



International Plant Protection Convention
Protecting the world's plant resources from pests

Managing Relationships with Stakeholders

A guide to stakeholder relations for
national plant protection organizations



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This paper presents a guide to phytosanitary aspects of managing relationships with stakeholders, created as a component of the IPPC National Phytosanitary Capacity Building Strategy, which was adopted by the fifth session of the Commission on Phytosanitary Measures (CPM) (2010) of the IPPC. This work has been developed by Ralf Lopian and selected experts and reviewed by the IPPC Capacity Development Committee (including phytosanitary experts from the seven Food and Agriculture Organization regions), the technical consultation among regional plant protection organizations (RPPOs) and the IPPC Secretariat. The elaboration of this manual was possible thanks to the financial contribution of the Standard and Trade Development Facility (Project STDF 350).

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IPPC Definitions Used

Area of low pest prevalence

An area, whether all of a country, part of a country, or all or parts of several countries, as identified by the competent authorities, in which a specific pest is present at low levels and which is subject to effective surveillance or control measures [IPPC, 1997; revised CPM, 2015]

Commodity

A type of plant, plant product, or other article being moved for trade or other purpose [FAO, 1990; revised ICPM, 2001]

Consignment

A quantity of plants, plant products or other articles being moved from one country to another and covered, when required, by a single phytosanitary certificate (a consignment may be composed of one or more commodities or lots) [FAO, 1990; revised ICPM, 2001]

Corrective action plan (in an area)

Documented plan of phytosanitary actions to be implemented in an area officially delimited for phytosanitary purposes if a pest is detected or a tolerance level is exceeded or in the case of faulty implementation of officially established procedures [CPM, 2009; revised CPM, 2013]

Eradication*

Application of phytosanitary measures to eliminate a pest from an area [FAO, 1990; revised FAO, 1995; formerly eradicate]

Inspection

Official visual examination of plants, plant products or other regulated articles to determine if pests are present or to determine compliance with phytosanitary regulations [FAO, 1990; revised FAO, 1995; formerly "inspect"]

Monitoring

An official on-going process to verify phytosanitary situations [CEPM, 1996]

National plant protection organization

Official service established by a government to discharge the functions specified by the IPPC [FAO, 1990; formerly "plant protection organization (national)"]

Pest free area

An area in which a specific pest is absent as demonstrated by scientific evidence and in which, where appropriate, this condition is being officially maintained [FAO, 1995; revised CPM, 2015]

Pest free place of production

Place of production in which a specific pest is absent, as demonstrated by scientific evidence, and in which, where appropriate, this condition is being officially maintained for a defined period [ISPM 10, 1999; revised CPM, 2015]

Pest free production site

A production site in which a specific pest is absent, as demonstrated by scientific evidence, and in which, where appropriate, this condition is being officially maintained for a defined period [ISPM 10, 1999; revised CPM, 2015]

Pest record

A document providing information concerning the presence or absence of a specific pest at a particular location at a certain time, within an area (usually a country) under described circumstances [CEPM, 1997]

Pest risk analysis (agreed interpretation)

The process of evaluating biological or other scientific and economic evidence to determine whether an organism is a pest, whether it should be regulated, and the strength of any phytosanitary measures to

be taken against it [FAO, 1995; revised IPPC, 1997; ISPM 2, 2007]

Pest risk assessment (for quarantine pests)

Evaluation of the probability of the introduction and spread of a pest and the magnitude of the associated potential economic consequences [FAO, 1995; revised ISPM 11, 2001; ISPM 2, 2007; revised CPM, 2013]

Pest risk management (for quarantine pests)

Evaluation and selection of options to reduce the risk of introduction and spread of a pest [FAO, 1995; revised ISPM 11, 2001]

Phytosanitary certificate

An official paper document or its official electronic equivalent, consistent with the model certificates of the IPPC, attesting that a consignment meets phytosanitary import requirements [FAO, 1990; revised CPM, 2012]

Phytosanitary import requirements

Specific phytosanitary measures established by an importing country concerning consignments moving into that country [ICPM, 2005]

Phytosanitary measure (agreed interpretation)

Any legislation, regulation or official procedure having the purpose to prevent the introduction or spread of quarantine pests, or to limit the economic impact of regulated non-quarantine pests [FAO, 1995; revised IPPC, 1997; ICPM, 2002; revised CPM, 2013]

Phytosanitary procedure

Any official method for implementing phytosanitary measures including the performance of inspections,

tests, surveillance or treatments in connection with regulated pests [FAO, 1990; revised FAO, 1995; revised CEPM, 1999; revised ICPM, 2001; revised ICPM, 2005]

Phytosanitary regulation

Official rule to prevent the introduction or spread of quarantine pests, or to limit the economic impact of regulated non-quarantine pests, including establishment of procedures for phytosanitary certification [FAO, 1990; revised FAO, 1995; CEPM, 1999; ICPM, 2001; revised CPM, 2013]

Regional plant protection organization

An intergovernmental organization with the functions laid down by Article IX of the IPPC [FAO, 1990; revised FAO, 1995; CEPM, 1999; formerly "plant protection organization (regional)"]

Surveillance

An official process which collects and records data on pest occurrence or absence by survey, monitoring or other procedures [CEPM, 1996; revised CPM, 2015]

Survey*

An official procedure conducted over a defined period of time to determine the characteristics of a pest population or to determine which species are present in an area [FAO, 1990; revised CEPM, 1996; revised CPM, 2015]

Systems approach

A pest risk management option that integrates different measures, at least two of which act independently, with cumulative effect [ISPM 14, 2002; revised ICPM, 2005; revised CPM, 2015]

Note: These definitions are sourced from the IPPC *Glossary of phytosanitary terms* (ISPM 5). This list includes only the glossary terms that are used in this guide. The Glossary is updated annually based on decisions taken by the IPPC Commission on Phytosanitary Measures. The complete and updated glossary is maintained at: www.ippc.int/publications/glossary-phytosanitary-terms. The definitions are accurate as of August 2015.

* Indicates that the term, at the time of publishing, is on the work programme of the Technical Panel for the Glossary, which means the terms or definitions may be revised or deleted in the future.

Acronyms and Abbreviations

ALPP	Area of low pest prevalence
CAC	Codex Alimentarius Commission
CBD	Convention on Biological Diversity
CPM	Commission on Phytosanitary Measures (of the IPPC)
FAO	Food and Agriculture Organization of the United Nations
GIA	Government–industry agreement
IAS	Invasive alien species
IICA	Inter-American Institute for Cooperation on Agriculture
IPPC	International Plant Protection Convention
ISPM	International Standards for Phytosanitary Measures
NAQS	Northern Australia Quarantine Strategy
NGO	Non-governmental organization
NPPO	National plant protection organization
OIE	World Organisation for Animal Health
PCE	Phytosanitary Capacity Evaluation
PFA	Pest free area
PFPP	Pest free place of production
PFPS	Pest free production site
PRA	Pest risk analysis
RPPO	Regional plant protection organization
SPS	Agreement on the Application of Sanitary and Phytosanitary Measures of the WTO
STDF	Standards and Trade Development Facility
WTO	World Trade Organization

1. Introduction

Plant protection, which includes the development and implementation of phytosanitary policies and activities, is an important part of public governance and administration. It relies on the full engagement of the private sector and civil society. Private sector producers and traders are greatly affected by phytosanitary policies and actions and so have asked to be involved in decision-making processes and information exchange. Many national plant protection organizations (NPPOs) involve stakeholders routinely in decision-making processes and information exchange activities. In many cases, export-related activities undertaken by NPPOs result from joint decisions with the private sector, and consultations are held with stakeholders before new phytosanitary legislation is adopted. NPPOs also consult regularly with stakeholders when pest survey or control activities are required. The International Plant Protection Convention (IPPC) does not address the interactions between NPPOs and stakeholders specifically. However, numerous International Standards for Phytosanitary Measures (ISPMs) of the IPPC highlight the importance of stakeholders, such as national and local government agencies, research institutions, universities, scientific societies (including amateur specialists), producers, consultants, museums and the general public. Guidance on the establishment and maintenance of successful stakeholder relations may, therefore, be of benefit to many NPPOs when establishing their own stakeholder relations and consultative processes.

There are numerous ways to interact with stakeholders and establish public-private partnerships and it is impossible to describe all of them in this manual. Furthermore, there are no studies on the effectiveness of different ways to involve phytosanitary stakeholders in the work of NPPOs. Consequently, the practices described

National plant protection organization

Official service established by a government to discharge the functions specified by the IPPC [FAO, 1990; formerly "plant protection organization (national)"]

in this manual should be seen as a guide to how stakeholder relations can be established and maintained, rather than as a blueprint for every contracting party or NPPO. Please also note that this manual has no legal status under the IPPC; neither is its intention to harmonize NPPO practices.

The main objective of this manual is to provide guidance on the kinds of stakeholder relations that can be established and maintained by NPPOs. The intention is to encourage the establishment and development of public-private partnerships and to promote coordination among non-phytosanitary public sector stakeholders, such as foreign ministries and authorities for trade, standards and the environment.

In setting out guidance on establishing good relations with stakeholders, the manual first identifies the benefits and challenges associated with building strong and active stakeholder involvement in NPPO activities. Different categories of stakeholder relations are identified, such as:

- ◆ coordination of phytosanitary policy and legislation
- ◆ coordination and cooperation in the establishment of specific phytosanitary programmes or systems
- ◆ stakeholder involvement in market access activities
- ◆ national coordination of international and regional activities and liaison with international stakeholders.



Credit: Ilya Mityushev

The manual also provides practical guidance on the establishment and on-going development of stakeholder relations, covering such topics as:

- ◆ institutional set-up – the composition and tasks of policy advisory bodies and operational groups
- ◆ communication with stakeholders
- ◆ public awareness
- ◆ good reporting practices.

In some countries, stakeholder relations, rights and obligations are not specific to phytosanitary concerns. Instead, they are organized on a horizontal level throughout the government and public administration. This manual aims to provide ideas and examples from different countries; however, these may not be applicable or appropriate in every country without a horizontal political dialogue on the subject.

Each section of this manual begins with a box highlighting what you should learn from that section. The discussion questions can then be used to assess your level of understanding (some can also be used to guide group learning). The case studies give some interesting examples. Definitions of terms are also provided at the beginning of this manual.

Survey

An official procedure conducted over a defined period of time to determine the characteristics of a pest population or to determine which species are present in an area [FAO, 1990; revised CEP, 1996; revised CPM, 2015]

2. Stakeholders: Definition, Benefits, Challenges and Roles

Learning objectives

- Understand what constitutes a stakeholder within the context of the NPPO
- Appreciate the benefits of involving stakeholders in NPPO activities
- Become aware of the challenges associated with stakeholder involvement and know how to deal with them

NPPOs do not work in isolation. Their work affects the lives of enterprises, producers, academics, traders and members of civil society in many ways. At the same time, these individuals, groups and organizations also affect the activities of an NPPO. Consequently, involving stakeholders in establishing and developing the activities of the NPPO may provide substantial benefits to both parties, while also presenting certain challenges.

2.1 Definition of stakeholder

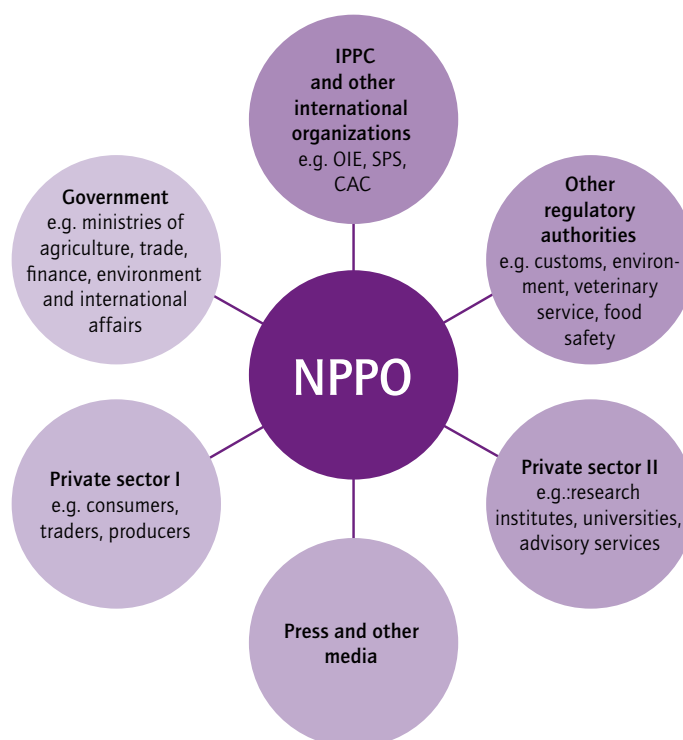
The many interest groups with which NPPOs interact and that may assist the NPPO in the discharge of its functions include government organizations and authorities, private citizens, producers, traders, participants in the production and marketing chain, universities and research institutes, museums and botanical gardens, community groups, non-governmental organizations (NGOs), labour unions, indigenous groups, charitable organizations, faith-based organizations, professional associations and foundations (see Figure 1). All such groups and individuals may have reasons to be involved in phytosanitary activities and decision-making, but not necessarily equally and not at the same time.

Consequently, the term stakeholder is defined for this manual to mean “a person, group or organization that has an interest in the phytosanitary activities of an NPPO”.

Having an interest in the phytosanitary activities of an NPPO may encompass different notions

and expectations. For example, traders' interests may be determined by their expectation of gaining market access, while producers' interest may be created by the need to avoid excessive administrative burdens or expensive pest management activities to manage pest introductions.

Figure 1: NPPO stakeholders



Abbreviations: OIE, World Organization for Animal Health; SPS, Agreement on the Application of Sanitary and Phytosanitary Measures of WTO; CAC, Codex Alimentarius Commission

Discussion Question:

- ◇ List the main stakeholder groups that you think should be involved in activities with your NPPO.

2.2 The benefits of involving stakeholders

Stakeholder involvement in the work of NPPOs usually takes place at the policy or operational level. Involving stakeholders at the policy level (including the development of legislation and policy) can bring substantial benefits to an NPPO. The following list outlines some of these:

- ◆ promoting the objective of the NPPO (to protect plant health)
- ◆ raising the political profile of plant health in government policy
- ◆ increasing public awareness of plant health issues
- ◆ helping decision-makers to understand stakeholders' expectations, thereby promoting more effective work and better results
- ◆ increasing stakeholders' awareness of the decision-making process and the positive ways in which they can influence it
- ◆ providing stakeholders with an opportunity to provide input into policy development through a consultation process
- ◆ providing solutions to situations of conflict
- ◆ promoting the sustainability of NPPO programmes.

At the operational level, stakeholder involvement should be designed to fit a certain purpose. This may be assisting the NPPO by providing the technical, financial or political support it needs to manage its phytosanitary programmes. Participatory initiatives, in which stakeholders are directly involved in the implementation of a phytosanitary programme, are likely to be sustainable because they build on local capacity and knowledge and the participants have a sense of ownership. Furthermore, the initiatives are more likely to be compatible with the long-term development plans

of the NPPO. Some benefits of this "fit for purpose" involvement of stakeholders in such participatory phytosanitary programmes are:

- ◆ creating synergies and increasing the reliability and acceptability of NPPO activities
- ◆ developing innovative phytosanitary systems
- ◆ facilitating export activities through less bureaucratic certification procedures
- ◆ prioritizing resource allocations and developing cost-effective solutions to resource constraints
- ◆ building adaptive capacity and empowering producers by enabling them to tackle phytosanitary challenges, both individually and collectively
- ◆ providing necessary resources or sharing them with the NPPO
- ◆ contributing to the development of effective and sustainable market access strategies.

In conclusion, stakeholder cooperation offers NPPOs the opportunity to benefit from a huge resource of scientific, technical and commercial information, and may also provide much-needed resources.

Discussion Question:

- ◇ List five benefits associated with stakeholder involvement in policy-level activities and five in operational-level activities.

2.3 Challenges associated with stakeholder relations

Involving stakeholders in the activities of an NPPO (at both policy and operational levels) may not always provide a favourable outcome for all participants. Inevitably, there will be situations in which stakeholder input may not be aligned with a positive outcome for the phytosanitary interest of the country. Table 1 provides some examples of situations in which stakeholder relationships may become strained and suggests some mitigation actions.

It is important to remember that the benefits of building stakeholder cooperation will always

Table 1. Challenges to stakeholder relations and suggested mitigation action

Situation	Challenge	Suggested mitigation action
Perceived resource drain on NPPO	NPPO staff may perceive stakeholder involvement as laborious and time-consuming, and consider the effort it requires to be an unnecessary drain on resources.	<p>Illustrate to staff how stakeholder involvement can supply additional resources and reduce costs.</p> <p>Minimize the effort required by implementing standard procedures.</p>
Stakeholders try to advance their own interests	All stakeholders have their own commercial or other interests and their advice will favour these. Therefore they cannot give impartial advice and cannot be trusted fully.	<p>It is an advantage to the NPPO to understand stakeholder interests and expectations. Inviting stakeholders from different backgrounds creates a balanced view.</p> <p>NPPOs should always check for potential conflicts of interest that could compromise the reliability or integrity of a programme and set limitations on the participation of certain stakeholders if this is likely. Declarations could be signed by stakeholders to carry out their tasks without a conflict of interest.</p>
Individual stakeholders exert undue influence on working groups	Powerful industry representatives and strong personalities can exert undue influence on the proceedings of policy or operational groups.	<p>The chair of any stakeholder working group should, if possible, have some training or experience in the conduct of meetings, including how to deal with hostile takeovers. Working groups should have Terms of Reference to ensure participant expectations are clear.</p> <p>Unbalanced influence among working groups can also be mitigated through careful selection of the stakeholders involved. A broad spectrum of stakeholders will balance each other out, since the interests of one group may be different to those of the others. Strategic selection of stakeholders may allow them to hold group discussions, after which the NPPO selects the appropriate policy.</p>
Stakeholders are "turned off" or discouraged	If a request from a certain stakeholder is not followed up, this may taint future relations with that stakeholder, with potential adverse effects on their activities and contributions.	<p>The NPPO must make it clear to stakeholders that it is the decision-maker and that stakeholders are invited to assist the decision-making process.</p> <p>Having a broad spectrum of stakeholders will ensure that they balance each other's opinions and requests. In the best cases, stakeholders will argue against each other and so help the NPPO to maintain good relations.</p>
Stakeholders are not accountable to the NPPO	When involved in operational activities, the lack of accountability may cause problems.	Mutual accountability is very important when involving stakeholders in operational activities. Formal agreements, which specify stakeholder rights and obligations, are useful and should include mention that the NPPO has the final authority. Stakeholders need to understand that they are participating in operational activities under the supervision of the NPPO.

Table 1. Challenges to stakeholder relations and suggested mitigation action (continued)

Situation	Challenge	Suggested mitigation action
Stakeholders are indifferent to international obligations	Stakeholders, especially those from industry, may not be overly concerned with obligations set by international organizations such as the IPPC. They may therefore have different approaches to operational activities, e.g. a private laboratory carrying out diagnostic tests according to their own protocols rather than those of the IPPC.	The NPPO needs to make private stakeholders aware of international obligations and ensure these are adhered to in operational activities.
NPPOs are unable to provide appropriate supervision	NPPOs may not have the necessary staff and other resources to provide appropriate supervision when stakeholders participate in operational activities.	<p>If the NPPO cannot supervise stakeholders, those stakeholders should not be involved in any programme. If the programme is important to stakeholders (e.g. export activities), they may wish to donate resources and so enable the NPPO to carry out its supervisory role. Stakeholders may also put political pressure on the government to provide additional resources to the NPPO.</p> <p>However, NPPOs should be careful that they do not become dependent on such resources, as this would compromise their function.</p>

outweigh the challenges. At the same time, the authority to make decisions concerning plant health rests with the NPPO, not with the stakeholders.

Discussion Question:

(Could be a group exercise involving role play):

- ◇ Depending on time, take one to three examples of situations in which stakeholder involvement can present a challenge or lead to a conflict of interest. How would you deal with the situation and prevent the same thing happening in the future?

2.4 The role of NPPOs in managing stakeholder input

The NPPO normally decides when and how to involve stakeholders, maintaining responsibility for all activities (unless otherwise regulated under operational legislation). Stakeholders can provide advice and support, but they do not make decisions at the policy or operational levels. NPPOs may therefore set out clearly the responsibilities of stakeholders when participating in NPPO activities.

It is important to remember that, while stakeholders are expected to provide support and add perspective to the activities of the NPPO, they have very specific interests and concerns depending on their backgrounds and sometimes their personalities. It is therefore crucial that NPPOs identify potential conflicts of interest and take appropriate action to avert them.

3. Stakeholder Input on Phytosanitary Policy

Learning objectives

- Understand the need to establish a public–private platform to facilitate stakeholder input on phytosanitary policy
 - Learn about the different options and methods that can be used to establish such a body, the tasks it may perform and the types of stakeholder that may be involved
-

Developing a phytosanitary policy involves making fundamental decisions relating to the organizational structure of an NPPO and the programmes it administers. It also includes the legislation that enables the NPPO to meet its obligations under the IPPC. Involving stakeholders in policy development ensures the NPPO has an operational and regulatory framework that reflects the country's unique interests. The main goal is to identify the expectations of the private sector and civil society, and to coordinate phytosanitary policy with the policies of other government departments and agencies.

There are many ways to involve stakeholders and it is not possible to illustrate all of them in this manual. One of the most common approaches adopted when developing legislative proposals is to provide a period during which the public can comment. However, this is a reactive form of soliciting stakeholder input. A more inclusive and sustainable way to include NPPO stakeholders in policy and legislative development is to establish a more permanent public–private policy body, such as a national phytosanitary council or a legislative coordination committee.

3.1 National phytosanitary council

It is important to maintain contact with private sector operators, academia and other institutions that are relevant to phytosanitary issues. This keeps the NPPO up to date with developments in plant protection and provides ideas and guidance on the expectations of the plant protection community.

Meetings and other communications also provide a platform for dialogue, networking and coordination among public and private sector stakeholders, thus enabling the NPPO to address phytosanitary requirements, research priorities and emerging issues in a proactive and effective way. For example, requests for technical assistance from developing countries are more likely to be approved when coordinated at the national level.

To establish such a forum for dialogue, networking and coordination, NPPOs may wish to set up a permanent policy body such as a national phytosanitary council (see Case Study 1). Its primary objective may be to serve as a national coordination forum to advise on phytosanitary matters for the continual improvement of the phytosanitary situation of the country.

The main advisory tasks of such a national phytosanitary council might include the following:

- ◆ review the national phytosanitary policy
- ◆ exchange information on new developments
- ◆ coordinate research priorities
- ◆ advise on priority phytosanitary issues and activities
- ◆ coordinate requests for technical assistance, if appropriate (see Table 2)
- ◆ establish a mechanism for national phytosanitary dialogue.

The forum should be broad-based to include representation from all major plant protection institutions, including research institutes, universities, government agencies and the private sector. Involving policy advocacy groups from civil society

Case Study 1

Finland's national phytosanitary advisory council

In Finland, advisory councils have been established in many government sectors to engage stakeholders from private companies and academia. It is government policy to involve the public and private sectors in decision-making since the country has a small population and resources are limited. The legal basis for the establishment of the phytosanitary advisory council is laid down in the plant health law of Finland.

The phytosanitary advisory council of Finland fulfils a general advisory function in plant health. It provides advice on general plant health issues, assists in the development of plant health policy and may initiate its own activities concerning plant health matters. There are around 20 members in the council. Six are civil servants from different ministries, two are from the NPPO, eight are from industry and relevant associations and four are from universities and research organizations. The council meets several times a year. The broad nature of the council creates space for stakeholders to have free discussions on topics relevant to plant health. Although there are no legal obligations, their recommendations are followed up by the relevant authorities.

The council makes regular field trips to investigate new aspects of plant health. The meetings and some travel expenses are paid by Finland's Ministry of Agriculture and Forestry, which has an annual budget set aside for the council. The Ministry also appoints the chair and secretary of the group.

Table 2: Stakeholder involvement in a national phytosanitary council

Type	Tasks	Stakeholders
National phytosanitary council	<ul style="list-style-type: none"> • Review the national phytosanitary policy • Exchange information on new developments • Coordinate research priorities • Advise on the prioritization of phytosanitary issues and activities • Coordinate requests for technical assistance, if appropriate • Establish a national phytosanitary dialogue 	Senior representatives from: <ul style="list-style-type: none"> • universities • research institutes • government agencies (e.g. customs) • producer organizations • importer and exporter associations • civil society groups (e.g. environmental protection).

(e.g. environmental protection) may also be useful. A broad composition ensures a balanced approach and prevents the council being influenced by one-sided interests or parties. Table 2 illustrates

the tasks that may be performed by a national phytosanitary council and the types of stakeholders that may be involved.

Discussion Question:

- ◇ What are the main tasks of a national phytosanitary council? Make a list of the stakeholders who you think should be involved in your country.

3.2 Policy and legislation coordination body

Phytosanitary policies and legislation are often the responsibility of a range of government stakeholders beyond the Ministry of Agriculture and NPPO. Establishing consistent policy and legislation therefore requires coordination among the different ministries and agencies. At the same time, coordination will help to avoid overlap of activities.

National coordination of phytosanitary policies and legislation is usually the responsibility of a coordination body or committee (see Case Studies 2 and 3). A policy and legislation coordination body should be a permanent body to allow for consistency in its deliberations. Its main tasks are to coordinate and to make binding decisions with regard to:

- ◆ phytosanitary policy
- ◆ phytosanitary measures
- ◆ national positions for the IPPC and regional plant protection organizations (RPPOs)
- ◆ national positions with regard to other international organizations, e.g. the World Trade Organization (WTO), Agreement on the Application of Sanitary and Phytosanitary Measures (SPS) Committee of the WTO, the Convention on Biological Diversity (CBD), the Montreal Protocol
- ◆ priorities with regard to market access initiatives (see Box 1).

The membership of policy and legislation coordination bodies is usually permanent (as is the committee) and should consist of representatives of government ministries, departments and agencies that have an interest in phytosanitary matters or are affected by them. For example, representatives from ministries or departments dealing with foreign affairs, international trade and the environment would be valuable members. An intra-governmental policy and legislation advisory committee may also have representatives from industry and academia as observers (non-voting members). Including industry and academic stakeholders may help the NPPO to justify its policy and legislation decisions, thereby increasing acceptance of them. Table 3 illustrates the tasks that may be performed by a policy and legislation coordination body and the types of stakeholders who may be involved.

The following examples illustrate the importance of coordination in different areas of relevance to plant health issues.

Market access

In many countries, market access activities are carried out by trade ministries and their agencies. Phytosanitary market access negotiations may be only a part of the whole market access strategy

Box 1: The IPPC market access manual

In 2013, the IPPC published a new manual, *Market access – a guide to phytosanitary issues for national plant protection organizations*, to help countries gain access to new markets. The manual outlines how to access markets with minimal hindrance to trade, while also preventing the spread of pests and diseases into new areas. The manual also provides guidance for stakeholder involvement, which is essential in any market access activity. It describes how:

- stakeholder requests may trigger market access activities
- consultations between government and stakeholders are needed in the preparation of a market access proposal
- the market access proposal should be supported by the relevant industry stakeholders
- constant exchange of information between government and stakeholders ensures the quality of proposals to the importing country
- strong involvement of stakeholders is needed in a risk communication strategy for market access
- stakeholders can be involved in audits by the importing country.

The *Market access – a guide to phytosanitary issues for national plant protection organizations* manual can be accessed on the IPPC Phytosanitary Resources webpage: <http://www.phytosanitary.info/ippc-technical-resources>.

Phytosanitary measure (agreed interpretation)

Any legislation, regulation or official procedure having the purpose to prevent the introduction or spread of quarantine pests, or to limit the economic impact of regulated non-quarantine pests [FAO, 1995; revised IPPC, 1997; ICPM, 2002; revised CPM, 2013]

Regional plant protection organization

An intergovernmental organization with the functions laid down by Article IX of the IPPC [FAO, 1990; revised FAO, 1995; CEP, 1999; formerly “plant protection organization (regional)”]

Case Study 2

Finland's phytosanitary coordination committee

Finland has established a policy of horizontal government coordination on legislative and policy decisions discussed within the European Union framework. This includes a phytosanitary coordination committee, which ensures coordinated input into Finland's position with regard to international organizations and European Union decisions. The committee is a decision-making body and proposals are put forward only when agreed to by the committee.

The phytosanitary coordination committee works on two levels. Its basic level is the decision-making body and includes representatives from the Ministry of Agriculture and Forestry, Ministry of Foreign Relations and the NPPO. In specific cases, other government ministries and agencies can be involved. The extended level also includes representatives from the private sector, including agricultural producers, horticultural associations and forestry groups. The private sector can provide useful information and opinions on proposed legislative initiatives. The coordination committee usually meets twice a year and more often if required.

Case Study 3

Institutional and national coordination of CPM matters – IICA guidance

The Inter-American Institute on Cooperation on Agriculture (IICA) has developed guidance on how to participate effectively in IPPC-related matters, which includes the *Handbook of good practices to participate in meetings of the International Plant Protection Convention (IPPC)* (IICA, 2009). The handbook includes information on effective institutional and national coordination of Commission on Phytosanitary Measures (CPM) matters, specifying the following:

When documents requiring institutional consultations are received for CPM meetings, they should be sent to the competent units of the NPPO to obtain an advanced opinion. Consultations should be held with persons who have the greatest degree of training and specialization, so that solid and well-founded positions can be adopted.

...

Certain issues on the CPM agenda may require consultation at a higher level, involving public and private sector stakeholders in the country. In this case, it is a good idea to post these documents for consultation at national portals, and to hold coordination meetings with the principal interest groups and authorities involved. This should be accompanied by timely notices, through various channels of communication such as press notices or e-mail. These consultations must be conducted at the highest technical level available in the country.

...

Consultation meetings at the institutional and the national level need to be carefully organized, with participation by all public sector stakeholders and interest groups. ... The individuals, organizations or institutions to be consulted should be those strictly related to the agenda topic, and the people participating in the meetings should have full powers of representation and decision-making.

...

Country positions are established on the basis of national consultations, and therefore interventions at CPM meetings are offered on behalf of the country, and not as personal opinions.

In this context it should be noted that the NPPO does not always represent the country in international organizations, but the same coordination function would apply to any other authority.

Table 3: Stakeholder involvement in a policy and legislation coordination body

Type	Tasks	Stakeholders
Policy and legislation coordination body	National coordination of: <ul style="list-style-type: none"> • phytosanitary policy • phytosanitary measures • the IPPC positions • RPPO positions • phytosanitary positions with regard to other international organizations (e.g. WTO SPS Committee, CBD, Montreal Protocol) • priorities with regard to market access initiatives. 	Representatives from different ministries or departments such as: <ul style="list-style-type: none"> • agriculture • forestry • foreign affairs • customs • environment • trade and industry. Optional advisory representation from: <ul style="list-style-type: none"> • universities • research institutes • producer organizations • importer and exporter associations • civil society groups (e.g. environmental protection).

and therefore need to be coordinated among phytosanitary and other authorities. This may be especially valuable when coordinating relevant sanitary and phytosanitary market access negotiations, which have similar principles. A country would have to set priorities for market access in order to establish the most economic and valid market access policy. For example, an industrialized country may wish to focus on market access priorities for high-value industrial goods. In this case, independent and potentially hostile market access activities by phytosanitary authorities may be damaging from a macro-economic perspective. For more information, see Chapter 5 and Box 1.

Environment

Government coordination is needed to establish a common policy regarding the protection of the environment. For example, work on invasive alien species (IAS) would need considerable coordination among environmental and phytosanitary authorities. The experience of NPPOs in assessing and managing biological risks related to the introduction of organisms has given these authorities the knowledge they need to deal with the risks posed by IAS that are plant pests (Lopian, 2005). Likewise, duplication of activities could be avoided. However,

full utilization of such specific knowledge would necessitate considerable coordination between environmental and phytosanitary authorities.

International organizations

Coordination is required to establish national positions in relation to the decisions of international organizations. Taking the example of IAS, coordination between environmental and phytosanitary authorities would be needed to develop coherent positions for the CBD and the IPPC (see Case Study 3). It would be difficult to maintain a good reputation for consistency and coherence if contradicting positions were promoted in different, but overlapping, international organizations. Other countries may use such inconsistent approaches to their advantage.

Discussion Question:

- ◇ What are the main tasks of a policy and legislation coordination body? Make a list of the stakeholders who you think should be involved in your country.



4. Stakeholder Input on Phytosanitary Operations

Learning objectives

- Understand why it is important to involve stakeholders in phytosanitary operations
- Learn how to organize stakeholder involvement in a range of tasks in the areas of pest risk analysis (PRA), pest surveillance, establishment of pest free areas (PFAs) and areas of low pest prevalence (ALPPs), certification and inspection systems, eradication programmes and contingency plans, and systems approaches.
- Understand how stakeholders can be involved in education and training of NPPO staff and in government–industry agreements

4.1 General considerations

On an operational level, NPPOs often have direct interactions with stakeholders as a result of regular inspection activities, pest surveillance and monitoring, and import/export activities. Unlike the policy level, the operational level allows stakeholders to participate actively through involvement in planning and implementation of phytosanitary programmes and activities. This involvement is essential for the development of effective national phytosanitary systems and to ensure they are implemented effectively and can be enforced. NPPOs benefit from stakeholders' diverse opinions, expertise and viewpoints. It is impossible for an NPPO to understand all the facets and impacts of a policy; moreover, stakeholders (especially industry stakeholders) usually bear the brunt of regulations and procedures, so their knowledge is not only valuable, but also essential when establishing national phytosanitary systems (Wood, 2005).

For many countries, a capacity analysis according to the IPPC Phytosanitary Capacity Evaluation (PCE) tool is an important step in the development of national phytosanitary systems (see Box 2). Stakeholder involvement in the analysis is essential to identify existing and potential phytosanitary resources.

For certain activities, an NPPO may not have the capacity to carry out all the necessary actions.

Box 2: Stakeholder involvement in the Phytosanitary Capacity Evaluation

The PCE tool illustrates the value of policy and input from stakeholder consultations. In the assessment phase, it is recommended that six to eight staff from the NPPO and two or three non-NPPO representatives (from appropriate research institutes, agricultural universities, agro-industries or import/export associations) are involved in the application of the tool. To obtain an agreement among stakeholders, a workshop can be held in which coordinators facilitate a consensus. The consensus is then used for a problem analysis and an assessment of strengths, weaknesses, opportunities and threats (SWOT analysis). This leads to the development of a logical framework, from which the manager and advisers can complete a national phytosanitary action plan.

The PCE tool can be accessed on the IPPC webpage <http://pce.ippc.int/>

Phytosanitary import requirements

Specific phytosanitary measures established by an importing country concerning consignments moving into that country [ICPM, 2005]

Inspection

Official visual examination of plants, plant products or other regulated articles to determine if pests are present or to determine compliance with phytosanitary regulations [FAO, 1990; revised FAO, 1995; formerly “inspect”]

For example, it may not have an appropriate diagnostic laboratory to undertake required testing and diagnosis. In such cases, the NPPO may be obliged to contract these activities to outside institutions or private entities, which are stakeholders.

Stakeholder knowledge can assist NPPOs, especially in the development of specific phytosanitary systems or the conduct and review of regular phytosanitary activities. Stakeholders can be involved in the planning and conception phase of a specific phytosanitary programme or in its implementation. Systems and programmes in which stakeholder involvement are important include PRA, regionalization, pest surveillance, export certification and inspection systems, contingency plans and eradication programmes, system approaches, education and training, and government–industry agreements. These systems and programmes, which are to a large extent standardized through ISPMs, need meaningful participation from stakeholders if they are to be efficient and successful. They are described in brief in the following sections and in more detail in Appendixes 1–8.

4.2 Pest risk analysis

When planning to establish or revise a national PRA system, the NPPO should identify existing capabilities that are available within the country. The NPPO should endeavour to identify other institutions or organizations that would have the capacity to undertake PRAs (or parts of them) under the supervision of the NPPO. The planning phase would also include the development of procedures for supervision and quality control relating to the PRA process and to allow comments from stakeholders. The operation of such a system could involve stakeholders that have the necessary

Pest risk analysis (agreed interpretation)

The process of evaluating biological or other scientific and economic evidence to determine whether an organism is a pest, whether it should be regulated, and the strength of any phytosanitary measures to be taken against it [FAO, 1995; revised IPPC, 1997; ISPM 2, 2007]

Pest risk assessment (for quarantine pests)

Evaluation of the probability of the introduction and spread of a pest and the magnitude of the associated potential economic consequences [FAO, 1995; revised ISPM 11, 2001; ISPM 2, 2007; revised CPM, 2013]

Pest risk management (for quarantine pests)

Evaluation and selection of options to reduce the risk of introduction and spread of a pest [FAO, 1995; revised ISPM 11, 2001]

scientific capacity, while the NPPO supervises the process. This has the advantage that the best expert available can be contracted for each PRA.

For more detailed information see Appendix 1.

4.3 Regionalization

Implementation of regionalization concepts, including PFAs, ALPPs, pest free production sites (PFPSs) and pest free places of production (PFPPs)

Area of low pest prevalence

An area, whether all of a country, part of a country, or all or parts of several countries, as identified by the competent authorities, in which a specific pest is present at low levels and which is subject to effective surveillance or control measures [IPPC, 1997; revised CPM, 2015]

Pest free area

An area in which a specific pest is absent as demonstrated by scientific evidence and in which, where appropriate, this condition is being officially maintained [FAO, 1995; revised CPM, 2015]

Pest free production site

A production site in which a specific pest is absent, as demonstrated by scientific evidence, and in which, where appropriate, this condition is being officially maintained for a defined period [ISPM 10, 1999; revised CPM, 2015]

Pest free place of production

Place of production in which a specific pest is absent, as demonstrated by scientific evidence, and in which, where appropriate, this condition is being officially maintained for a defined period [ISPM 10, 1999; revised CPM, 2015]

is often driven by trade and thereby lends itself to broad stakeholder participation. Successful implementation requires a good relationship between the NPPO and the stakeholders that will benefit from it directly. Long-term support from a range of other stakeholders (public and private sector) is often needed to ensure that PFA programmes remain viable. Stakeholders should be involved when planning a PFA or other regionalization concept. They could be involved in some operational aspects as well as providing funding for certain activities.

For more detailed information see Appendix 2.

4.4 Pest surveillance

Pest surveillance is particularly suitable for stakeholder involvement, especially when the NPPO has a limited range of specialist plant health experts or where it feels there are specific benefits

Monitoring

An official on-going process to verify phytosanitary situations [CEPM, 1996]

Surveillance

An official process which collects and records data on pest occurrence or absence by survey, monitoring or other procedures [CEPM, 1996; revised CPM, 2015]

in having stakeholder participation. Stakeholders can be involved in many activities in planning and implementing a pest survey. It is important to ensure that the personnel involved are trained adequately (and monitored if necessary) in appropriate plant protection and data management, including sampling methods, preservation and transportation of samples for identification, and record keeping.

For more detailed information see Appendix 3.

4.5 Export certification and inspection systems

Inspection and phytosanitary export certification activities (including electronic certification) are largely official undertakings for which the NPPO has full responsibility. This limits the involvement of stakeholders and almost fully excludes the private sector, since their involvement may compromise the integrity of the phytosanitary export certification process and may not be accepted by importing countries. Stakeholder involvement in certification and inspection systems may therefore be limited to government agencies and departments and local authorities. However, stakeholders can be involved in coordination and cooperation between the NPPO, the customs authority and other authorities (e.g. the veterinary service) at border stations. (See Case Study 4.)

For more detailed information see Appendix 4.

Phytosanitary certificate

An official paper document or its official electronic equivalent, consistent with the model certificates of the IPPC, attesting that a consignment meets phytosanitary import requirements [FAO, 1990; revised CPM, 2012]

Phytosanitary procedure

Any official method for implementing phytosanitary measures including the performance of inspections, tests, surveillance or treatments in connection with regulated pests [FAO, 1990; revised FAO, 1995; revised CEPM, 1999; revised ICPM, 2001; revised ICPM, 2005]

Case Study 4

Nigeria's stakeholder forum

The Nigeria Agricultural Quarantine Service, the NPPO for Nigeria, maintains regular contact with key players in the national phytosanitary system via its stakeholder forum. This is an inexpensive and dynamic way to promote interaction and information exchange among stakeholders. The forum improves understanding of stakeholder concerns and helps the NPPO to improve its engagement and service delivery. For example, quarantine operations have been improved as a result of collaboration among the customs service and port operators, who interact with the quarantine service in regular meetings.

Different stakeholders are invited to forum meetings, depending on the purpose of the event. For example, key stakeholders (including academia, agricultural trade associations, farmers' groups, port inspectorate agencies, cargo handlers, clearing agents, postal services, shippers and other sanitary and phytosanitary government regulators) were invited to comment on the draft phytosanitary legislation so that the NPPO could consider their concerns or accommodate their inputs. This greatly improved the operation of the NPPO and helped streamline potential areas of conflict with other operatives, resulting in better cooperation and voluntary compliance from its clients.

Another forum, in which the NPPO worked with the National Horticulture Research Institute, engaged stakeholders in planning the control of fruit fly. Those invited to make presentations and advise on a joint plan of action included agricultural extension departments from selected universities, national and international research institutes, seed companies, sanitary and phytosanitary regulators, farmers' associations, fruit growers, handlers and processors, customs, NGOs and development partners. As a result of this forum, a national fruit fly consultative committee was set up and the National Council of Agriculture, the highest agricultural policy-making body, added fruit fly to the national programme and set up a take-off fund for the programme.



Credit: FAO/ Pius Utomi Ekpei

4.6 Eradication programmes and contingency plans

Stakeholder participation in the development and implementation of eradication programmes and contingency plans is highly desirable, especially when stakeholders play an important role in operational aspects of the programmes (which occurs often). Their role needs to be defined clearly

and agreed well in advance of implementation. Stakeholder participation in the development of contingency plans is especially useful since it also raises awareness of the risk a certain pest may pose to producers or the environment. (See Case Study 5.)

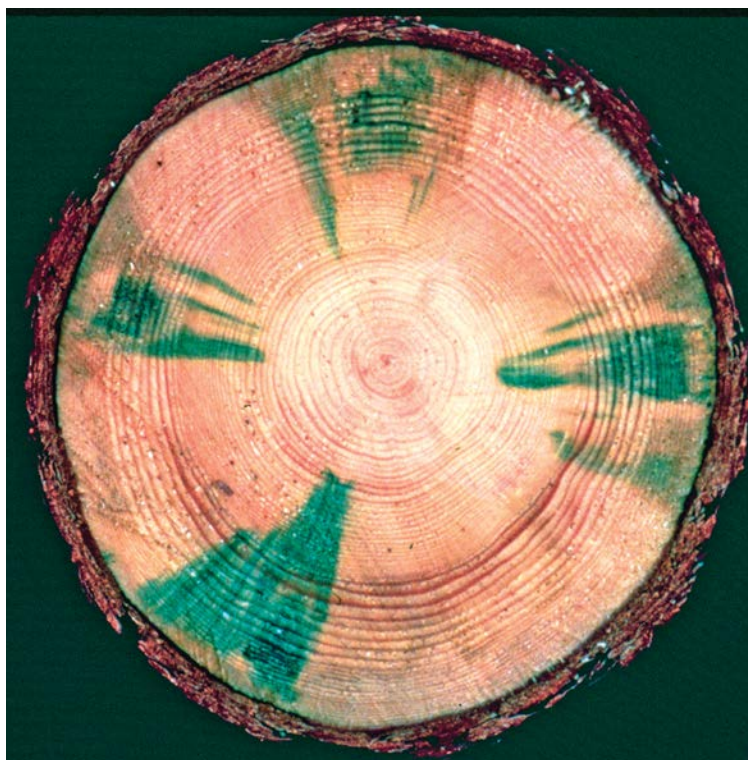
For more detailed information see Appendix 5.

Case Study 5

Contingency planning in Finland

Finland has developed a contingency plan for the pinewood nematode (*Bursaphelenchus xylophilus*). Since forestry is an important contributor to the economy and forests may have significant adverse environmental impacts, the introduction of forestry pests is considered a priority threat. A contingency plan enables the country to react quickly to incursions of quarantine pests.

The Ministry of Agriculture and Forestry convened a working group with members drawn from Ministry experts, the NPPO, the forestry research institute, the forest owner association and forestry industry (all stakeholders having a priority interest in forestry pests). The high level of this group showed the importance placed by the government on the contingency plan and aimed to minimize any opposition to a potentially expensive eradication plan. As a result, the development process was smooth and industry and forestry owners, realizing the dangers associated with the pest, readily accepted the need to use severe eradication measures if the pest was found in Finland's forests.



Credit: USDA Forest Service, North Central Research Station Archive, USDA Forest Service, Bugwood.org

Eradication

Application of phytosanitary measures to eliminate a pest from an area [FAO, 1990; revised FAO, 1995; formerly eradicate]

4.7 Systems approaches for pest risk management

Systems approaches to pest risk management are increasingly being used to develop and evaluate integrated phytosanitary measures to improve market access. Development of a systems approach is often triggered by private sector producers and traders and therefore should benefit considerably from their involvement. Measures used in a systems approach may be applied from pre- to post-harvest, wherever NPPOs have the ability to oversee and ensure compliance with phytosanitary procedures. Thus, a systems approach may include measures applied at the place of production, during the post-harvest period, at the packing house, or during shipment and distribution of the commodity. Cultivation practices, crop treatment, post-harvest disinfestation, inspection and other procedures may be included in an integrated systems approach. The possibilities for combinations of phytosanitary measures make it necessary to involve private operators such as growers, cool store operators, freight handlers and shippers in the day-to-day operation of a systems approach. (See Case Study 6.)

For more detailed information see Appendix 6.

Systems approach

A pest risk management option that integrates different measures, at least two of which act independently, with cumulative effect [ISPM 14, 2002; revised ICPM, 2005; revised CPM, 2015]

Commodity

A type of plant, plant product, or other article being moved for trade or other purpose [FAO, 1990; revised ICPM, 2001]

4.8 Education and training

The NPPO has an obligation to train its staff so they are able to carry out their required functions. An effective NPPO will ensure its staff have appropriate skills and experience and, where possible, follow international standards, accepted protocols and standard operating procedures. To some extent this can be achieved through appointing suitably qualified and skilled staff, but inevitably training and staff development are also critical. Consequently, a staff training and development programme is essential. This may include such stakeholders as universities, technical colleges and comparable tertiary institutions.

For more detailed information see Appendix 7.

4.9 Government–industry agreements

Government–industry agreements are usually based on a deed signed by industry and government representatives. A particularly important objective of these agreements is to deliver an agreed approach from government and industry to prepare for and effectively respond to phytosanitary risks. For example, they may cover one component of a phytosanitary system, such as cooperation with pest eradication programmes subsequent to a pest incursion. They may also cover several components or all facets of a national phytosanitary plan for a specific plant product or group of products.

For more detailed information see Appendix 8.

Discussion Question:

- ◇ What is the main difference between stakeholder input at the policy level and that at the operational level?
- ◇ For each system or programme, what are the main tasks and which stakeholder groups do you think should be involved in your country? (Participants could be split into working groups and given one system each, followed by a general discussion with the whole group.)

Case Study 6

Beyond Compliance project

The Standards and Trade Development Facility (STDF) project *Beyond compliance: An integrated systems approach for pest risk management in Southeast Asia* (STDF/PG/328) aims to develop and test new decision-support tools focused on an integrated systems approach for pest risk management. It also aims to enhance competence and confidence in the region in applying a systems approach to trade opportunities, and thereby to increase potential trade prospects. The project includes extensive sub-regional and national stakeholder involvement, with the NPPOs of Indonesia, Malaysia, the Philippines, Thailand and Viet Nam interacting with one another and with their RPPO, the Asian and Pacific Plant Protection Commission.

The project involves the review and modelling of potential trade opportunities for export of plant commodities to selected importing countries. Since information on the market supply chain, production and logistics clearly requires stakeholder involvement, it was important to hold national stakeholder seminars in the participating countries and investigate the application of a systems approach in case studies for the export of specific crops. The stakeholder workshops invited participants from the private sector, including producers and traders, as well as from public bodies such as research institutes.

Further information on the *Beyond compliance: An integrated systems approach for pest risk management in Southeast Asia* (STDF/PG/328) project, can be accessed on the STDF webpage.



Credit: FAO/AFP/Hoang Dinh Nam

5. The Role of Stakeholders in Market Access

Learning objectives

- Understand why it is useful to involve stakeholders in some parts of market access initiatives
 - Learn about the roles they can perform and the types of stakeholders that may be involved
-

NPPO activities relating to opening up new markets for new and existing products or commodities are becoming increasingly important. The SPS Agreement provides tools to help access markets that have previously been closed or problematic. Market access matters are often triggered by industry and trade representatives, therefore negotiations on risk management measures, such as systems approaches, can be strengthened when producers bring their professional knowledge and traders contribute their understanding of the value chain. For this reason, it is useful to establish crop-specific market access consultative groups, in which authorities and industry work together to develop new concepts and solutions (see Case Study 7).

Some countries establish private–public partnerships to generate market access initiatives. These are sometimes crop- or sector-specific (as in Case Study 7) and sometimes they cover the whole phytosanitary sector, i.e. plants and plant products in general.

A particularly important feature of stakeholder involvement in market access activities is that industry stakeholders benefit directly from these activities and so have a highly developed sense of cooperation and responsibility. In many cases, the industry is not the limiting factor in these activities; it is the public sector, which may lack the necessary resources to carry out all market access activities with equal focus. It is, therefore, good management practice to involve the stakeholders who benefit the most and who are most eager to engage in market access activities.

As in developing systems approaches, establishing market access activities involves planning, conducting negotiations with the importing country NPPO and implementation. While it is essential for stakeholders to be involved in the planning and implementation phases, negotiations between the NPPOs of the importing and exporting countries are government-to-government affairs in which stakeholder involvement is not appropriate.

Since most countries have only a limited number of major export commodities, it is preferable to have planning and operational matters dealt with by crop-specific permanent working groups. Each working group would develop the components of a market access approach for a specific crop and oversee its implementation. Each plan would have components of surveillance, phytosanitary treatments, integrated measures, PFAs or PFPPs.

Table 4 illustrates the tasks that may be performed by a market access working group and the types of stakeholders that may be involved. For more information on market access, see Box 2.

Discussion Question:

- ◇ What are the main tasks of a crop-specific market access working group? Make a list of the stakeholders who you think should be involved in your country, highlighting those who are likely to benefit the most and who would therefore be most eager to engage.

Case Study 7

South Africa's citrus market

A partnership between South Africa's Department of Agriculture, Forestry and Fisheries and its horticulture (mainly fresh fruit) industry has created a market access working group to coordinate phytosanitary issues related to market access and maintenance for horticulture exports. The objective was to enhance the NPPO's delivery of services. The Department of Agriculture, Forestry and Fisheries took the lead in setting up the working group and developing its terms of reference. It also provides the secretariat and chairs the meetings.

Since its establishment, the market access working group has provided an effective platform for coordinating market access activities undertaken by the public and private sectors regarding exports of fresh fruit. Its activities have helped to facilitate access to new markets and help maintain existing markets (valued at approximately R20 billion or US\$3 billion per year), which have contributed to job creation and rural economic development. The market access working group has also played a key role in the negotiation of new bilateral protocols (e.g. with China and Republic of Korea) to open up new markets for South African fruit. In such cases, public and private members of the group discussed and agreed on the protocols and the responsibilities of different stakeholders to comply with export requirements.

Table 4: Stakeholder involvement in a market access working group

Type	Tasks	Stakeholders
Crop-specific market access working group (permanent)	<p>Planning</p> <ul style="list-style-type: none"> • Establishing export priorities • Laying down surveillance needs • Establishing risk management options • Assessing feasibility and trade restrictiveness • Developing an implementation plan, including documentation and reporting • Outlining future consultation approaches • Elaborating processes to review market access plans as necessary <p>Operation</p> <ul style="list-style-type: none"> • Monitoring/auditing and reporting on market access plan effectiveness • Developing corrective actions if necessary • Evaluating and reviewing the market access plan • Ensuring appropriate flow of information between participants 	<p>Specifically invited commodity specific experts, such as:</p> <ul style="list-style-type: none"> • producers • shippers • exporters • packing house operators • research institutes • universities. <p><i>Optional</i> Representatives from:</p> <ul style="list-style-type: none"> • local authorities • other authorities (e.g. trade ministries).

6. Liaison with International and Regional Stakeholders

Learning objectives

- Identify relevant regional and sub-regional stakeholders
- Understand the types of activities that may benefit from their involvement
- Learn about international cooperation regarding the activities of an NPPO in relation to the IPPC

NPPO stakeholders include individuals, groups, organizations and government agencies that represent other countries or regions. Since many countries have strict guidelines to govern international, regional, bilateral and multilateral relations, NPPOs should be aware of these before embarking on international collaborative activities.

6.1 Regional and sub-regional cooperation

Various regional and sub-regional activities require stakeholder involvement; for example, sub-regional eradication programmes or establishment of PFAs, and regional surveillance activities (see Case Study 8). These activities benefit from the involvement of national, regional and sub-regional stakeholders. Regional and sub-regional stakeholders can be:

- ◆ RPPOs
- ◆ NPPOs from countries within the region
- ◆ regional grower and trade associations
- ◆ other regional organizations (e.g. environmental, food security)
- ◆ regional and sub-regional knowledge centres (e.g. Centre of Phytosanitary Excellence, universities).

The important difference in regional and sub-regional cooperation is that the NPPO is just one partner in the activities and does not have the authority to decide on the actions of a regional or a sub-regional programme. Instead, such programmes are cooperative efforts in which decisions on policy

and operational matters are made, usually on a consensus basis.

It may be necessary to conduct a national consultation or preparatory process to determine the position of the NPPO in regional and sub-regional activities. This involves consulting national stakeholders and may follow a similar process to that described in section 3.2 (Policy and legislation coordination body).

Discussion Question:

- ◇ What is the important difference between national coordination and that promoted at the regional and sub-regional levels?
- ◇ List the main types of regional and sub-regional stakeholders and add examples from your own country.

6.2 International cooperation

International cooperation concerns mainly the activities of an NPPO in relation to the IPPC (see Case Study 3, p. 18) and other international organizations or agreements that affect phytosanitary activities, such as those listed in this section. National coordination of international

Case Study 8

The Northern Australia Quarantine Strategy

Surrounded by ocean, Australia could be considered essentially free from the risk of trans-border incursions of pests and diseases. However, Australia's northern coastline is vast and sparsely populated, making it vulnerable to the entry of pests from the countries to the north. Migrating birds, human activities, wind currents, and the movement of traditional vessels, fishing boats and other foreign vessels that bypass the usual quarantine checks at Australia's border entry points, can all provide pathways for pests and diseases.

The Northern Australia Quarantine Strategy (NAQS) was established in 1989 to help address these unique quarantine risks. The programme focuses on pests and diseases that could potentially enter Australia from countries close by. A target list of exotic animal and plant pests, diseases and weeds that are considered to be a threat to Australia's agricultural productivity, export markets or the environment is reviewed annually. This list includes:

- Asian citrus psyllid
- citrus fruit borer
- exotic fruit flies
- mango pulp weevil
- sugarcane stem borer
- exotic weed species.

NAQS involves surveillance within and beyond Australia to detect incursions and initiate measures to control or restrict the spread of pests and diseases. Importantly, the Strategy includes cooperative programmes with neighbouring countries, including Indonesia, Papua New Guinea and Timor-Leste, which involve the development and implementation of measures for early detection of pests and diseases of mutual concern.

Further information on NAQS can be accessed at the Australian Department of Agriculture webpage: www.daff.gov.au/biosecurity/quarantine/naqs.

activities to establish and maintain a consistent approach requires careful management and cooperation across all the government agencies and ministries involved. The process of coordinating national positions may be essentially the same as that described in section 3.2 (Policy and legislation coordination body). In this context, it should be mentioned that many countries have coordination bodies that are not under the authority of the NPPO, but have responsibility for each of the international organizations or agreements listed below. NPPOs should seek to be involved in these coordination bodies, for example, the national coordination body for the WTO SPS Committee.

The Convention on Biological Diversity

The CBD is an international agreement that aims to develop national strategies for the conservation and sustainable use of biological diversity. Its major

interaction with the IPPC is in relation to IAS and efforts to prevent them being introduced into new ecosystems.

Montreal Protocol on Substances that Deplete the Ozone Layer

The Montreal Protocol is an international treaty designed to protect the ozone layer by phasing out the production and use of numerous substances that are responsible for ozone depletion. Its main impact on the work of the IPPC and NPPOs is the phasing out of methyl bromide, which is or has been used widely in phytosanitary treatments.

Agreement on the Application of Sanitary and Phytosanitary Measures of the WTO

The SPS Agreement is an international treaty of the WTO. It sets rules to ensure that international trade of goods is fair and not affected by unjustified,



Credit: Derric Nimmo

protectionist sanitary and phytosanitary measures. The IPPC is one of the three international standard-setting organizations whose standards are deemed justified and necessary to protect human, animal or plant life or health under this agreement.

World Organisation for Animal Health

The OIE is the intergovernmental organization responsible for improving animal health worldwide. It is one of the three international standard-setting organizations recognized under the SPS Agreement. It concerns phytosanitary authorities through its use of similar approaches to protect animal health, and through its status under the SPS Agreement.

The Codex Alimentarius Commission of FAO and World Health Organization

The CAC is a body of the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization. It aims to develop international standards, codes of practice, guidelines and other recommendations relating to food and food production to ensure food safety. It is recognized by the SPS Agreement and concerns phytosanitary authorities through its use of similar approaches to protect human health, and through its status under the SPS Agreement.



7. Establishing Successful Stakeholder Relations

Learning objectives

- Learn how to identify and prioritize relevant stakeholders
 - Understand the main considerations for NPPOs when establishing formal policy-level and operational-level bodies involving stakeholders
 - Appreciate the key points regarding communication with stakeholders
-

To establish and manage successful stakeholder relations, an NPPO needs to develop and adopt procedures that are acceptable in the prevailing social and political environment of its own country and region. These procedures should underpin the effective management of stakeholders and, at the same time, provide for a fair and transparent system, which can help NPPOs justify decisions and recommendations that are made to the government and the public. Such procedures for successful stakeholder relations (see Appendix 9) focus mainly on:

- ◆ the establishment, composition and tasks of policy-level stakeholder bodies
- ◆ the establishment, composition and tasks of operational-level stakeholder bodies
- ◆ stakeholder prioritization
- ◆ communication mechanisms for exchanging information with stakeholders
- ◆ public awareness measures
- ◆ reporting practices.

The preceding chapters describe many different groups of stakeholders, which can be divided essentially into policy-level and operational-level groups. However, an NPPO can identify and contact stakeholders only when it is aware of their existence. It is therefore useful to create and maintain a stakeholder register (see Case Study 9).

7.1 Policy advisory groups

When establishing a policy advisory group with stakeholder participation (see Chapter 3), the

NPPO has to consider the general strategy of the government towards transparency and the inclusion of stakeholders in decision-making. In many countries, relations with civil society and stakeholders generally are regulated or specified on a horizontal level, meaning that they apply to all sectors of government equally and that general legislation specifies the degree to which stakeholders can be involved in decision-making. In such cases, when establishing official stakeholder coordination groups, existing laws and legislative practices must be upheld.

In cases where legal provisions concerning the involvement of stakeholders are absent or insufficient, the NPPO can be flexible in establishing advisory groups. The following bullet points illustrate the main considerations for NPPOs when establishing formal policy-level bodies involving stakeholders, such as national phytosanitary councils or legislative coordination groups. The composition of these groups should be very broad so as to establish a good dialogue.

Institutional set-up

The characteristics of policy-level bodies, such as national phytosanitary councils or legislative coordination groups, are that they are formal and are:

- ◆ permanent
- ◆ established through decree or institutionalised by phytosanitary legislation
- ◆ have developed terms of reference
- ◆ may have rules of procedure.

Case Study 9

Australia's Stakeholder Register

The Australian Department of Agriculture has many programmes and policies, which regularly release new information. Anyone visiting the Department website who would like to be notified of changes and updates to this information is invited to complete a registration form relating to their area of interest. Anyone who registers as a stakeholder specifying their interest in the activities of Plant Biosecurity Australia will receive online updates and information on policy development and service delivery in relation to biosecurity legislation, market access and import risk analysis.

The Stakeholder Register compiles the following information:

- Contact details.
- Category – e.g. industry, producer, importer, environmentalist, media, government, academic, scientist, student, civil society, general public. Identifying stakeholders by category allows information distribution to be targeted.
- Commodity interests – to identify stakeholders who want to be kept informed of the progress of a biosecurity risk assessment process for specific commodities. Stakeholders can specify their commodity interests, such as oranges or apples, or identify their commodity interests generally, such as fruit (citrus or pome, e.g. apple), grains, vegetables, nuts and nursery stock.

All stakeholders receive the *Biosecurity Bulletin*, a monthly online newsletter providing readers with a greater understanding of the Department's work in managing biosecurity risks overseas, at the border and within Australia. Market access and biosecurity legislation updates are also sent to mailing lists identified from the Stakeholder Register.

The Stakeholder Register is a key element of departmental and biosecurity policy development and service delivery, providing open government processes for the early identification of public issues and concerns, leading to more effective and responsive risk management and stakeholder engagement.

Further information on the Stakeholder Register can be accessed on the Australian Department of Agriculture webpage: <http://www.agriculture.gov.au/biosecurity/risk-analysis/stakeholder>.

Tasks

Policy-level bodies usually have tasks to:

- ◆ review phytosanitary policy
- ◆ exchange information on new developments
- ◆ coordinate research priorities
- ◆ advise on the prioritization of phytosanitary activities
- ◆ establish a national phytosanitary dialogue
- ◆ national coordination of:
 - phytosanitary policy
 - phytosanitary measures
 - IPPC positions
 - RPPO positions
 - phytosanitary positions with regard to other international organizations (WTO SPS Committee, CBD, Montreal Protocol, etc.)
 - set priorities with regard to market access initiatives.

Composition

The composition of such groups should be very broad in order to establish a good dialogue. Stakeholders involved would be chosen from:

- ◆ Ministry of Agriculture
- ◆ Ministry of Forestry
- ◆ foreign affairs
- ◆ customs
- ◆ environment
- ◆ trade and industry
- ◆ universities
- ◆ research institutes
- ◆ other government agencies
- ◆ producer organizations
- ◆ importer and exporter associations
- ◆ civil groups (e.g. environmental protection).

Practical arrangements

The NPPO is the organizing body and therefore:

- ◆ convenes the meetings
- ◆ sets the agenda (with stakeholder input)
- ◆ chairs the meeting
- ◆ provides secretarial assistance and if appropriate funding
- ◆ writes and distributes the reports.

7.2 Operational bodies

Chapter 4 describes the different groups and bodies that can be established by an NPPO to plan, implement or supervise specific phytosanitary activities, programmes or projects. In general, such bodies are usually crop- or pest-specific and would include stakeholders with the appropriate expertise. The bullet points below illustrate the main considerations for an NPPO when establishing an operational body with stakeholder participation.

Institutional set-up

Operational bodies are established by the NPPO and are usually:

- ◆ temporary
- ◆ may have or develop terms of reference
- ◆ may have or develop rules of procedure.

Tasks

Operational bodies are usually crop-, pest- or project-specific and have responsibility to:

- ◆ plan specific phytosanitary projects or programmes (e.g. surveillance, systems approaches, contingency plans)
- ◆ plan the establishment of a capability (e.g. PRA, diagnostics)
- ◆ supervise specific projects or programmes
- ◆ review projects or programmes
- ◆ adjust projects or programmes or take corrective actions
- ◆ set communication targets.

Composition

Usually stakeholders in operational bodies would be crop-, pest- or project-specific experts and chosen from:

- ◆ national and local government agencies
- ◆ research institutions

- ◆ universities
- ◆ scientific societies (including amateur specialists)
- ◆ representatives of related industries (including cool store operators, fumigation operators, freight forwarders, etc.)
- ◆ producers
- ◆ consultants
- ◆ museums
- ◆ the general public
- ◆ exporters
- ◆ importers
- ◆ environmental organizations.

7.3 Stakeholder prioritization

It is important to choose suitable partners to be involved in NPPO activities. The choice of stakeholders must ensure that participants have the appropriate skills and experience they need for each specific activity. They must also be selected in a fair and impartial manner.

The NPPO may have a long list of people and organizations that are affected by its work, including political or economic interest groups that may wish to block or advance a certain topic. It is therefore important to prioritize involvement. Figure 2 is a simple prioritization grid. This was developed for corporate governance but may also be used for phytosanitary purposes. (See Case Study 9.)

When prioritizing stakeholders, it is important to understand their motivation. There are a number of key questions that can help to understand their intentions and objectives (see Mind Tools, undated):

- ◆ What financial or emotional interest do they have in the outcome of your work? Is it positive or negative?
- ◆ What motivates them most of all?
- ◆ What information do they want from you?
- ◆ How do they want to receive information from you? What is the best way of communicating your message to them?
- ◆ What is their current opinion of your work? Is it based on good information?
- ◆ Who influences their opinions generally, and who influences their opinion of you? Do some of these influencers therefore become important stakeholders in their own right?

- ◆ If they are not likely to be positive, what will win them around to support your project?
- ◆ If you don't think you will be able to win them around, how will you manage their opposition?
- ◆ Who else might be influenced by their opinions? Do these people become stakeholders in their own right?

When selecting stakeholders, the aim should be to reach a balance between different stakeholder interests and power structures.

Discussion Question:

- ◇ Apply the key questions to some of the stakeholders you have identified in previous discussion questions. Does this help to prioritize which ones to include in your own programmes?

7.4 Communicating with stakeholders

An effective communication strategy is essential and should keep stakeholders well-informed through accurate, comprehensive and timely communications. The NPPO should also solicit regular feedback and make provision for a

constant flow of information between all parties. Communication can be passive (designed to inform stakeholders and sometimes receive information in response) and active (involving stakeholders in discussions and decision-making input). Successful stakeholder relations require a mixture of both types and Table 5 illustrates various options.

Figure 2. Power/interest grid for stakeholder prioritization

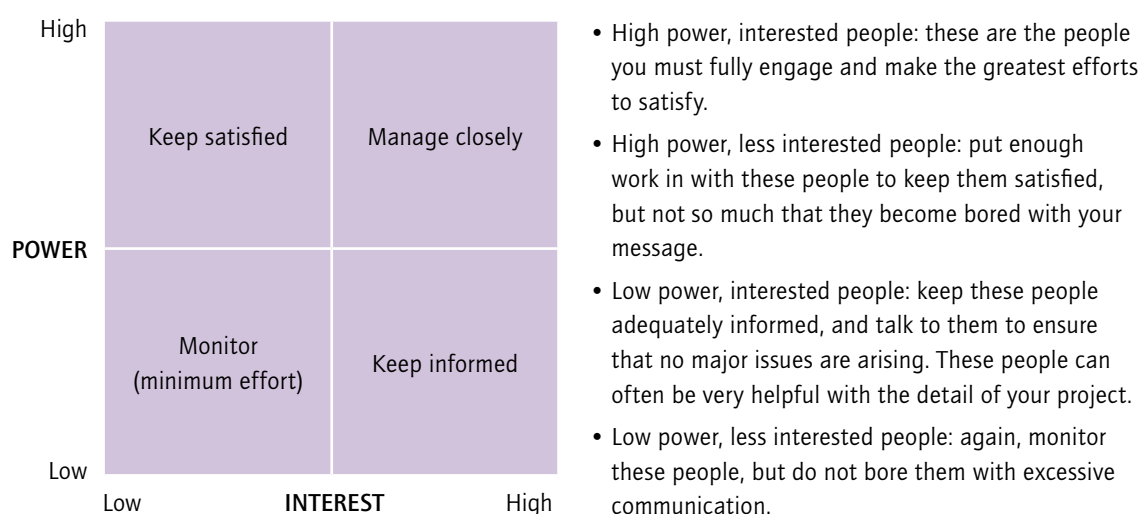


Table 5: Passive and active methods of communication

Passive (information)	Active (discussion)
<ul style="list-style-type: none"> • Websites • Newspaper articles • Other news channels • Posters • Flyers • Pamphlets • List servers • Draft policy documents 	<ul style="list-style-type: none"> • Conference calls • Video conferencing • Face-to-face meetings • Questionnaires • Social media (interactive) • Advisory committees or councils • Working groups • Consultations

Discussion Question:

- ◇ Give participants a number of messages that need to be communicated to stakeholders and ask them to select which communication tool to use. Discuss why they chose a particular tool and if there is agreement or disagreement among participants.

7.5 Public awareness

Public awareness of the activities of an NPPO is an extension of the communication strategy. Significant disease outbreaks, pest eradication and control activities, and other activities that may lead to environmental disturbances are clearly issues of interest to the general public and may affect particular individuals or groups. Press releases, radio and television interviews and dedicated open phone lines to receive public comment provide the best means of communication in the most serious situations.

An NPPO should also keep the public aware of less serious issues and activities, particularly when these will benefit individuals or groups. For example, trade negotiations that lead to more favourable conditions for importing or exporting plants and plant products, or international recognition for PFAs and ALPPs should receive extensive media coverage to gain political and public support for NPPO activities.

The NPPO should take advantage of all public awareness exercises to highlight its stakeholder relations and stress their importance. This will have a positive impact on the public profile of the NPPO and will help to build good, long-term stakeholder relations.

Discussion Question:

- ◇ Make a list of potential public awareness activities that could occur in your NPPO in the next six months.

7.6 Good cooperative practices

Good cooperative practices – the ways in which an NPPO or other phytosanitary authority deals with its stakeholders – ensure that stakeholders feel valued, are taken seriously and develop a good understanding of the actions of the NPPO. This will build their trust.

The first step is to make sure that all stakeholders feel part of the group on an equal footing. Documents should always be circulated in a timely manner to the entire list of stakeholders so none of them feels left out. They should also be asked to distribute documents, proposals or other information among their own organizations.

When working with stakeholders on policy decisions and specific phytosanitary regulations or measures, it is important to communicate the potential impacts and to establish clear timelines for receiving their responses. All stakeholders should be engaged in the decision-making process and responsibilities should be shared among them to ensure a balanced input into decisions. It is also important to make it clear from the beginning that the final decision rests with the NPPO or other phytosanitary authority.

Phytosanitary regulation

Official rule to prevent the introduction or spread of quarantine pests, or to limit the economic impact of regulated non-quarantine pests, including establishment of procedures for phytosanitary certification [FAO, 1990; revised FAO, 1995; CEPF, 1999; ICPM, 2001; revised CPM, 2013]

7.7 Good reporting practices

The results of stakeholder consultation exercises should be shared with all interested parties. This includes the results of important policy changes, market access negotiations and important phytosanitary decisions developed through stakeholder involvement. Reporting should be a high priority as it ensures transparency in the activities of the NPPO or other phytosanitary authority. It will also ensure that the stakeholder representatives continue to present the opinions of the operators

and enterprises they actually represent. Good reporting builds trust and minimizes the potential for problems in future stakeholder consultations and coordination activities. Suitable communication

tools include press releases and public information meetings. All relevant documents can be made available on public access websites, depending on the transparency policy of the country.



Credit: Ken Hammond

8. References and Resources

IICA. 2009. *Handbook of good practices to participate in meetings of the International Plant Protection Convention (IPPC)*. Document prepared by B. Melchó. San José, Costa Rica, Inter-American Institute for Cooperation on Agriculture. 71 pp. (available at www.iica.int/Esp/organizacion/LTGC/Sanidad/Publicaciones%20de%20SAIA/IPPC%20Eng.pdf (accessed 31 August 2015))

IPPC. 2007. *IPPC pest risk analysis training course*. Rome, Food and Agriculture Organization of the United Nations. Available at www.phytosanitary.info/information/ippc-pest-risk-analysis-training-course (accessed 31 August 2015).

IPPC. 2013. *Market access – a guide to phytosanitary issues for national plant protection organizations*. Rome, Food and Agriculture Organization of the United Nations. 40 pp. Available at www.phytosanitary.info/sites/phytosanitary.info/files/Market%20Access%20Guide-English%20%282%29.pdf (accessed 31 August 2015).

ISPM 2. 2011. *Framework for pest risk analysis*. Rome, IPPC, FAO.

ISPM 4. 2011. *Requirements for the establishment of pest free areas*. Rome, IPPC, FAO.

ISPM 5. 2015. *Glossary of phytosanitary terms*. Rome, IPPC, FAO.

ISPM 6. 2011. *Guidelines for surveillance*. Rome, IPPC, FAO.

ISPM 7. 2012. *Phytosanitary certification system*. Rome, IPPC, FAO.

ISPM 9. 2011. *Guidelines for pest eradication programmes*. Rome, IPPC, FAO.

ISPM 10. 2011. *Requirements for the establishment of pest free places of production and pest free production sites*. Rome, IPPC, FAO.

ISPM 11. 2013. *Pest risk analysis for quarantine pests*. Rome, IPPC, FAO.

ISPM 14. 2014. *The use of integrated measures in a systems approach for pest risk management*. Rome, IPPC, FAO.

ISPM 21. 2011. *Pest risk analysis for regulated non-quarantine pests*. Rome, IPPC, FAO.

ISPM 22. 2011. *Requirements for the establishment of areas of low pest prevalence*. Rome, IPPC, FAO.

ISPM 23. 2011. *Guidelines for inspection*. Rome, IPPC, FAO.

ISPM 26. 2015. *Establishment of pest free areas for fruit flies (Tephritidae)*. Rome, IPPC, FAO.

ISPM 30. 2011. *Establishment of areas of low pest prevalence for fruit flies (Tephritidae)*. Rome, IPPC, FAO.

(All ISPMs can be found and downloaded at <https://www.ippc.int/en/core-activities/standards-setting/ispm/#publications>)

Lopian, R. 2005. The International Plant Protection Convention and invasive alien species. In IPPC Secretariat. *Identification of risks and management of invasive alien species using the IPPC framework*, pp. 6–16. Proceedings of the workshop on invasive alien species and the International Plant Protection Convention, Braunschweig, Germany, 22–26 September 2003. Rome, Food and Agriculture Organization of the United Nations. Available at www.fao.org/docrep/008/y5968e/y5968e05.htm#bm05 (accessed 31 August 2015).

Mind Tools. Undated. Stakeholder analysis: winning support for your projects. Available at www.mindtools.com/pages/article/newPPM_07.htm (accessed 31 August 2015).

Wood, M. 2005. Stakeholder consultation and risk communication in Canada. Presentation at the International Plant Health Risk Analysis Workshop, 24–28 October 2005, Niagara Falls, Canada. Available at www.ippc.int/publications/stakeholder-consultation-and-risk-communication-canada-michael-wood-canada (accessed 31 August 2015).

Appendix 1: Stakeholder Involvement in Pest Risk Analysis

The IPPC specifies in Article IV (2f) that the responsibilities of an NPPO shall include “the conduct of pest risk analysis”. The objectives of a PRA are to identify pests and/or pathways of quarantine concern and to evaluate their risk, to identify endangered areas and, if appropriate, to identify risk management options. The PRA process is divided into three stages:

- ◆ **PRA Stage 1:** Initiation – This stage involves defining the reason for the PRA and identifying the pest(s) and pathway(s) that may be considered for the PRA in relation to the PRA area.
- ◆ **PRA Stage 2:** Pest risk assessment – In this stage, information about the pests or pest groups identified in Stage 1 is gathered and evaluated. The results are used to decide whether risk management is required. Also, the endangered area within the PRA area is identified.
- ◆ **PRA Stage 3:** Pest risk management – This stage determines appropriate management options to reduce the risks identified in Stage 2 to an acceptable level.

The IPPC PRA training course (IPPC, 2007) describes the PRA process in detail, while specific aspects of the process are included in the IPPC standards (ISPM 2, 2011; ISPM 11, 2013; ISPM 21, 2011). The guidance provided by such publications is providing impetus for many countries to establish PRA units within the NPPO. However, many small countries are finding it difficult to commit resources to a dedicated unit. In such cases, alternative ways to carry out PRAs under the supervision of NPPOs should be developed. This establishment and implementation of a PRA system by an NPPO can be an activity where stakeholders may be involved and play important roles. Their involvement can take place in the planning or the operational phase.

Planning the PRA system

When planning to establish or revise a PRA system, the NPPO should identify existing capabilities that are

available in the country. The NPPO should endeavour to identify other institutions or organizations that would have the capacity to undertake PRAs under the supervision of the NPPO. The planning phase would also include the development of procedures for supervision and quality control relating to the PRA process.

This assessment and planning exercise could be done with the help of a working group established by the NPPO. The working group would assess and plan the activities that would ultimately lead to the establishment of a PRA system. These activities could include identification of:

- ◆ existing resources for PRA
- ◆ institutions and organizations capable of conducting PRAs
- ◆ supervisory functions for the NPPO
- ◆ financing options for PRA development
- ◆ quality control procedures
- ◆ potential public consultation procedures.

When establishing a working group, NPPOs should extend invitations to specific stakeholders that can provide essential information. This should include representatives from research institutes and universities who are best placed to capably provide information and advice for carrying out PRAs.

Operation of a PRA system with stakeholder involvement

Stakeholders can also be involved in conducting PRAs. NPPO resources may be insufficient to establish a fully functional PRA unit with principal scientists for all major disciplines in plant health. Consequently, a system can be established in which the PRA expertise and resources can be outsourced from such stakeholders as research institutes and universities. Such a system, with operational stakeholder involvement in the PRA process, could have the following components:

The NPPO:

- ◆ assesses the need for a particular PRA
- ◆ identifies potential stakeholders scientifically capable of carrying out the PRA
- ◆ ensures that there is no conflict of interest
- ◆ enters into a contractual agreement with the stakeholder to carry out the PRA
- ◆ provides training in PRA to the assessor (if appropriate)
- ◆ supervises the PRA development through commenting, etc.

The stakeholder:

- ◆ carries out the PRA or specific elements of the PRA
- ◆ takes part in training on PRA.

Such a system would essentially entail that stakeholders are carrying out PRAs while the NPPO supervises the process and the development. The advantages are that for each PRA the best expert available can be contracted.

Table A1. Stakeholder involvement in PRA

Type	Tasks	Stakeholders
PRA system planning group	Planning and assessment <ul style="list-style-type: none"> • Existing resources for PRA • Identify institutions and organizations being capable of conducting PRAs • Supervisory functions by the NPPO • Financing PRA development • Quality control procedures • Possible public commenting procedures 	Representatives of: <ul style="list-style-type: none"> • universities • research institutes. <i>Optional</i> Representatives from: <ul style="list-style-type: none"> • producer organizations • importer and exporter associations.
Operational involvement in conducting PRA	NPPO tasks <ul style="list-style-type: none"> • Assess the need for a particular PRA • Identify potential stakeholders scientifically capable of carrying out the PRA • Ensure that there is no conflict of interest • Enter into a contractual agreement with the stakeholder to carry out the PRA • Provide training in PRA to the assessor (if appropriate) • Supervise the PRA development through commenting, etc. Stakeholder tasks <ul style="list-style-type: none"> • Carry out the PRA • Take part in training on PRA • Ensure no conflict of interest in the outcome of the PRA 	Individual scientists from: <ul style="list-style-type: none"> • universities • research institutes.

Appendix 2: Stakeholder Involvement in the Establishment of Pest Free Areas and other Regionalization Concepts

The IPPC specifies in Article IV (2e) that the responsibilities of an NPPO shall include “the designation, maintenance and surveillance of pest free areas [PFAs] and areas of low pest prevalence [ALPPs]”. The effective execution of these measures and actions changes the pest status of regulated pests in an area, creating opportunities for a country to negotiate market access.

The package of measures that an NPPO may apply to establish a PFA or to prevent the introduction of a known pest into an area designated for the propagation of plants should be based on relevant ISPMs (ISPM 4, 2011; ISPM 10, 2011; ISPM 22, 2011; ISPM 26, 2015; ISPM 30, 2011) and on the biology of the pest, and be well documented for possible later auditing and verification. In many cases, measures to establish PFAs or other regionalization concepts are developed jointly by the exporting and importing countries and laid down in bilateral agreements.

These measures include:

- ◆ establishment, maintenance and surveillance of PFAs, PFPPs and PFPSs
- ◆ establishment of ALPPs
- ◆ eradication (see section 4.6).

Implementation of these measures is often trade-driven and so lends itself to broad stakeholder participation. Successful implementation requires a strong relationship between the NPPO and the stakeholders who will benefit directly from the PFA. Long-term support from a range of other stakeholders from both the public and private sectors is often needed to ensure that PFA programmes remain viable.

Public sector stakeholder support may be operational (e.g. inspection staff, extension service, customs, police), regulatory (e.g. NPPO staff, forest

departments, environment departments, ministry of justice) and financial (e.g. ministry of trade, ministry of finance, budget and planning departments of the ministry of agriculture).

Private sector stakeholder support includes:

- ◆ providers of direct inputs, such as the principal producers, marketers or industry representatives of the products intended for export and therefore the main beneficiaries
- ◆ residents in areas where phytosanitary actions are to be taken
- ◆ the general public, particularly those who traverse PFAs and areas known to be infested by the regulated pest.

In making the decision to establish any of the above, the NPPO and stakeholders should work together to conduct several measures, including:

- ◆ a cost–benefit analysis to:
 - establish freedom from pests
 - maintain freedom from pests
 - verify that freedom from pests has been attained or maintained
 - manage the maintenance of product identity and phytosanitary security of the consignment
- ◆ technical feasibility studies
- ◆ environmental impact studies.

Consignment

A quantity of plants, plant products or other articles being moved from one country to another and covered, when required, by a single phytosanitary certificate (a consignment may be composed of one or more commodities or lots) [FAO, 1990; revised ICPM, 2001]

Table A2. Stakeholder involvement in the establishment of PFAs and ALPPs

Type	Tasks	Stakeholders
Planning group	<p>Financial feasibility studies</p> <ul style="list-style-type: none"> • Government policy regarding the implementation of these measures in economic development • Cost sharing agreements • Potential income from anticipated exports over time • Market access opportunities for expansion of exports • Benefits to environment and food quality for local consumption 	<ul style="list-style-type: none"> • External stakeholders in potential importing country • Ministries of trade, finance and agriculture • Primary stakeholders – producers, exporters and others in the commercialization chain
	<p>Technical feasibility studies</p> <ul style="list-style-type: none"> • Type of pest to be regulated • Type of crop(s) • Cropping pattern, host plants and the spread of pest in the targeted area • Possible physical and other barriers to be considered • Measures (their efficacy and practicality of their application) • Availability of inputs and reliability of sources 	<ul style="list-style-type: none"> • Ministry of agriculture, ministry of environment • Universities and research institutes • Producer organizations • Importer and exporter associations
	<p>Environmental impact studies</p> <ul style="list-style-type: none"> • Evaluation of measures to be applied and their effects on human health, environment and plant and animal life 	<ul style="list-style-type: none"> • Ministries of environment, agriculture, health and relevant environmental agencies • Individual scientists from universities and research institutes
Operational aspects	<ul style="list-style-type: none"> • Identify the crops to be protected • Determine the pest(s) to be regulated 	<ul style="list-style-type: none"> • Producers • Requesting trading partner/importer • Ministry of agriculture
	<ul style="list-style-type: none"> • Determine the area to be designated for establishing freedom from pests 	<ul style="list-style-type: none"> • Producers, civil society groups • Local/municipal/state government
	<ul style="list-style-type: none"> • Identify the stakeholders to be affected by the impact of regulation of the pest(s) • Implementation of measures • Maintenance of PFA/ALPP 	<ul style="list-style-type: none"> • Primary stakeholders (producers and exporter associations) • Regulatory agencies

Appendix 3: Stakeholder Involvement in Pest Surveillance

The IPPC specifies in Article IV (2b) that the responsibilities of an NPPO shall include “the surveillance of growing plants”. This includes those under cultivation (*inter alia* fields, plantations, nurseries, gardens, greenhouses and laboratories), wild flora, and plants and plant products in storage or in transportation. Surveillance is carried out particularly with the object of reporting the occurrence, outbreak and spread of pests, and of controlling those pests.

To provide guidance on surveillance, the IPPC Secretariat developed ISPM 6 (2011), which outlines the main components of survey and monitoring systems for the purpose of pest detection and the provision of information for use in PRAs, the establishment of PFAs and, where appropriate, the preparation of pest lists.

ISPM 6 (2011) differentiates between the major types of surveillance systems, which are general surveillance and specific surveys. In both types of surveys, stakeholder inputs, assistance and support are extremely valuable.

In general surveillance, information on priority pests is gathered from many sources and made available by the NPPO. In the case of general surveillance, which is primarily a data collection exercise, NPPOs can access many sources of pest information, including national and local government agencies, research institutions, universities, scientific societies (including amateur specialists), producers, consultants, museums, the general public, scientific and trade journals, unpublished data and contemporary observations. This input is crucial to obtain an accurate picture of the possible occurrence of pests and their distribution in a country. To solicit this information from stakeholders it may suffice to contact them by letter or e-mail.

In specific surveys, NPPOs obtain information on pests of concern on specific sites over a defined time period. Specific surveys are planned

meticulously according to the epidemiology of the target pests. Stakeholder involvement in specific surveys can be important at a planning/policy level and also during the operational phase.

Stakeholder involvement in the planning of specific surveys

ISPM 6 (2011) specifies that specific surveys, which may be detection, delimiting or monitoring surveys ... should follow a plan which is approved by the NPPO.

The survey plan should include:

- ◆ definition of the purpose (e.g. early detection, assurances for PFAs, information for a commodity pest list) and the specification of the phytosanitary requirements to be met
- ◆ identification of the target pest(s)
- ◆ identification of scope (e.g. geographical area, production system, season)
- ◆ identification of timing (dates, frequency, duration)
- ◆ in the case of commodity pest lists, the target commodity
- ◆ indication of the statistical basis (e.g. level of confidence, number of samples, selection and number of sites, frequency of sampling, assumptions)
- ◆ description of survey methodology and quality management including an explanation of:
 - sampling procedures (e.g. attractant trapping, whole plant sampling, visual inspection, sample collection and laboratory analysis); the procedure would be determined by the biology of pest and/or purpose of survey
 - diagnostic procedures
 - reporting procedures.

To develop the specific survey plan and to take account of external scientific, technical and practical expertise, the NPPO may want to establish a working group with stakeholder involvement.

Table A3. Stakeholder involvement in surveillance

Type	Tasks	Stakeholders
General surveillance – data collection	<p>NPPO tasks</p> <ul style="list-style-type: none"> • Obtain information on pest • Contact stakeholders 	<ul style="list-style-type: none"> • National and local government agencies • Research institutions • Universities • Scientific societies (including amateur specialists) • Producers • Consultants • Museums • Members of civil society • General public
Planning a specific survey through a working group	<ul style="list-style-type: none"> • Definition of the purpose (e.g. early detection, assurances for PFAs, information for a commodity pest list) and the specification of the phytosanitary requirements to be met • Identification of the target pest(s) • Identification of scope (e.g. geographical area, production system, season) • Identification of timing (dates, frequency, duration) • In the case of commodity pest lists, the target commodity • Indication of the statistical basis (e.g. level of confidence, number of samples, selection and number of sites, frequency of sampling, assumptions) • Description of survey methodology and quality management including an explanation of: <ul style="list-style-type: none"> – sampling procedures (e.g. attractant trapping, whole plant sampling, visual inspection, sample collection and laboratory analysis); the procedure would be determined by the biology of pest or purpose of survey – diagnostic procedures – reporting procedures. 	<p>Host- or pest-specific experts from:</p> <ul style="list-style-type: none"> • universities • research institutes • grower and producer associations. <p><i>Optional</i></p> <ul style="list-style-type: none"> • Local authorities • Environmental authorities.
Implementation of a specific survey	<p>Universities and research institutes may:</p> <ul style="list-style-type: none"> • conduct surveillance on priority crops consistent with the protocol developed • develop a commodity pest list • prepare databases for pest records • provide access to pest information obtained through research and its collections • assist in verification of pest data. <p>Producers/commodity associations (e.g. citrus, cocoa, coffee, banana) may be engaged to:</p> <ul style="list-style-type: none"> • monitor traps on their farms • collect information on pest occurrence and outbreaks • make their pest records available to the NPPO • report the occurrence of any new pests. 	<p>Host or pest specific experts from, for example:</p> <ul style="list-style-type: none"> • universities • research and producer associations. <p><i>Optional</i></p> <ul style="list-style-type: none"> • Local authorities • Environmental authorities

Stakeholders would include producers, research institutes, universities and possibly local authorities and environmental authorities. Since specific surveys are pest-specific, the stakeholders involved would be pest- or commodity-specific experts, for example, citrus, cocoa, coffee or banana producers and researchers.

Stakeholder involvement in implementation of the survey

Pest surveillance lends itself to a range of possible partners and options, especially when the NPPO has a limited range of plant health experts or where there are specific benefits in having stakeholder participation. Stakeholders can be involved in many activities, for example:

Universities and research institutes may:

- ◆ conduct surveillance on priority crops consistent with the protocol developed
- ◆ develop a commodity pest list
- ◆ prepare databases for pest records
- ◆ provide access to pest information obtained through research and its collections
- ◆ assist in verification of pest data.

Producers and commodity associations (e.g. citrus, cocoa, coffee, banana) may be engaged to:

Pest record
A document providing information concerning the presence or absence of a specific pest at a particular location at a certain time, within an area (usually a country) under described circumstances [CEPM, 1997]

- ◆ monitor traps on their farms
- ◆ collect information on pest occurrence and outbreaks
- ◆ make their pest records available to the NPPO
- ◆ report the occurrence of any new pests.

Members of civil society and the general public may be involved in surveillance activities on certain pests. However, when stakeholders are involved in surveillance activities, the NPPO should ensure they are trained and audited adequately in appropriate fields of plant protection and data management, including sampling methods, preservation and transportation of samples for identification and record-keeping associated with samples. In all cases, data and records provided by stakeholders should be accurately verified by the NPPO.

Appendix 4: Stakeholder Involvement in Certification and Inspection Systems

The IPPC Article V.1 states: "each contracting party shall make arrangements for phytosanitary certification" and the inspection of consignments of plants and plant products moving in international traffic. ISPM 7 (2012) and ISPM 23 (2011) provide detailed guidance on the establishment of certification and inspection systems.

Certification and inspection activities are usually official undertakings for which the NPPO has full responsibility. This limits the participation of stakeholders and almost fully excludes those from the private sector, since their involvement may compromise the integrity of the certification process and prevent its acceptance by importing countries. Stakeholder involvement in the certification and inspection system may therefore be limited to other government agencies and departments and local authorities.

Stakeholder involvement may be further limited to certain inspection activities related to import and export. The objective of inspection of consignments is to confirm compliance with import or export requirements relating to quarantine pests or regulated non-quarantine pests. It often serves to verify the effectiveness of other phytosanitary measures taken at a prior time. In some low-population countries, inspection activities may have to be delegated to other authorities for resource reasons.

Border inspection is one area where stakeholders are commonly involved. Consignments

arriving from other countries are usually inspected at the border to ensure their compliance with phytosanitary requirements. According to ISPM 23 (2011), this inspection consists of three distinct parts:

- ◆ examination of documents associated with a consignment
- ◆ verification of consignment identity and integrity
- ◆ visual examination for pests and other phytosanitary requirements (such as freedom from soil).

NPPOs need to cooperate with customs authorities at the border and thus save resources and reduce administrative burdens on importers. Cooperation with customs authorities at the border may relate to:

- ◆ sharing of premises
- ◆ accessibility of databases
- ◆ flagging of phytosanitary-relevant consignments by customs
- ◆ document checks and verification of consignment identity and integrity by customs authorities.

Stakeholders can be involved in inspection activities relating to export and the issuing of phytosanitary certificates. Certain sampling and inspection activities may be undertaken by local authorities or inspectors from other state-level agencies. However, in such cases, the inspectors authorized to take the samples must be recognized and trained by the NPPO. In addition, the NPPO should regularly audit the inspection system, especially when non-NPPO staff are involved.

Table A4. Stakeholder involvement in certification and inspection

Type	Tasks	Stakeholders
Inspection (for export certification)	<ul style="list-style-type: none"> • Sampling according to predetermined protocols • Simple inspections • Document checks (e.g. greenhouse production records) • NPPO requirements: training and auditing 	Local or state-level authorities other than the NPPO such as: <ul style="list-style-type: none"> • local authorities • environmental authorities.
Inspection (border)	<ul style="list-style-type: none"> • Examination of documents associated with a consignment • Verification of consignment identity and integrity • NPPO requirements: training and auditing 	State-level authorities other than the NPPO such as customs authority and border policy

Appendix 5: Stakeholder Involvement in Contingency Plans and Eradication Programmes

One of the main activities of an NPPO is to conduct pest eradication programmes to eliminate a pest from an area. Within the IPPC context, ISPM 9 (2011) has been developed to provide guidance. Contingency planning is a forward-looking exercise in which plans are developed to address specific pests or pest groups that have a high potential for introduction, and for which an eradication plan is deemed to be both feasible and necessary, before the pest is found in an area. The development of plans in advance of a possible outbreak has advantages in providing additional time for deliberation, evaluation and research that may ensure the eradication programme is well designed and can be executed quickly and effectively.

The participation of stakeholders in the development and implementation of eradication and contingency plans is highly desirable, especially when stakeholders have a role in operational aspects of the programmes. This allows for the role of the stakeholders to be defined clearly and agreed well in advance of programme implementation.

Stakeholder involvement in eradication or contingency planning

ISPM 9 (2011) specifies that the decision to proceed with an eradication programme results from an evaluation of the circumstances of detection of a pest, its identification, the risk identified by a pest-initiated PRA, estimation of the present and potential distribution of the pest, and assessment of the feasibility of conducting an eradication programme. It is normally good practice to give due consideration to all the elements recommended.

The development of a contingency plan usually follows the same proactive approach but without the same level of urgency, given that the

target pest has not yet been introduced. Elements needed in the planning phase include:

- ◆ pest identification issues
- ◆ estimating present and potential pest distribution
- ◆ data gathered at the site of detection or occurrence
- ◆ geographical origin
- ◆ pathways of the pest
- ◆ survey for distribution
- ◆ predicting spread
- ◆ feasibility of undertaking an eradication programme
- ◆ biological and economic information
- ◆ cost-benefit analysis of eradication programmes.

The analysis in the planning phase and the subsequent choice of how to proceed may be developed through a working group with stakeholder participation. Stakeholders are necessary to ensure that the appropriate and best scientific and technical expertise is committed to the task and to enhance the acceptability of the eradication programme by industry stakeholders. Acceptability is also improved by sharing information with broader audiences, such as growers, residents and local governments. A planning group with broad stakeholder participation can be strategically important in justifying the eradication programme to the public.

Stakeholders invited to a working group may be representatives or experts from research institutes, universities, grower associations and importers. They should include the most appropriate people who can provide essential information and advice on the development of eradication or contingency plans. In cases where eradication is to

proceed for the establishment of PFAs, it may be appropriate to also invite local authorities.

Stakeholder involvement in the implementation of eradication or contingency plans

Stakeholder involvement in implementation depends on the dimension of the eradication needed. If it is a relatively localized (e.g. greenhouse) infestation with little possibility of spread, the eradication measures may be relatively low key and swift. In such cases, stakeholder involvement may not be necessary.

However, in cases where the eradication concerns a pest that has become relatively widespread, a pest is of priority quarantine concern, or where environmentally sensitive aspects need to be considered (e.g. quarantine pests in a national park), coordination amongst the NPPO and other stakeholders is recommended.

Once it has been decided to undertake an eradication programme, a management team should be established to provide direction to the activities. The size of the management team depends on the scope of the programme and the

Table A5. Stakeholder involvement in contingency planning and eradication

Type	Tasks	Stakeholders
Development of a contingency or eradication plan (working group)	<ul style="list-style-type: none"> • Pest identification • Estimating present and potential pest distribution • Data gathered at the site of detection or occurrence • Geographical origin • Pathways of the pest • Survey for distribution • Predicting spread • Feasibility of undertaking an eradication programme • Biological and economic information • Conducting cost-benefit analysis for eradication programmes 	<p>Representatives or specifically identified experts from:</p> <ul style="list-style-type: none"> • universities • research institutes • grower and producer associations. <p><i>Optional</i></p> <ul style="list-style-type: none"> • Local authorities • Environmental authorities
Implementation of a contingency or eradication plan (management team)	<ul style="list-style-type: none"> • Ensuring that the eradication programme meets the agreed criteria for successful eradication • Formulating, implementing and modifying as necessary the eradication plan • Ensuring programme operators have appropriate authority and training to undertake their duties • Financial and resource management • Appointing and defining duties of operators, ensuring operators understand their responsibilities and documenting their activities • Managing communication, including a public relations programme • Communicating with affected parties, e.g. growers, traders, other government departments and NGOs • Implementing an information management system, including programme documentation and appropriate record-keeping • Daily management of the programme • Continuous monitoring and evaluation of critical elements • Periodic overall programme review 	<p>Representatives or specifically identified experts from:</p> <ul style="list-style-type: none"> • universities • research institutes • grower and producer associations. <p><i>Optional</i></p> <ul style="list-style-type: none"> • Local authorities • Environmental authorities

resources available to the NPPO. Large programmes may require a steering committee or an advisory group that includes the various interest groups that may be affected.

According to ISPM 9 (1998), the management team should have responsibility for:

- ◆ ensuring that the eradication programme meets the agreed criteria for successful eradication
- ◆ formulating, implementing and modifying as necessary an eradication plan
- ◆ ensuring programme operators have appropriate authority and training to undertake their duties
- ◆ financial and resource management
- ◆ appointing and defining duties of operators, ensuring operators understand their responsibilities and documenting their activities
- ◆ managing communication, including a public relations programme
- ◆ communicating with affected parties, e.g. growers, traders, other government departments and NGOs

- ◆ implementing an information management system, including programme documentation and appropriate record-keeping
- ◆ daily management of the programme
- ◆ continuous monitoring and evaluation of critical elements
- ◆ periodic overall programme review.

In addition to being active in the management team, stakeholders may be involved in operational activities, such as surveillance, applying specific eradication measures or providing diagnostic services. The application of specified treatments under the supervision of the NPPO may be an activity especially suited to stakeholders.

Stakeholders involved in the implementation of the eradication plan would be the same as those defined in the planning phase, i.e. representatives or experts invited from research institutes, universities, grower associations and importers. Optional representation may be drawn from local authorities.

Appendix 6: Stakeholder Involvement in Establishing and Implementing a Systems Approach for Pest Risk Management

ISPM 14 (2014) provides guidance, particularly for the NPPOs of exporting countries, for developing and evaluating sets of integrated phytosanitary measures in a systems approach as options for pest risk management in a PRA. This systems approach is useful for evaluating various combinations of phytosanitary measures that can be applied within the production and marketing chain to determine which sets of integrated measures meet the phytosanitary requirements of countries importing their plants, plant products or other regulated articles. Importantly, the systems approach can identify options that are least trade-restrictive for industry stakeholders.

The establishment of integrated measures in a systems approach consists of the following elements:

- ◆ planning of a systems approach
- ◆ negotiations with importing-country NPPO
- ◆ implementation and operation of the integrated measures.

While it is essential for stakeholders to be involved in the planning and implementation phases, negotiations between the NPPOs of the importing and exporting countries are government-to-government affairs in which stakeholder involvement is not appropriate.

Planning a systems approach programme

The systems approach should be considered as a risk management option, whenever the NPPO becomes aware that new or alternative measures are available for risk management. The NPPO may respond to advice from industry sources or research institutions that can justify the consideration of alternative measures to those already in use or those under consideration. In such cases, the NPPO should seek consultation with stakeholders to examine

the alternative measures for risk management. This consultation may take place in the form of a working group which has the main tasks of:

- ◆ identifying where and when management measures occur or can be applied (control points)
- ◆ distinguishing between measures that are essential to the system and other factors or conditions identifying independent and dependent measures and options for the compensation for uncertainty
- ◆ assessing the individual and integrated efficacy of measures that are essential to the system
- ◆ assessing feasibility and trade restrictiveness
- ◆ developing an implementation plan including documentation and reporting
- ◆ outlining future consultation approaches
- ◆ elaborating processes to review and modify the systems approach, as necessary.

Implementation and operation of the systems approach

Integrated measures for a systems approach usually combine two or more measures that are independent of each other and may include any number of measures that are dependent on each other.

Measures used in a systems approach may be applied pre- and/or post-harvest wherever NPPOs have the ability to oversee and ensure compliance with phytosanitary procedures. Thus a systems approach may include measures applied in the place of production, during the post-harvest period, at the packinghouse, or during shipment and distribution of the commodity. Cultural practices, crop treatment, post-harvest disinfestation, inspection and other procedures may be included in an integrated systems approach (ISPM 14, 2014).

These numerous possibilities for combinations of phytosanitary measures make it necessary

that private operators such as growers, cool store operators, freight handlers and shippers may have a range of tasks to perform in the day-to-day operation of a systems approach. For example, growers may be responsible for using appropriate planting material or for weed control practices in cases where those measures are part of the systems approach. The NPPO must have appropriate oversight, authority and control of all stages of a systems approach where private operators are required to apply phytosanitary measures. Since the private sector and the NPPO have to cooperate closely to successfully implement the systems approach, it may be appropriate to establish a group to oversee the programme. The group would be responsible for:

- ◆ monitoring, auditing and reporting on system effectiveness
- ◆ developing a corrective action plan if necessary

- ◆ evaluating and reviewing the systems approach
- ◆ ensuring appropriate flow of information between participants.

The main participants in such an implementation group should be NPPO experts. However, specific stakeholders with relevant expertise regarding the commodity for which the approach had been developed could be included in the group.

Corrective action plan (in an area)

Documented plan of phytosanitary actions to be implemented in an area officially delimited for phytosanitary purposes if a pest is detected or a tolerance level is exceeded or in the case of faulty implementation of officially established procedures [CPM, 2009; revised CPM, 2013]

Table A6. Stakeholder involvement in systems approach for pest risk management

Type	Tasks	Stakeholders
Planning a commodity-specific systems approach (working group)	<ul style="list-style-type: none"> • Identifying where and when management measures occur or can be applied (control points) • Distinguishing between measures that are essential to the system and other factors or conditions, identifying independent and dependent measures and options for the compensation for uncertainty • Assessing the individual and integrated efficacy of measures that are essential to the system • Assessing feasibility and trade restrictiveness • Developing an implementation plan including documentation and reporting • Outlining future consultation approaches • Elaborating processes to review and modify the systems approach as necessary 	<p>Specifically invited commodity specific experts, such as:</p> <ul style="list-style-type: none"> • producers • packing house operators • cool store operators • freight handlers • shippers • exporters. <p><i>Optional</i> Representatives from</p> <ul style="list-style-type: none"> • research institutes • universities • local authorities.
Implementation and operation of the commodity-specific systems approach (implementation group)	<ul style="list-style-type: none"> • Monitoring/auditing and reporting on system effectiveness • Developing corrective action plan if necessary • Evaluating and reviewing the system approach • Ensuring appropriate flow of information between participants 	<p>Specifically invited commodity specific experts, such as:</p> <ul style="list-style-type: none"> • producers • packinghouse operators • cool store operators • freight handlers • shippers • exporters.

Appendix 7: Education and Training

The NPPO has the obligation to train its staff appropriately so that they are able to carry out the functions undertaken by the NPPO. An effective NPPO will try to ensure that all the functions under its administration are performed by persons that have appropriate skills and experience and, where possible, follow international standards, accepted protocols and standard operating procedures. To some extent this can be achieved through the appointment of suitably qualified and skilled staff, but inevitably training and staff development will be required.

Consequently, a training and staff development programme is essential for an effective and sustainable NPPO and may include:

- ◆ a dedicated unit for training and staff development
- ◆ a strategic plan for continual improvement through training and development
- ◆ documented training packages, standards, protocols and operating procedures
- ◆ training facilities and equipment
- ◆ authority to negotiate secondments and attachments

- ◆ authority to outsource to training experts
- ◆ authority to negotiate staff exchanges.

Universities, technical colleges and comparable tertiary institutions offering advanced education qualifications generally provide graduates with a skill set appropriate to many of the roles within the NPPO. Higher degrees from universities can also be awarded that provide graduates with specialized skills that are also required by the NPPO. However, courses within these institutions rarely include subjects or units specifically covering regulatory plant health.

Stakeholders as partners in the training of NPPO staff will include universities, colleges and agricultural institutions that offer basic education in such areas as pest management, botany and pest diagnoses. The NPPO also needs to train personnel from these institutions appropriately so that they can deliver specialized phytosanitary modules in their degree programmes. Specialized institutions, such as diagnostic institutions, specialists in treatments of commodities and equipment firms that supply the NPPO are all examples of stakeholders who assist in the training of staff.

Table A7. Stakeholder involvement in training and education of NPPO staff

Type	Tasks	Stakeholders
Planning	<ul style="list-style-type: none"> • Developing a programme for education and continual training at all levels of competency • Needs assessment • Identifying appropriate institutions, facilities and agencies that may contribute to NPPO training • Financial arrangements • Developing instruments of agreement with appropriate institutions • Determining phytosanitary modules to be incorporated in degree courses 	<ul style="list-style-type: none"> • Ministries of education and agriculture, national planning and training departments • Representatives from universities and research institutes <p><i>Optional</i></p> <ul style="list-style-type: none"> • Representatives from producer, exporter and importer organizations
Operational aspects	<ul style="list-style-type: none"> • Degree courses • Specific phytosanitary training • Pest diagnostics and preparation of pest data sheets • On-the-job training in documented procedures, manuals • Treatments, e.g. fumigation, heat treatment • Use of equipment 	<ul style="list-style-type: none"> • Universities and colleges • IPPC/FAO, WTO • Specialized diagnostic institutions • Institutions and relevant supply companies

Appendix 8: Government–Industry Agreements

Government–industry agreements (GIAs) are usually based on a deed signed by industry and government representatives. They may cover, for example, one component of phytosanitary programme, such as cooperation with pest eradication programmes subsequent to a pest incursion. They may also cover several components or all facets of a national phytosanitary programme for a specific plant product or group of products.

A particularly important objective of GIAs is to deliver an integrated approach from government and industry to prepare for and effectively respond to phytosanitary risks. There should be a collaborative approach to developing proactive risk-based readiness and response capacity and capability to reduce harm caused by introduced pests.

The scope of an agreement would mean engagement of relevant industries across the entire phytosanitary system. Thus phytosanitary engagement would cross the areas of offshore activities (i.e. pre-border work), activities at the border, onshore activities including readiness and response, and pest management. The agreement would include provisions for joint decision-making and the sharing of costs for readiness and response activities for introduced pests that could be eradicated, contained or controlled by pest management activities.

GIAs involve commitments from all signatories; for example:

- ◆ All signatories would work in collaboration, raise awareness of benefits of an effective phytosanitary system, actively promote strategies that reduce the introduction or spread of pests.
- ◆ The NPPO would manage the phytosanitary risk created by the movement of goods, people and vessels across the border and maintain capacity

for risk management; undertake risk analysis and develop phytosanitary import requirements consistent with international requirements, engaging with affected industries; implement statutory standards; monitor ongoing phytosanitary operations; and operate a full compliance system. The NPPO would also meet with the relevant industry and review:

- the phytosanitary profile of the industry
 - the risk management measures in place to mitigate the risk of the introduction of pests
 - the performance of pre-border, border and post-border activities
 - new and emerging risks
 - additional readiness and response activities that may be implemented.
- ◆ The industry signatory would engage with its members and the NPPO to manage phytosanitary risks and:
- seek input from its members to promote a greater understanding of phytosanitary systems
 - identify and prioritize quarantine pests for the industry
 - assist the NPPO in reviewing phytosanitary risk management practices
 - assist with the development of import health standards
 - meet with the NPPO to review the phytosanitary profile of the industry, risk management measures, new and emerging risks and additional readiness and response actions.

Such agreements may contain additional clauses referring to commitments, particularly in relation to operational agreements for pest responses, administration (including a governance group and secretariat) and financial arrangements.

Appendix 9: Checklist for Effective Stakeholder Meetings

Before the meeting	
Who or what event triggered the meeting, or the need for a meeting?	
What is your existing relationship with these stakeholders? What relationship would you aim for?	
How much do these stakeholders know about the NPPO and its objectives?	
What do you specifically want to achieve at this meeting? <ul style="list-style-type: none"> – How will you know you achieved it? – What needs to be in place to achieve it? 	
What follow-up do you need from this meeting? <ul style="list-style-type: none"> – Who needs to follow up? – By when? – What specifically do you need from each party for follow-up? – Will there be a cost and, if so, who will pay? 	
What outcome of the meeting (which you can control to some degree) would satisfy you? <ul style="list-style-type: none"> – Numbers of participants – Range of representation – Active engagement through question-and-answer session (be sure to document this as well as the other outcomes). 	

During the meeting

Explain the role of the NPPO and its objectives if necessary ask the stakeholders:

What are you doing now?	
What works?	
What does not work?	
What else could you do or have you tried?	
If something else works, why are you not doing it already? (barriers to implementation)	
How much improvement would you expect with these new practices?	

If the NPPO is suggesting a change in procedures:

Explain why you propose a change:

What is not working?	
Will something change soon, e.g. loss of a pesticide, more resistance building up?	
What is working in other places or with other commodities?	
Why is it worth considering a different approach?	
What would be expected in terms of additional costs or savings, including access to new markets or the threat of loss of a market?	

IPPC

The International Plant Protection Convention (IPPC) is an international plant health agreement that aims to protect cultivated and wild plants by preventing the introduction and spread of pests. International travel and trade are greater than ever before. As people and commodities move around the world, organisms that present risks to plants travel with them.

Organization

- ◆ The number of contracting party signatories to the Convention exceeds 181.
- ◆ Each contracting party has a national plant protection organization (NPPO) and an Official IPPC contact point.
- ◆ 10 regional plant protection organizations (RPPOs) have been established to coordinate NPPOs in various regions of the world.
- ◆ IPPC liaises with relevant international organizations to help build regional and national capacities.
- ◆ The Secretariat is provided by the Food and Agriculture Organization of the United Nations (FAO-UN).



International Plant Protection Convention (IPPC)

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