GUIDELINES FOR THE REVISION OF NATIONAL PHYTOSANITARY LEGISLATION

BY
JESSICA VAPNEK
AND DANIELE MANZELLA

FAO LEGAL PAPERS ONLINE #63 January 2007 **FAO Legal Papers Online** is a series of articles and reports on legal issues of contemporary interest in the areas of food policy, agriculture, rural development, biodiversity, environment and natural resource management.

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Guidelines for the Revision of National Phytosanitary Legislation Jessica Vapnek¹ and Daniele Manzella²

¹ Legal Officer, United Nations Food and Agriculture Organization.

² International Legal Consultant. The authors would like to thank Bob Ikin, Jeffrey Jones and Orlando Sosa for comments on earlier versions of the guidelines, Nila Petralli and George Sarpong for excellent research assistance and Jonathan Lindsay and Melvin Spreij for earlier intellectual contributions.

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1. Introduction

A glance through the official gazette of most nations, developed and developing, will usually reveal the existence of phytosanitary legislation. Phytosanitary legislation serves several purposes, most importantly enabling countries to protect their agricultural resources and natural environment from the introduction or spread of pests. Phytosanitary legislation defines the institutional framework necessary for effective plant protection and improves the efficiency and effectiveness of national authorities toward this end. It also allows countries to implement their international obligations with a view to facilitating international trade in plants and plant products and fostering cooperation and research in the field of plant protection.

A basic phytosanitary law sets out the government's power to take action upon the appearance of a new pest, such as declaring a quarantine area and imposing restrictions on the movement of people, vehicles, plants and plant products into and out of the areas affected by the pest. It also covers inspections, imports and exports of plants and plant products and penalties for violations.³

Recent international developments have spurred many countries to re-examine their existing legal frameworks to better meet their international obligations and to improve the implementation of their phytosanitary activities. For example, the new revised text of the International Plant Protection Convention (IPPC) of 1997 incorporates a number of definitions and concepts that are generally not reflected in older national phytosanitary laws. Moreover, the phytosanitary standards prepared and issued under the IPPC have become essential for member countries of the World Trade Organization (WTO) through the Agreement on

the Application of Sanitary and Phytosanitary Measures (SPS Agreement) of 1995.

Even those countries that are not members of the WTO have found it useful to revise their phytosanitary legislation to meet the WTO and IPPC requirements, because in many cases their trading partners demand it. In such cases, the fact of having legislation which does not comply with the SPS Agreement can constitute a barrier to trade. It is in this context that FAO has increasingly been called upon to assist member countries in evaluating and updating their phytosanitary legislation.

A government's felt need to revise phytosanitary legislation may stem from internal or external forces, although the latter are increasingly important. Situations may arise which reveal weaknesses in a country's existing administrative scheme for plant protection, while experiences in international trade may do the same. The opening up of regional and global markets is driving states to establish common rules that render the international exchange of goods simpler, and harmonization of phytosanitary legislation is an important step in that direction.

These guidelines attempt to distil the experience gained and lessons learned during the implementation of FAO legal assistance activities in the phytosanitary field in recent years, carried out in close collaboration with the Plant Protection Division of FAO's Agriculture Department. The guidelines discuss the many essential and desirable elements that should form part of modern national phytosanitary legal framework. They also identify the issues that ought to be considered by governments in reviewing their existing regulatory frameworks on plant protection, especially in light of the new revised text of the IPPC and the SPS Agreement.

³ In civil law countries, the "plant protection" law may cover not only these kinds of quarantine issues, but may in addition address the manufacture, import, labelling, storage, sale, use and disposal of pesticides and other plant protection products. This article mainly addresses the phytosanitary issues, with the registration and sale of pesticides touched on in section 5.1. In some countries phytosanitary legislation also covers the development and audit of certification schemes such as those for

potatoes, bulbs and citrus, which are sometimes referred

to as "plant health" activities.

2. The International Context

2.1. Principal international obligations

The main international obligations for states with regard to the protection of plants and the natural environment from the negative effects of pests derive from the WTO SPS Agreement and the IPPC. The next sections discuss in detail the

obligations arising under these two agreements. The appendix to this paper sets out in table form the most relevant provisions of the WTO SPS Agreement, the IPPC and the international standards for phytosanitary measures (ISPMs) with respect to the contents of a basic phytosanitary law. The ISPMs are discussed further in section 2.1.2.1 below and the outline of a basic phytosanitary law is set out in Box 2.

The Convention on Biological Diversity (CBD) imposes obligations on member states with regard to invasive alien species. Article 8(h) of the CBD requires each contracting party to "prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species." Since most invasive species can be categorized as plant pests, the CBD reinforces governments' responsibility to address these threats under phytosanitary legislation.⁴

2.1.1. WTO Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement)

The SPS Agreement aims to prevent the use of plant protection measures as disguised barriers to international trade. Accordingly, it establishes that national phytosanitary measures may be applied only to the extent necessary to protect plant life or health and must be based on scientific principles and sufficient scientific evidence. The Agreement clarifies which factors should be taken into account in the assessment of the risk involved (the principle of technical justification). WTO members are admonished, where they apply phytosanitary measures as a condition for import of plants and plant products. not to arbitrarily or unjustifiably discriminate between countries with identical or similar phytosanitary status (the principle of nondiscrimination).

The SPS Agreement allows countries to set their own level of protection on the basis of analysis and assessment of objective and accurate scientific data. At the same time, the SPS Agreement encourages member countries to apply international standards where they exist, identifying the IPPC as the source of internationally agreed standards on phytosanitary measures. Therefore, the main

implication of the SPS Agreement for national legal frameworks is that so long as a WTO member state employs international standards in the formulation of its national phytosanitary measures, these are presumed to be consistent with the provisions of the SPS Agreement. Although member states may adopt measures which result in a higher level of protection than that offered by an international standard, guideline or recommendation, a member state may be asked to provide scientific justification, that is, to demonstrate that it had to depart from the relevant international standard because applying it would not have resulted in the level of plant health protection the country considered appropriate.

Importing WTO member states are obliged to accept the measures of other member states if the exporting country objectively demonstrates to the importing country that its measures achieve the importing country's appropriate level of protection (the principle of equivalence).

An acceptable level of risk can often be achieved in several ways. Assuming that all such alternatives are technically and economically feasible and provide the same level of plant health protection, governments should select those which are not more traderestrictive than necessary to meet their plant health objectives (the principle of minimal impact).

The SPS Agreement is designed to improve the transparency of sanitary and phytosanitary measures. Accordingly, countries must establish SPS measures on the basis of an appropriate assessment of the actual risks involved, and, if requested, make known what factors they took into consideration, the assessment procedures they used and the level of risk they determined to be acceptable. Governments are also required to notify other countries of any new or changed sanitary and phytosanitary requirements which affect trade. The SPS Agreement requires each member state to establish a national enquiry point to provide advance notice of any new or changed phytosanitary measures, thus giving other member states an opportunity to comment on them and facilitating information-sharing (the principle of transparency).

For the Agreement's first phase of implementation (until the year 2000), developing

⁴ The issue of invasive alien species is further dealt with in section 5.2.

and least developed countries, which make up about two-thirds of the WTO membership, were accorded special and differential treatment provisions. Still, limited technical, human and financial resources continue to hamper many of these countries' ability to implement and enforce phytosanitary measures and regulations. In particular, many developing countries are unable to provide the necessary scientific and technical justification for their phytosanitary measures and are unable to conduct pest risk analysis – which is the process of evaluating biological or other scientific and economic evidence to determine whether a pest should be regulated, and the strength of any phytosanitary measures to be taken against it. This is due to a number of factors such as the lack of infrastructure (e.g. accredited laboratories or other testing facilities) or a weak institutional framework (e.g. regulations and regulatory bodies).

Although the SPS Agreement acknowledges the limitations of means, it encourages the participation of all member states (especially developing countries) in the IPPC, so that such countries can contribute to the formulation of phytosanitary measures and make informed decisions on the approval of international standards. To address these and other implementation issues, WTO member states have agreed to provide developing countries with technical assistance, either bilaterally or through the appropriate international organizations.

2.1.2. International Plant Protection Convention (IPPC)

The IPPC was adopted in 1951 and revised twice, in 1979 and in 1997. The 1997 text (the "New Revised Text") came into force in October 2005. The IPPC is a multilateral treaty whose main purpose is to secure "common and effective action to prevent the spread and introduction of pests of plants and plant products and to promote appropriate measures for their control". The New Revised Text reflects the role of the IPPC as recognized by the SPS Agreement, which, as noted above, identifies the IPPC as the organization responsible for international phytosanitary standard-setting and promotes the harmonization of phytosanitary measures to facilitate trade.

The New Revised Text applies to the protection of both cultivated and natural flora and includes seeds and germplasm. It extends to the potential impacts of plant pests on the environment and addresses the import and use of living modified organisms (LMOs) that may directly or indirectly effect plants or other organisms. The New Revised Text emphasizes cooperation and the exchange of information on plant protection, and formalizes the IPPC Secretariat, which is housed at FAO. The text also identifies new phytosanitary concepts, such as pest risk analysis, the designation of pest free areas and the phytosanitary security of export consignments after certification. Finally, like the SPS Agreement, the New Revised Text of the IPPC makes provision for contracting parties to provide technical assistance to other contracting parties, especially developing countries, with the objective of facilitating implementation of the IPPC and its standards.

The IPPC embraces a number of principles, some of which must be reflected in national legislative and regulatory frameworks. The first of these is state sovereignty, which recognizes that countries have the right to use phytosanitary measures, including measures taken in emergency situations, to protect their territories and their citizens from phytosanitary threats from other states. The effect of this right is, however, tempered by other principles, such as the principle of necessity, which requires states to adopt restrictive measures only when they are necessary for phytosanitary protection, and the principle of minimal impact (also contained in the SPS Agreement), which requires restrictive measures to have the least possible impact on the international movement of people and goods.

Other important principles are cooperation, which requires states to cooperate to prevent the spread and introduction of quarantine pests and to promote measures for their official control. In the phytosanitary context, non-discrimination under the IPPC requires that phytosanitary measures be applied without discrimination between countries with the same phytosanitary status. In the case of regulated pests within a country, measures are to be applied without discrimination between domestic and imported consignments.

The principle of transparency under the IPPC requires countries to publish and disseminate phytosanitary prohibitions, restrictions and requirements and, on request, to make available the rationales for them. The principle of equivalence, also seen above, requires states to recognize as being equivalent those phytosanitary measures that are not identical but which have the same effect. Finally, the principle of emergency action permits countries in the face of a new or unexpected phytosanitary situation to take immediate emergency measures on the basis of a preliminary pest risk analysis. Such measures are to be temporary and the validity of their application in the long term is subject to a detailed pest risk analysis as soon as possible.

2.1.2.1. Phytosanitary Standards under the IPPC

The IPPC is a legally binding international convention, but the standards developed and adopted under its aegis are not in themselves binding. They do however become relevant to WTO members, in that member states are encouraged to base their phytosanitary measures on the international standards developed within the framework of the IPPC,

where these exist. However, member states are allowed to adopt measures that establish a higher level of protection than that provided by the relevant international standard, on the basis of scientific justification and necessity for them, i.e. on pest risk analysis. Members may also develop standards in the absence of an applicable international standard, so long as such national standards are supported by pest risk analysis.

The IPPC Secretariat established its standard-setting programme in 1992. The first ISPMs were approved by the FAO Conference in 1995. From 1998 to 2005 they were approved by the Interim Commission on Phytosanitary Measures. Since 2006, after the entry into force of the New Revised Text, they have been approved by the Commission on Phytosanitary Measures (CPM). Standards usually originate through national or regional initiatives and are drafted by expert groups organized by the Secretariat of the IPPC. A number of ISPMs have been approved, as shown in Box 1.

BOX 1 - INTERNATIONAL STANDARDS FOR PHYTOSANITARY MEASURES (ISPMs)

ISPM 1 - Phytosanitary Principles for the Protection of Plants and the Application of Phytosanitary Measures in International Trade (2006): intends to reduce or eliminate the use of unjustifiable phytosanitary measures as barriers to trade.

ISPM 2 - Guidelines for Pest Risk Analysis (1996): describes the process of pest risk analysis to assist National Plant Protection Organizations in the preparation of phytosanitary regulations.

ISPM 3 - Guidelines for the Export, Shipment, Import and Release of Biological Control Agents and Other Beneficial Organisms (2005): lists the responsibilities of government authorities and of exporters and importers of biological control agents.

ISPM 4 - Requirements for the Establishment of Pest Free Areas (1996): outlines the requirements for the establishment and use of pest free areas in connection with phytosanitary certification of plants and plant products for export.

ISPM 5 - Glossary of Phytosanitary Terms (2006): lists terms and definitions relevant to phytosanitary systems worldwide and provides a harmonized internationally agreed vocabulary.

ISPM 6 - Guidelines for Surveillance (1997): describes the components of surveillance and monitoring systems for pest detection or for the provision of information for use in pest risk analysis, the establishment of pest free areas or the preparation of pest lists.

ISPM 7 - Export Certification System (1997): describes the components of a national system for the issuance of phytosanitary certificates for export.

ISPM 8 - Determination of Pest Status in an Area (1998): describes the content of a pest record, and outlines the use of pest records and other information in the determination of pest status in an area.

ISPM 9 - Guidelines for Pest Eradication Programmes (1998): describes the components of a pest eradication programme which can lead to the establishment or re-establishment of pest absence in an area.

- ISPM 10 Requirements for the Establishment of Pest Free Places of Production and Pest Free Production Sites (1999): describes these requirements, similar to pest free areas.
- ISPM 11 Pest Risk Analysis for Quarantine Pests Including Analysis of Environmental Risks and Living Modified Organisms (2004): provides details for the conduct of pest risk analysis to determine whether pests are quarantine pests.
- *ISPM 12 Guidelines for Phytosanitary Certificates (2001):* describes principles and guidelines for the preparation and issue of phytosanitary certificates.
- *ISPM 13 Guidelines for the Notification of Non-compliance and Emergency Action (2001):* describes the actions to be taken by countries regarding the notification of instances of failure of an imported consignment to comply with specified requirements.
- ISPM 14 The Use of Integrated Measures in a Systems Approach for Pest Risk Management (2002): provides for the development and evaluation of integrated measures in a systems approach as an option for pest risk management for import.
- ISPM 15 Guidelines for Regulating Wood Packaging in International Trade (2002) with Modifications to Annex I (2006): describes phytosanitary measures to reduce the risk of introduction and/or spread of quarantine pests associated with wood packaging material.
- ISPM 15 Certification Mark (2002): sets out the IPPC certification mark.
- ISPM 16 Regulated Non-quarantine Pests: Concept and Application (2002): describes the concept of regulated non-quarantine pests and identifies their characteristics.
- ISPM 17 Pest Reporting (2002): describes the responsibilities of and requirements for contracting parties in reporting the occurrence, outbreak and spread of pests in areas for which they are responsible.
- ISPM 18 Guidelines for the Use of Irradiation as a Phytosanitary Measure (2003): provides technical guidance on the application of ionizing radiation as a phytosanitary treatment.
- ISPM 19 Guidelines on Lists of Regulated Pests (2003): describes the procedures for the preparation, maintenance and dissemination of national lists of regulated pests.
- ISPM 20 Guidelines for a Phytosanitary Import Regulatory System (2004): outlines the structure and operation of a phytosanitary import regulatory system.
- ISPM 21 Pest Risk Analysis for Regulated Non quarantine Pests (2004): provides guidance for the conduct of pest risk analysis for regulated non-quarantine pests.
- ISPM 22 Requirements for the Establishment of Areas of Low Pest Prevalence (2005): outlines the procedures and requirements for the establishment of areas of low pest prevalence at national level.
- *ISPM 23 Guidelines for Inspection (2005):* describes the procedures for the inspection of consignments of plants and plant products and other regulated articles at import and export.
- ISPM 24 Guidelines for the Determination and Recognition of Equivalence of Phytosanitary Measures (2005): discusses the applicable principles and requirements for the determination of equivalence of phytosanitary measures.
- ISPM 25 Consignments in Transit (2006): describes procedures to manage phytosanitary risks for consignments of regulated articles which pass through a country without being imported.
- ISPM 26 Establishment of Pest Free Areas for Fruit Flies (Tephritidae) (2006): provides guidance for the establishment and maintenance of pest-free areas for fruit flies of economic importance.
- ISPM 27 Diagnostic Protocols for Regulated Pests (2006): provides standards for the content and structure of diagnostic protocols.

2.1.2.2. Regional work under the IPPC

Interest in the harmonization of standards for trade purposes has encouraged the development of standards at the regional level by regional standard-setting organizations. Regional phytosanitary standards should be consistent with the SPS Agreement and the

IPPC, although they may address areas not yet covered by international standards. For example, a regional organization may develop a standard for surveillance of a particular pest in the region, although that standard will be based on science and on the existing IPPC surveillance standard (ISPM 6).

Regional Plant Protection Organizations (RPPOs) are intergovernmental organizations functioning as regional coordinating bodies for national plant protection organizations (NPPOs). Not all members of the IPPC are members of RPPOs, nor are all members of RPPOs signatories to the IPPC. There are currently 9 RPPOs, namely:

- the Asia and Pacific Plant Protection Commission;
- 2) the Comunidad Andina;
- the Comite de Sanidad Vegetal del Cono Sur;
- the Caribbean Plant Protection Commission;
- 5) the European and Mediterranean Plant Protection Organization;
- 6) the Inter-African Phytosanitary Council;
- 7) the North American Plant Protection Organization;
- 8) the Organismo Internacional Regional de Sanidad Agropecuaria; and
- 9) the Pacific Plant Protection Organization.

The relationship between a regional economic grouping and its relevant standard-setting organization varies. At one end of the spectrum might be the North American Free Trade Agreement and the North American Plant Protection Organization (NAPPO), where the standards established by the latter have direct legal effect. At the other end of the spectrum, standards established by the European Plant Protection Organization (EPPO) are not binding on European Union members, although they are persuasive and are most often taken on board.

Each RPPO has its own independent statute and conducts its own regional cooperation programme. The main task of an RPPO is to produce regional standards for its members. RPPOs cooperate with each other and with FAO. In particular, they meet in technical consultations to promote the development and use of relevant standards and to encourage inter-regional cooperation on phytosanitary measures. The IPPC recognises a role for RPPOs in the coordination of activities at regional level and the promotion of the objectives of the IPPC. RPPOs are to cooperate with the IPPC Secretariat and the CPM in developing international standards, and to assist in gathering and disseminating phytosanitary

information for the purpose of implementation of the New Revised Text of the Convention.

2.2. Implementation of international obligations at national level

In most cases, international treaties have no direct application at national level unless they are made effective through enabling national legislation. Thus, in accepting international obligations, governments commit to amending their current national legislation to conform to their new responsibilities. In this sense, states' international obligations prevail over national dispositions, and national provisions that contravene international obligations must be repealed. The precise relationship between international and national obligations in a particular country is generally established in the national constitution or in national legislation.

Although the national phytosanitary legal framework has to be devised so as to permit the fulfilment of international obligations, generally there is no need to specifically spell out those international obligations in national laws. Rather, the task for national authorities is to develop national provisions in light of the applicable international instruments. Ultimately, what matters in terms of compliance with international obligations is how phytosanitary measures are established and applied and how transparently this is carried out at national level.

The main pitfalls for countries to avoid in devising phytosanitary legislation are likely to arise in connection with some of the principles reviewed above. Foremost among these is the requirement of scientific justification. Countries that impose phytosanitary measures in the form of severe restrictions on the import of plants and plant products without those restrictions being technically justified may find themselves in contravention of the IPPC and the SPS Agreement. Similarly, if a trading partner could argue that such measures were not the least restrictive means of addressing the phytosanitary objectives, then the measures might be found to violate the IPPC principle of minimal impact.

Another potential danger in drafting national legislation would be provisions that violate the principle of non-discrimination by treating similarly situated countries differently. For example, severe phytosanitary restrictions on

imports from Country A (a particular pathway) which has the same pest and uses the same measures to control it as does Country B (but which is not similarly restricted) would not be proper. On the other hand, in a particular context the principle of emergency action could justify the imposition of severe import restrictions on the basis of a preliminary pest risk analysis.

Other principles, although they apply as a general matter and should be borne in mind, may not have a specific impact on the drafting process. For example, the principle of transparency would mean that the NPPO must publish its national phytosanitary measures and pest list and respond to queries from trading partners. Similarly, an NPPO decision to disallow imports from Country X simply because it has a different kind of treatment regime (although that regime rises to the appropriate level of protection) would violate the principle of equivalence.

In the effort to review national legislation and align it with international obligations, there are no firm answers as to whether provisions in a country's phytosanitary law will meet the requirements of the SPS Agreement and the IPPC. Just as an individual would not know whether his actions constitute a crime until he is charged with that crime and convicted of all its elements, so a country might not know whether its legislation and the way that legislation is being implemented violate the SPS Agreement until another country challenges a proposed phytosanitary measure or brings a dispute before the WTO and that dispute is resolved.

Nonetheless, phytosanitary legislation belongs to the realm of agriculture and its implementing institutions naturally have an agricultural background. Thus, while trade issues are inevitably a concern, it should be sufficient for a technical institution such as the NPPO to ensure that its phytosanitary requirements and phytosanitary measures are technically justified, and will not be found protectionist. Compliance with purely international trade-related criteria, such as minimal impact and non-discrimination, should be monitored by the national institutions that are responsible for international trade as they have the appropriate level of specific expertise.

3. Relevant Issues in the Preparation of New or Revised National Legislation

As should be clear from the preceding discussion, the SPS Agreement and the IPPC are extraordinarily important, in fact essential, in the development of national phytosanitary legislation. But legislation for national implementation cannot be developed in the international arena and then imposed on national governments. Each country has its own history, politics, traditions, legislation, institutions and resources, all of which will affect its strategies for national laws. Any new law must be developed with these factors in view, in order to ensure that the law reflects national needs and national circumstances but at the same time enables compliance with the country's obligations under international law.

3.1. Legislative system

The type of phytosanitary legislation that will be developed in a particular country depends in the first instance on the national legal system, i.e. the system in place for interpreting and enforcing the law. Does the country have a civil law, common law or Islamic law system or some combination of these? The most prevalent legal system in the world is the civil law system, which has its roots in Roman law and which is based on written legal codes. The main alternative to the civil law system is the common law system. which is based on precedents created by judicial decisions over time. Another influential legal system is Islamic law, which is derived from the Koran and can be found in the Middle East and in some African countries.

Regardless of the formal legal system, the role of law in society varies enormously from country to country. In some countries, legislation seems generally effective, while in others it appears to have little impact in terms of establishment of rights and obligations or regulation of public authorities' activities. In many cases this reflects the overall perception of laws and government authority in the country although it may also demonstrate distrust arising from widespread corruption or frustration with arduous

bureaucratic procedures. It may also arise from confusion about applicable laws.

In many countries statutory law exists side by side with customary law, the latter consisting of the written and unwritten rules which have developed from the customs and traditions of communities. Established patterns of behaviour acquire the force of customary law when they become the undisputed rule by which certain rights or obligations are regulated between members of a community. In some countries, the status of customary law in relation to national statutory law is ambiguous; in others, the custom is codified and explicitly recognized by national legislation, or it gives legal recognition to the decisions of traditional authorities.

3.2. Policies and priorities

In every country, a variety of policies, strategies and priorities of national, regional or international provenance affect the development of national legal frameworks. One important policy with implications for phytosanitary regulation is the overall agricultural policy; other relevant policies might cover the environment, land use and trade. Good governance policies, such as access to information, participation in decisionmaking, transparency and accountability of public authorities will also affect the legislative design. In some situations governments are obligated to incorporate certain policies in their national legislation, while in others they may simply choose to do so.

As an example, many countries have embraced the decentralization of government responsibilities and the devolution of powers to provincial or lower levels of government. The purpose is to ensure public participation in decisionmaking and to promote more effective management of resources, since local authorities are generally more familiar with their regulatory needs and staffing and other resource constraints. Practically, the existence of a decentralization policy or decentralization law might mean that in any new legislative framework for phytosanitary control, local authorities might be given certain regulatory powers, while the central authority retains others.

In this regard, the establishment of National Plant Protection Organizations (NPPOs) as

required by the IPPC may produce some tension with national decentralization policies. The IPPC requires one single government authority to be assigned certain core responsibilities for phytosanitary controls. In some cases, this is perceived by countries as an obligation to re-organize the mandates of agencies and local authorities and pull them together under the aegis of the NPPO. But it should nonetheless be possible for a government to allow local authorities to exercise some of those responsibilities. So long as the NPPO keeps oversight functions vis-à-vis the decentralized authorities, this should be an effective organizational structure. How far the central oversight should go is a matter of national discretion and there is enough flexibility in the IPPC provisions to adapt to national decentralization policies. Nevertheless, a country should always be in a position to demonstrate to other IPPC contracting parties that its NPPO is effectively in charge of phytosanitary controls.

Privatization is another strategy which many countries are implementing through legislation on various subjects, particularly countries in transition to market economies where socialist governing structures are being dismantled. Elsewhere, some countries are increasingly facing the need to revise their legal structures in a direction that is more favourable to private investment and the disentanglement of government from the market and from the provision of services. To achieve this policy, some governments choose to out-source certain phytosanitary functions such as inspection and laboratory services to contracted private parties. The same observation made with regard to decentralization applies here: delegation of functions to private parties is compatible with the IPPC so long as the NPPO retains an effective oversight role.

Other policy influences on national phytosanitary legislation include globalization and regionalization. The desire to join trade and social alliances, such as an economic union (e.g. the European Union, the Caribbean Community and Common Market, the Asia-Pacific Economic Cooperation, the Association of Southeast Asian States, the Southern African Development Community, the Pacific Forum) or the region's RPPO, will encourage countries to update and conform their phytosanitary legislation to those organizations' requirements.

Within the Caribbean and Gulf regions there have been recent efforts, coordinated by FAO, to harmonize phytosanitary legislation along the lines of the New Revised Text of the IPPC. There are also initiatives in the Pacific Region with the same aims.

Finally, in the policy realm, where a country has a strong interest in biosecurity this will be of great significance in how the law is developed. Biosecurity recognizes the similarities in the regulation of risks to animal health, plant health and food safety. Some countries are opting to develop overall biosecurity legislation rather than purely phytosanitary or zoosanitary laws; this will be a matter of individual national choice.

3.3. Existing legal and institutional framework

Before developing new phytosanitary legislation, it will be essential to identify and analyse the existing institutional framework and the variety of legal provisions which apply. This helps determine the range of reforms that will be necessary, while outlining the parameters within which any new legislation will function.

An analysis of the existing framework should begin with the constitution, if any, as it serves as the supreme law of the land and defines how the legislative, executive and judicial functions and responsibilities are assigned within the country. It may allocate some powers to the national authorities (or federal authorities, in a federal system), some to the state or provincial governments and some to the local or municipal authorities. It is unlikely that the constitution will contain an explicit reference to agriculture or natural resources, although it may indicate which areas of concern are to be regulated at which level of government, which will affect both how new legislation is developed and how it will be enforced. Equally, if the constitution establishes a hierarchy between international obligations and national legal provisions, then this will be an important consideration in the design of a national law.

After a review of the constitution and the international context, the analysis should turn to

⁵ For more information on biosecurity, see FAO, Biosecurity in Food and Agriculture, 2001 available at https://www.ippc.int

the country's existing legislation which may affect the design of any new phytosanitary law. In some instances, a particular activity that is anticipated in the new law may be directly prohibited by an existing law. If, for instance, the new legislation intends for the NPPO to charge fees for its services and keep those fees (so as to strengthen its inspection apparatus or to build its own laboratories, for example), problems will arise if existing legislation requires that all fees for services go to the central government (to the consolidated revenue), which then allocates funds for phytosanitary control as it does for other matters. As another example, the desire to out-source inspection activities to the private sector (third-party delivery) because of limited human resources in the NPPO may conflict with an existing law that prohibits the delegation of public powers except to government officials.

A review of the country's existing legislation specifically addressing phytosanitary matters is the next step. The relevant instruments will consist not only of parliamentary-level legislation but will also include subsidiary legislation, such as ministerial regulations, as well as laws enacted by lower-level governments. The review will require an assessment of the legislation itself: is it consistent with the principles of the WTO and the IPPC as outlined above? Does it cover all the subject areas identified in the IPPC and in the ISPMs? Are there sufficient implementing regulations to ensure that the requirements can be undertaken and enforced? Carrying out an analysis of the existing legal framework serves an important purpose: if it leads to the determination that the current legislation is sufficiently comprehensive, time may be better spent on other matters such as improving implementation and enforcement of the existing legislation.

The institutional framework also has significant implications for the review process. For example, there may be contradictory provisions within the applicable legislation that appear to give the same or overlapping powers to different entities. Import and export inspection systems, for instance, are often located within the ministry responsible for commerce or trade, while the inspection of agricultural products will likely fall within the ambit of the phytosanitary law enforced by the ministry responsible for agriculture.

One harmful result of conflicting assignments of responsibility is that key implementing agencies may find that their authority to undertake certain actions is open to legal challenge. To avoid this, it is crucial that boundaries be clearly identified in the phytosanitary law and that mandates, powers and responsibilities between the various regulatory authorities be delineated as clearly as possible. This may require amendment of legal instruments other than phytosanitary legislation in order to eliminate any overlap and to ensure the primacy of the NPPO in the phytosanitary area.

As an example, forests and forest products are often identified in forest legislation as a separate area of governmental regulation, distinct from agriculture. The ministry responsible for the environment may well be assigned responsibility for controlling pests of "forest species". It is recommended that new phytosanitary legislation provide for the control of all pests, and systems need to be in place to ensure that phytosanitary control extends to the import of plants and seeds of forest species and to the surveillance of pests in forest lands. Close collaboration with and perhaps delegation to the forest experts will maximize effectiveness, although the NPPO retains ultimate responsibility for phytosanitary control.

3.4. Implementation of legislation

A thorough analysis of the phytosanitary legal framework consists not only of an assessment of the legal system and a review of relevant policies, legislation and institutions. It is also important to assess the actual effect that relevant laws and regulations have on the ground, examining how they are applied in practice. Often, there are gaps between the objectives of a law and what is actually achieved once it is enacted. Many ambitious laws, internally coherent and technically well-drafted, may fall short of their intended purposes or have quite unintended secondary effects for a number of reasons. In other cases there may be provisions which are technically correct but are not being enforced for one reason or another. This kind of analysis is important because if the reasons the current legislation is not satisfactory are not changed, then new legislation is unlikely to work any better.

In some cases, legislation may prove difficult to implement because of a simple lack of

resources or because of the failure to anticipate the pragmatic details of putting the law into effect, such as modes of enforcement and costs of implementation. There are many examples of well-drafted laws that have been enacted without sufficient prior attention to the level of development of a country and its existing resources and which, as a result, prove difficult to implement. For example, in many countries the resolution of legal disputes is the responsibility of a court system that is overburdened and underfinanced, while alternatives to the traditional court system may be few or nonexistent. As a result, even good laws may not be properly enforced for lack of judicial mechanisms. The law should reflect reasonable expectations about the government's ability to monitor the import and export of agricultural products, taking into account the fact that inspection services are often understaffed and lacking in basic infrastructure, including buildings, equipment and vehicles. In addition, where laboratories do exist, they may not have the appropriate means to perform necessary analyses.

The effectiveness of any new law may also be undercut by the failure of officials or institutions to devote sufficient resources or energy to its implementation. There may be opposition among government units and staff to new institutional set-ups, as this would often result in a transfer of government officials from related ministries. Resistance is often inspired by fear that terms and conditions of employment will change or cease, for instance due to a transfer from the public sector to authorities nested in the private sector. Particularly in those ministries which have been in place for some time, the resistance to change, which is usually related to the perceived loss of power or mandate, can be great. Implementation may also in some instances be compromised by corruption, a problem which governments may be unable or unwilling to combat with the necessary vigour.

The absence of necessary political will to ensure effective implementation may also be related to the manner in which the new law has been formulated and adopted. Necessary collaboration may fall victim to institutional jealousies, turf-defending behaviour and passive resistance of government officials or stakeholder groups which feel their interests were not taken into account in the enactment of the new legislation. Widespread participation of all

affected stakeholders as part of a policy of good governance is vital to the process of legal change. As a practical matter, the participatory approach can be ensured through consultations with a wide range of stakeholders during the drafting process as well as consultative workshops where the legislation is presented and the government commits to implement the recommendations and monitor their application.

After identification and analysis of the legislation relevant to phytosanitary control, and an assessment of the existing constraints in the legal, institutional and policy environments, the next step is to assess the feasibility of correcting the shortcomings identified or at least mitigating their impact. If the problems have arisen in practice, how can the defects in implementation be addressed? If it is the legal framework which needs modification, what technical and political steps are required, and what obstacles stand in the way? Can the changes be accomplished through the issuance of regulations or administrative rules by the ministry responsible for agriculture? Often, this is the easiest and quickest solution. Will they require the cooperation of another ministry, an agreement between two ministers or the attention of Parliament or Cabinet? This may take considerably longer and may entail greater political uncertainties. Determining what kind of action is required in order to implement a particular change may be straightforward, or it may call for careful statutory and constitutional analysis and interpretation.

It is important to have a realistic understanding of how open to change the decisionmakers are in a particular setting. In some contexts it may be possible to propose, draft and adopt needed legal reforms in the form of a new basic phytosanitary law capturing the essential components that the SPS Agreement and the IPPC require; in other countries and other circumstances the legislation must stay in place and reformers must work within the regulatory parameters, however imperfect they are, and "adapt" them to meet the country's international obligations. In either case, it is essential to have a complete understanding of the legislative framework so that appropriate strategies can be developed with that framework in mind.

4. National Phytosanitary Frameworks

4.1. General

In practice, because phytosanitary legislation includes issues relating to national borders, it is the national legislature which passes a new or amended basic phytosanitary law embodying the government's plant protection and other relevant policies. The structure of phytosanitary legislation can differ, and the order in which topics are addressed can vary in accordance with the legislative practice in the country as well as the many factors discussed above. However, some basic provisions need to be included. In general, phytosanitary legislation must be designed so as to guarantee that a government (or in some countries, a quasi-governmental or non-governmental agency) can create or become an effective administrative and technical structure, the NPPO, for the implementation and enforcement of phytosanitary measures. Such legislation should allow the NPPO to take action to control the introduction and/or spread of pests.

The contents of phytosanitary laws fall into several main subject areas, which will be explored in the next sections. See also Box 2. First, the law will outline its scope and provide the definitions which will guide its interpretation. Next it identifies the administrative authorities which will enforce the law, including at a minimum the NPPO, the inspection corps and official laboratories and analysts. The law will outline their powers and responsibilities, in particular who makes decisions and the context in which they are made, as well as any limitations on those implementation powers. Many laws also have in place a plant protection board which provides advice to the minister or the head of the NPPO on technical matters. The law should address the many aspects of the import and export of plants and plant products, as well as measures for the control of plant pests within the territory of the country. Financial provisions - on funding and on fees – are also included. At least in common law jurisdictions, the law will next describe offences which can be committed and the penalties they attract. Most laws conclude with miscellaneous provisions on subjects such as liability, appeals against administrative decisions. repeal of existing provisions and the power to make lower-level legislation such as regulations. orders, schedules and notices.

Box 2 - Basic Structure of a Phytosanitary Law

PRELIMINARY

Preamble

Scope

Definitions

PART I

Administration (NPPO, Plant Protection Board)

Duties of Inspectors

Powers of Inspectors

PART II

Import

PART III

Export

PART IV

Monitoring and Control of Pests

PART V

Offences and Penalties

PART VI

Miscellaneous (Liability, Appeals, Repeal and Savings, Power to Make Regulations)

4.2. Contents of phytosanitary laws

4.2.1. Introductory provisions

The introductory provisions in the phytosanitary law will describe what the legislation covers and state its objectives. These provisions may have no real legal effect, but instead operate as a kind of policy statement explaining why the law was enacted and what purpose it is intended to serve. For example, the preamble or one of the early provisions may state that the object of the law is to "control the introduction and spread of pests" or "to promote trade in agricultural products." In order to reflect the broader coverage of the New Revised Text of the IPPC, the objective can be more accurately presented as "to protect the agricultural and other plant resources of the country." Provisions in national phytosanitary laws that limit coverage to cultivated plants would have to be amended, as would any provisions defining pests to exclude weeds.

After stating the objectives or purposes, the law may then proceed to outline its scope, i.e. what activities and subject matters it covers. Next, the phytosanitary law will have to include a list of definitions of the main terms employed. The list is not a glossary of phytosanitary terms in general, but rather explicates only those terms

that appear in the law. At base, the definitions section serves as a reference point for terminology about which doubts may arise in the enforcement of the law. For example, if the definition of "owner" in the law is vague or restricted and does not cover someone in possession of plants or plant products, then someone ordered to destroy infected plants could avoid responsibility by arguing that he or she was not the "owner" of the plants. On the other hand, some definitions may be unnecessary if a country has an Interpretation Act which serves to define some terms uniformly for purposes of interpreting all of the country's legislation.

The definitions of "plant" and "pest" obviously have a special role in delimiting the application of the phytosanitary law. These and other important terms appear in ISPM No. 5 "Glossary of Phytosanitary Terms", issued by the IPPC. "Plant" is defined as "any living plant and the parts thereof, including seeds and germplasm", while "pest" is defined as "any species, strain or biotype of plant, animal or pathogenic agent injurious to plants or plant products." Following the Glossary is an important first step in order to ensure that the concepts and principles of the IPPC are reflected in national legislation. In fact, for purposes of harmonization, there is every positive reason to use the Glossary and other

guidelines issued by the IPPC in the development of national laws. Although the definitional terms are strictly speaking intended only to facilitate interpretation of the IPPC text and to delimit the scope of the IPPC's technical standards, their use in national legislation will certainly facilitate the implementation of the principles and concepts embodied in the international legal framework. Using this terminology will ensure consistency between the national legislation and the international standards and may minimize the risk of any serious challenge under the SPS Agreement in a trade dispute.

However, since the definitions are occasionally updated by the Secretariat, one practical solution could be to insert a minimum list of terms in the phytosanitary law itself and for all others refer to "the IPPC and its associated documents as may be amended and updated by the IPPC Secretariat from time to time." Another possibility is to state that any term not specifically defined shall have its normally accepted meaning, except that any term which also appears in the IPPC shall be defined by reference to that Convention and its associated documentation.

4.2.2. Administration

An essential task of the phytosanitary law will be to define the powers that will be exercised under it and to identify the public authorities in whom those powers are vested. As a general rule, provisions in this category will address: (1) the body or bodies responsible for administering the phytosanitary system; (2) the inspection corps and the powers and responsibilities of phytosanitary inspectors; (3) the laboratory scheme; and (4) the establishment and functioning of the advisory plant protection board, if any. The law does not usually describe in detail the functioning of the various structures it establishes. Such descriptions generally appear in subsidiary legislation, such as regulations or ministerial/inter-ministerial orders. The basic law describes mandates, defines roles and outlines basic rules.

4.2.2.1. National Plant Protection Organization

As noted earlier, the IPPC requires each contracting country to establish, "to the best of its ability," an official national plant protection organization, the NPPO. The NPPO is generally

a department or unit within the ministry responsible for agricultural matters, although in a few cases it is a separate non-governmental or quasi-governmental agency. Whatever its structure, because its work relates to the protection of national agriculture, there is in almost all cases some recourse to the minister or ministry of agriculture. The legislation might charge the minister with enforcing all of the law, or it might assign most powers to the head of the NPPO while having the minister retain the power to review administrative decisions and to issue regulations. In other circumstances, the minister might be accorded formal powers such as the power to declare a phytosanitary emergency, to designate official laboratories or to impose and remove a quarantine, but the actual decisions are made by the head of the NPPO. In such circumstances it behooves the minister to rely on the NPPO and its staff since they have the technical expertise in plant protection; such consultation can be formalized in the phytosanitary law, enumerating a requirement of consultation before decision by the minister. Whatever the final structure decided upon, the respective functions of the minister and the head of the NPPO should be clearly spelled out to avoid overlapping or gaps in the implementation of the law.

The question arises whether all phytosanitary functions have to be carried out by the same organization or unit or whether they can be spread among different ministries and departments. It is generally agreed that there is no specific requirement that all activities be carried out by the same unit, although it is probably more efficient. While the IPPC describes the functions of the NPPO as part of the obligations of contracting parties (Article IV to VIII), and a number of ISPMs delineate those NPPO functions in more detail, neither the IPPC nor the ISPMs give indications on the internal structure of NPPOs. Thus, each contracting party can set up the organization as it deems fit. For example, special commissions and bodies can be created by law to assist the NPPO on specific problems, while joint commissions can be established to coordinate the NPPO's activities with other relevant public bodies.

In addition to identifying the NPPO, the phytosanitary law should provide a description of the scope of its activities. The responsibilities of NPPOs, as set out in the IPPC, go beyond those typically assigned to national guarantine

services. While these latter focus mainly on inspections at points of entry and phytosanitary certification, NPPOs are also responsible for surveillance of areas under cultivation, including wild flora, and protection of areas being endangered by plant pests. This may require some restructuring and reassignment of activities among government units and ministries. Each IPPC contracting party must provide any other contracting party with a description of its internal organizational arrangements for plant protection, and must communicate any changes in these to the IPPC Secretariat, which circulates such information to all contracting parties.

As outlined in the New Revised Text of the IPPC, the main function of NPPOs is to identify plant pests and control them. To this end, the phytosanitary law will assign to the NPPO the responsibility for:

- the surveillance of growing plants (both in areas under cultivation and in the wild):
- the inspection of consignments of plants and plant products being stored or transported;
- the disinfection or disinfestation of consignments moving in international traffic;
- · the protection of endangered areas;
- the designation and maintenance of pest free areas and areas of low pest prevalence;
- the protection of the phytosanitary security of consignments after inspection and before export;
- the issuance of certificates relating to the phytosanitary requirements of importing countries; and
- the training and development of NPPO staff.

Other responsibilities of the NPPO, as set out in the IPPC, include distributing information regarding regulated pests and the means of their prevention and control; developing pest diagnostic, investigative and analytical capabilities; and developing phytosanitary regulations. According to the Glossary, phytosanitary regulations are defined as official rules "to prevent the introduction and/or spread of quarantine pests, or to limit the economic impact of regulated non-quarantine pests,

including establishment of procedures for phytosanitary certification." Information sharing, in keeping with the principle of transparency, is another important duty of the NPPO. The SPS Agreement and the New Revised Text of the IPPC require that there be structured channels for the notification of changes to phytosanitary measures and phytosanitary regulations. Under the New Revised Text, the responsibility rests with each member country to communicate to the IPPC Secretariat the title and location of an official contact point, through which all official information on phytosanitary matters will be channelled. This system is intended to facilitate

The list of responsibilities of the NPPO with respect to information sharing includes:

communication, information sharing and

transparency between countries, and between

the IPPC Secretariat and the contracting parties.

- providing justification to other countries concerning phytosanitary measures applied;
- notifying trading partners of relevant instances of non-compliance with import requirements;
- providing information where requested by national, regional or international organizations regarding import and export regulations in force and regarding the technical requirements for plant material and other regulated articles; and
- notifying phytosanitary regulations, phytosanitary requirements and phytosanitary measures to other countries in accordance with international obligations.

In some countries the phytosanitary law can assign other responsibilities to the NPPO. Depending on the national institutional and legislative structure, for example, the NPPO might also have responsibilities in the field of pesticide production and use (including the promotion of integrated pest management), organic agriculture certification, industrial insects (e.g. honey bees) and fertilizer usage. To allow for the greatest flexibility, the section of the phytosanitary law which lists the responsibilities of the NPPO should include a provision allowing the Minister to assign to the NPPO "any other function" he or she deems necessary.

4.2.2.2. Inspection and analysis

Another important administrative structure that should be created and defined in the phytosanitary law is an inspection service, with a corps of inspectors responsible for enforcing the law. The membership of the inspection corps will depend on the institutional structure set up in the law as well as the logistical needs of the ministry or agency at the head of that institutional structure. The law, or more likely its subsidiary legislation, may establish the minimum educational requirements of inspectors.

The law may refer to the power of the minister (or head of the NPPO) to appoint "or designate" inspectors under the law. Normally, once an administrative agency is designated as the NPPO, officers belonging to that agency serve as inspectors under the law. In some other situations (either routinely where the NPPO is understaffed or especially during a phytosanitary emergency), the NPPO may need to be supported by other administrative agencies and staff. Thus the law should permit the responsible ministry or agency to use not only its own employees but also employees of other authorities (public - or private, so long as there is no conflict of interest) in the enforcement of the law. For example, even where the ministry responsible for agriculture is the ministry assigned overall enforcement authority under the law, it may wish to rely on customs officers at border points if there are not sufficient ministry employees to serve at those remote locations. The law should indicate that inspectors are those officers appointed "or designated" as such, to carry out inspectors' functions under the law.

In setting out this administrative framework, it is important not to "dilute" the responsibilities of the NPPO by designating public officials without the appropriate qualifications to serve as inspectors. The minister responsible for the appointment or designation of inspectors should consider assigning only some of the inspectors' functions to the designees, while others (e.g. phytosanitary certification for export) should be carried out by NPPO staff only, since they possess the necessary qualifications and skills. To that end, the mandate of an appointed or designated inspector may be subject to limitations set out in the written instrument of appointment. The phytosanitary law may even

go one step further and explicitly assign phytosanitary certification for export, one of the key functions of a national phytosanitary system, to NPPO staff only in order to avoid mishandling of certification by unqualified officers.

In some countries the appointment of inspectors is not the responsibility of the minister responsible for the administration of the law but is the responsibility of a central government agency that appoints all public servants and officials. In that case the law should make reference to this arrangement.

In the phytosanitary law, the duties of inspectors generally include:

- the inspection of plants or plant products under cultivation, in the wild, in storage or in transit (in order to report the existence, outbreak and spread of pests);
- the inspection of consignments of plants or plant products designated for import or export from the country;
- the inspection of storage and transport facilities;
- the disinfection of consignments (either directly or through oversight); and
- the control of waste being disposed of from aircraft and ships or from premises which process or wash imported plant material in order to ensure that no threat to agricultural resources or the environment is caused.

They may also be called upon to issue phytosanitary certificates (on behalf of the NPPO); carry out detection activities and maintain up-to-date information on the country's pest status; and institute inquiries and request information or documentation upon suspicion that the provisions of the law are being violated.

The legislation may be drafted also to permit the minister or the head of the NPPO to assign other roles to the inspectors as deemed necessary. As adverted to above, however, the law should make clear the respective roles of the minister, the head of the NPPO and the inspectors, to avoid any ambiguity in the implementation of the law.

The phytosanitary law grants certain powers to phytosanitary inspectors so that they can carry out their duties effectively (see Box 3). Because these powers can be very similar to those of

officers of the peace and may therefore impinge upon personal liberties, the phytosanitary law should clearly outline the parameters of the inspectors' powers. Consistency between the provisions of the phytosanitary law and the Constitution or any law on the powers of public officials will also be important.

For the performance of their duties, inspectors are usually granted the power to enter sites where plants are grown or where plant products are stored. They have the power to inspect and take decisions in accordance with what they determine to be the pest risk, and if they have grounds to suspect that a contravention of the phytosanitary law is taking place, they may, without a warrant, enter and inspect any land, area or premises, except, in many jurisdictions, private homes.

If inspectors suspect that a person or conveyance within the national territory is harbouring a pest, they can, without a warrant, search such person or conveyance. This can be difficult to implement in maritime jurisdictions, as the ministry responsible for tourism may be loath to offend cruise ship operators or the owners of pleasure craft in national waters. Nonetheless, it will be essential to give inspectors these powers as ships and ships' passengers can be responsible for introducing or spreading plant pests.

The legislation will generally provide that inspectors must identify themselves before exercising their powers. Inspectors can then require people to produce permits and other documentation, and they may take samples and detain plants, plant products or other articles capable of harbouring or spreading plant pests. They have the right to order owners or importers of infected plants or plant materials to take

measures to treat or destroy them. If the inspectors deem that action on plants or plant products is immediately necessary or that the giving of notice is impracticable, they can take action directly and carry out the necessary measures. At the invitation of an exporting country, inspectors can carry out inspections in the territory of that country as a pre-clearance inspection.

The phytosanitary law should also outline some additional related or ancillary responsibilities of inspectors and of citizens affected by the exercise of inspection powers. For instance, the law should oblige owners, managers and employees of inspected premises to cooperate with inspectors. Equally, however, where resistance is expected or where assistance is otherwise required, the law will generally provide that inspectors may call upon the forces of public order, local administrations and customs authorities in the exercise of their powers. This may be for routine matters like entering premises, or it may be for purposes of implementing emergency response measures such as quarantine of affected areas, installation of road blocks and the like.

In addition to the inspection corps, the law should establish a system for identifying and certifying official laboratories and analysts that will carry out the required analysis and diagnostics of samples taken under the law. Usually the minister or the head of the NPPO is accorded the power in the law to identify and select the official laboratories and to appoint official analysts. The law ought to allow broad leeway in that selection, because in many countries there is an increasing need and desire to rely on private laboratories and their staff for some or all of these functions.

Box 3 - Phytosanitary Inspectors' Powers

Inspectors under the phytosanitary law should be granted at least the following powers:

- 1) to enter and search any area or premises and require any person to produce any documentation required under the law;
- 2) to inspect, examine and make copies of such documentation, or take extracts of registers or records and seize the same;
- 3) to stop and search any person, baggage, packaging, conveyance or any other regulated article, upon entry into, movement within or exit from the country;
- 4) to stop the distribution, sale or use of any plant, plant product or any other regulated article, which the inspector has reason to believe is harbouring a regulated pest, for a specific time period; and
- 5) to seize, destroy, detain, treat or otherwise dispose of any plants, plant products or other regulated articles, or order that any such action be taken.

4.2.2.3. Advisory or executive bodies

Because plant protection has an impact on other government departments, quasi-governmental agencies and the private sector, it is important that the law make provision for coordination. Most modern phytosanitary laws establish a mechanism for consultation and joint decisionmaking such as a plant protection board or other advisory body, which usually has as its essential mandate the provision of advice to the minister responsible for agriculture or the head of the NPPO on all matters related to plant protection in the country. In principle, a permanent board is preferable to a temporary or ad hoc body as the former has inherent advantages such as perpetual succession, consistency and predictability in its activities. The law generally establishes a secretariat to provide day-to-day support and coverage of meetings of the board.

The mandate of the board may be purely advisory or it may include some executive authority. The provisions in the law will make the board's role clear. In addition to its main advisory task, the board could assist in policymaking, discuss issues of common concern relating to phytosanitary measures and provide coordination where required. Other possible functions may be that it proposes and assists in preparing new regulations, orders and notices under the phytosanitary law, determines criteria for the declaration of a phytosanitary emergency, resolves appeals by citizens objecting to official actions taken under the law and carries out public information activities to sensitize the population on phytosanitary issues. The board exercises an important role in circulating requests for comments and generally managing the process of collection and collation of national inputs into the development of international standards, mainly under the auspices of the IPPC.

The specific membership of a plant protection board will vary from country to country but, in general, all the relevant governmental bodies and stakeholders should be represented, to ensure that all parties interested in and affected by plant protection issues in the country are able to give their inputs. The board may be called to advise on:

- environmental effects of pests;
- economic factors in pest risk analysis;
- interaction with the private sector (e.g. for pest surveillance);
- trade issues; and
- enforcement.

Because of the technical complexity of many issues, the board should have representation from scientific experts or must be able to constitute technical committees to draw upon their expertise.

Some jurisdictions assign the board a regulatory role (for example, issuing import permits) in addition to its advisory responsibilities. If this is the case, then the board should not have representatives of the private sector, as this would raise potential conflicts of interest, where the regulated are acting as the regulators. Where the board is purely advisory, however, then it is desirable to include not only government representatives but also representatives of producers, importers and exporters and the general public as stakeholders. Some boards include a legal expert to assist in preparing regulations, and others include representatives of an institute of higher education or research institutes in the country.

The law should provide that members of the board are nominated by their head or minister or appointed by the minister, on the basis of their technical expertise or professional qualifications and responsibilities. They should be paid sitting allowances and hold their appointments for a fixed term of years and be eligible for reappointment. They can be removed on grounds of misconduct or inability to perform their duties. Generally they are protected from liability for official decisions made under the phytosanitary law.

Provision should be made for meetings, including frequency, quorum and the appointment of a chair. The board should have the power to appoint such sub-committees as it may consider necessary, consisting of members of the board or non-members or both, to provide advice and technical inputs. Except for these broad outlines, the details of the functioning of the board should be contained in the subsidiary instruments under the phytosanitary law.

4.2.3. Imports

The phytosanitary law contains the rules applicable to imported plants or plant products. For example, it will generally state that where import requirements apply to a particular commodity, importers must obtain an import permit from the NPPO or other competent authority and offer up the imported consignment for inspection upon arrival. Following the procedures established in the phytosanitary law and its accompanying regulations (which will indicate, for example, the format of the application and the entity to which it is submitted), an importer applies for an import permit, stating the type of commodity, its source and its end use. The NPPO then evaluates the application based on an assessment of the risk (using pest risk analysis), and if the risk is acceptable or can be properly managed, the import permit will be issued. If the application required the applicant to indicate the presence of living modified organisms (LMOs) in the consignment, then a pest risk analysis for LMOs will also be carried out.

In the evaluation of import permits NPPOs generally implement one of two regulatory approaches, namely specific authorization or general authorization. With regard to the former, the NPPO evaluates all consignments for import, either individually or all consignments coming from a specific destination, in order to assess the risk of allowing them into the country. For the latter approach (general authorization), NPPOs will either establish no import requirements in cases where there is no phytosanitary risk or will establish a priori a list of commodities and the applicable conditions. based on already evaluated risk. The latter approach may facilitate compliance with the principle of transparency expressed in the SPS Agreement, in that the import requirements linked to particular commodities can be published and made available on demand to potential trading partners. But in all the above situations, it is fundamental that the requirements be modified without delay when conditions change and that changes be communicated to trading partners.

The phytosanitary measures required for consignments to be imported can be executed in the exporting country, during shipment, at the point of entry or after entry. The phytosanitary law may also task the NPPO with the

negotiation of bilateral and multilateral agreements for the evaluation and possible acceptance of alternative phytosanitary measures proposed by an exporting country as being equivalent to those required by the NPPO.

Permission to import plants, plant products or other regulated articles should be based only on a pest risk determination and not on trade-protectionist considerations. For that reason, the phytosanitary law should state that all import restrictions have a scientific basis – i.e. they should be based on pest risk analysis or international standards.

The import permit, if granted, will state that a particular article may be imported for a particular purpose at a particular port of entry. Because there are likely to be a number of points of entry (e.g. sea ports, airports or land border posts) where citizens and visitors may try to bring in plants and plant products but where the NPPO does not have a presence, phytosanitary laws generally provide that plants, plant products and regulated articles may only be imported at official points of entry listed in the law or in a subsidiary instrument issued under it. The law will also provide that it is an offence to bring plants and plant products into the country except at these prescribed points of entry.

In designating a point of entry, national authorities must take into consideration that inspection activities have to be carried out thoroughly and safely. In general, points of entry need to have the resources necessary for inspection of plant and plant products and management of pests, including stockrooms for the conservation of material, laboratories or similar facilities for the analysis of products, vehicles for the transport of plant material, equipment for the destruction or disinfection of infected material and so on. If there are limitations in terms of resources, financial or human, not all points of entry are suitable as points of import for plants and plant products. In such cases the designation of a limited number of points of entry allows national authorities to carry out their inspection tasks more responsibly and cautiously because they can focus the available resources on a limited number of entry points. The decision process behind the designation of a point of entry needs to reflect the real needs of the country, i.e. inspectors should be placed where plants and plant products actually enter national territory. Where

this is not feasible, it may be necessary to rely on customs officers at other entry points.

If requested by the importer, and if consignments are properly sealed and marked, plants and plant products can be inspected at their final destination instead of the point of entry, with any additional costs borne by the importer.

Upon importation, an inspector who determines that an imported consignment presents a risk for the introduction or spread of a regulated pest may detain the plants or plant products and may prescribe any measures to be taken by the importer and the time-frame for implementing them. Measures may take the form of appropriate treatment, re-exportation, confiscation or destruction, depending on the assessed risk. An inspector may subject imported plants or plant products to post-entry quarantine at a quarantine station, for further inspection, observation, research, testing, treatment and possible destruction. Whenever a consignment is seized, a detention certificate is issued and signed by an inspector, with a copy each retained by the officer and the owner which identifies the reason for the detention and the location of the consignment.

Upon inspection of an imported consignment, emergency action may be necessary if the inspector detects a regulated pest which is not listed as being associated with the commodity from the exporting country, or if the inspector detects other organisms posing a potential phytosanitary threat. In such situations the law should provide for immediate emergency measures on the basis of a preliminary pest risk analysis. The law should state clearly that such emergency measures shall be temporary in their application, and that their validity will be subjected to a detailed pest risk analysis as soon as possible. If the pest is later determined not to be a regulated pest, the consignment must be admitted.⁶ To comply with the IPPC, the law should provide for the notification of emergency actions to the exporting contracting party (art. VII.6).

Imported consignments may also be detained or destroyed if inspectors ascertain that they are

not accompanied by the necessary documentation. That is, in addition to the import permit (in the case of a restricted article for which import requirements are in place) an original phytosanitary certificate from the country of origin is also usually required. The law may also require a specific timeframe of validity of the certificate before the consignment arrives in the country. Where these requirements are not met, the consignment may be subject to reexport or destruction, at the importer's expense.

In the case of transit, the NPPO may issue a transit or movement certificate or may order custodial transport (where risk is high) from the point of entry to the point of exit in the territory. Where customs control is sufficient to manage a phytosanitary risk or where there is no perceived risk for a consignment in transit, the phytosanitary authority may not require phytosanitary controls but simply conduct a document check. The applicable procedures should be detailed in the law and subsidiary regulations.

In case of the importation of infected plants or plant products, the law should indicate that all costs such as treatment and disinfection are borne by importers. Moreover, the law may address the issue of how to calculate those costs. For example it may introduce a formula which applies in all cases, thus avoiding the necessity in each case of having to calculate fuel prices, hours of overtime for inspection and so forth, in order to bill the importer. In exceptional cases, the government can take responsibility for the associated costs, for example, when the owner or consignee of the items cannot be traced. The cost involved can, however, be recovered later from the owner as a debt.

Another important provision in the phytosanitary law gives the minister or head of the NPPO a reserve power to prohibit the entry of any plant, plant product or other regulated article in order to protect plant resources or the environment. This allows for the exclusion of alien plant species which might cause harm to local flora, and also living modified organisms (LMOs) for the same reason. The prohibition can either be commodity-based or commodity- and origin-based. But whatever its details, the prohibition must be scientifically based or it risk violating the concepts of the SPS Agreement and the

⁶ This is line with the philosophy of the IPPC, which states that import requirements can be established only for regulated pests (art. VI.1).

IPPC. The prohibition should also adhere to the principle of minimal impact, by being designed to have the least impact on international trade.

Where there is an outbreak of a particular pest in a country of export, the law should permit the minister or the head of the NPPO to issue a temporary ban on imports. However, such a prohibition should not be unduly prolonged or continue past the point where it is scientifically justified through pest risk analysis.

In order to take advantage of technical developments, a minister or head of the NPPO on the basis of advice from the plant protection board or other agencies should be able to authorize the importation of otherwise prohibited material for the purpose of scientific research, subject to such terms and conditions as the authority considers appropriate to safeguard plant resources and the environment. In all cases, the law must specify who has the power to take such decisions and the circumstances under which this power may be exercised. For example, the limited authorization to import may have import conditions attached to it, which will be stated in the letter or permit authorizing entry.

In addition to the importation of regular commercial consignments of commodities, the law should address the issue of airline and ships' passengers bringing in plants and plant material as personal effects. There should be no exceptions to the requirement that travellers declare that they have such material in their possession: diplomats, their baggage and personal effects are not exempt. Collaboration with airlines and cruise ships can facilitate the distribution of forms to be completed by travellers prior to arrival, so that they are aware of the prohibition of bringing in plants or plant products.

In addition to outlining the roles of inspectors in relation to imports, the law should define the functions and duties of employees of the postal service, private shipping agents, officials of customs department and port authorities or the defence force who are involved or have responsibilities to exercise when plants or plant products arrive in the country. Provisions should include the requirement to inform the NPPO of the arrival of plants or plant products in the

country, and to store consignments of plants or plant products until phytosanitary inspectors can take custody of them. Without such a duty to inform the NPPO, in many jurisdictions the arrival of plants and plant products may go unnoticed except by officers of the customs department, which is usually the first contact by individual airline and ship passengers upon arrival.

4.2.4. Exports

Under the IPPC, governments are responsible not only for setting import requirements for plants and plant products entering their territory, but also for ensuring and certifying that plants and plant products leaving their territory are safe and meet the import requirements of the state where they are meant to be imported. The ISPM No. 7 "Export certification system" identifies three basic elements of the phytosanitary certification process:

- ascertaining the applicable phytosanitary requirements of the importing country;
- verifying that the consignment to be exported complies with those requirements; and
- issuing the phytosanitary certificate.

These elements need to be reflected in national legislation.

The phytosanitary law should make clear that an exporter is obligated to apply for the appropriate documentation from the NPPO in order to meet the importing country's requirements. Where required by the importing country, legal or physical persons must apply for a phytosanitary certificate in order to be able to export plants or plant products. The certificate should indicate that the consignment of plants or plant products meets specific phytosanitary and documentary import requirements. Every member country of the IPPC is responsible for inspecting plant products and for issuing certificates only under the authority of technically qualified and duly authorized officers.

The IPPC explicitly prescribes that "each contracting party undertakes not to require consignments of plants or plant products imported into its territories to be accompanied by phytosanitary certificates inconsistent with the models set out in this Convention." This has

⁷ The subject is regulated by the Vienna Convention on Consular Relations and Optional Protocols of 1963.

the main purpose of ensuring the validity of such documents because they can be easily recognized and the relevant information can be found. Generally the national phytosanitary law will contain in a schedule, or other subsidiary instrument, a model phytosanitary certificate in the format set out in the IPPC.

Export consignments requiring certification are generally subject to inspection at the exit point, although where the authority has built up relationships with particular exporters, inspections may also be carried out at the place of business where the plants or plant products are packed. If after inspection the NPPO is not satisfied that the consignment meets the importing country's export requirements, the NPPO can order the consignment, at the exporter's expense, to be treated to remove the risk or destroyed. If the NPPO is satisfied that the physical and documentary requirements for the issuance of a phytosanitary certificate are met, it issues the certificate. It is then the NPPO's responsibility to guarantee the phytosanitary security of the consignment before it actually leaves the country. The phytosanitary law may also impose such a duty upon the exporter, in which case the NPPO will have to enforce it.

It is also possible that the phytosanitary law provides for specific points of exit for all or certain types of consignments for export. The purpose of such provisions would be to simplify the NPPO's task of ensuring the availability of staff and facilities for inspection and phytosanitary security of consignments after certification.

A re-export phytosanitary certificate may be required for transit consignments where part of it has been split or repackaged or reconstituted in the country in such a way that it was exposed to the risk of infection or infestation. The NPPO should issue a re-export phytosanitary certificate only if it is confident that the importing country's requirements are met. Such a certificate should be based on the model phytosanitary certificate for re-export as established by the IPPC. Some consignments may not require certification for re-export if they are in transit to their final destination. A consignment shall be defined as "in transit" in the phytosanitary law only if it has not been exposed to infestation and not split up, combined with other consignments or repackaged.

Pest free areas or places of production will also have an impact on exports. The IPPC and ISPMs Nos. 8 and 9 prescribe that when an NPPO takes certain steps to eradicate a pest from an area, imposes certain phytosanitary measures to keep the area free of the pest and institutes a monitoring system to verify that the area remains free from the pest, it can declare the area pest free. The advantage is that products that come from that area can be freely exported without being subject to individual inspections.8 The phytosanitary law should provide that once the NPPO implements the proper surveillance and monitoring activities in relation to a particular pest in a particular area, achieves the required results and take the appropriate measures to maintain that status (including identifying the responsible parties), the minister or head of the NPPO may declare the area pest free and add it to a schedule or other subsidiary instrument under the law which lists the country's pest-free areas and places of production. The same procedures apply to the establishment of areas of low pest prevalence, where, for purposes of facilitating export, a specific pest is maintained at a low level which is acceptable to the importing country.

4.2.5. In-country monitoring and control

Prevention is a more efficient and economical means of pest control than reacting only after the appearance of a pest or pest outbreak. Preventive measures can include prohibiting the planting of disease-prone species and varieties, prescribing preventive disinfections, promoting biological control by introducing animals and plant species which are useful in combating plant pests, demarcating observation areas, establishing sanitary cordons and requiring permits for the cultivation of certain crops.

To assist with prevention, the phytosanitary law should impose a duty on both government officials (plant protection officers, extension agents, customs officers) and private citizens (farmers) to report the appearance of certain pests, even before the existence of a disease can be diagnostically confirmed. Information

⁸ The recognition of pest-free areas is an obligation under the SPS Agreement, but of course it is up to the importing countries to make their own assessment of the exporting country's actual implementation of the phytosanitary measures and monitoring system, and to decide accordingly whether to accept that the area is in fact pest free.

must also flow the other way: inspectors and responsible authorities (NPPO and the ministry) have to make information on pests and diseases available to the public and to provide the necessary resources for tackling pests as they appear, to prevent their spread.

Surveillance is essential to an effective system of prevention, and the IPPC encourages governments to carry out regular pest surveillance. ISPM No. 6 details national surveillance responsibilities, and countries must be able to readily obtain pertinent data on pest biology, distribution, host range and potential for impact. ISPM No. 6 refers to both general surveillance and specific survey. The former is a process whereby information on particular pests of concern in an area is gathered from many sources. The latter is a procedure by which an NPPO, over a defined period of time, obtains information on pests of concern at specific sites in an area. ISPM No. 8 details the methods for developing pest records, which are essential components of the information used to establish the status of a pest in an area.

Verified information acquired through surveillance may be used to determine the presence, distribution or absence of pests in an area or on a host or commodity. All importing and exporting countries need information concerning the status of pests in order to carry out risk analysis, to establish and comply with import regulations and to establish and maintain pest free areas. Thus under the phytosanitary law, some person or department should be charged with the responsibility of collecting and analysing data so that the pest status of the country – and its various regions – can be determined and communicated.

Based on surveillance and pest risk analysis, the minister or head of the NPPO may declare a pest to be a quarantine pest or a regulated nonquarantine pest⁹ (together referred to as "regulated pests" under the IPPC). If a regulated

⁹ The ISPM No. 5 *Glossary of Phytosanitary Terms* defines a quarantine pest as "a pest of potential economic importance to the area endangered thereby and not yet present there, or present but not widely distributed and being officially controlled" and a regulated non-quarantine pest as a "a non-quarantine pest whose presence in plants for planting affects the intended use of those plants with an economically unacceptable impact and which is therefore regulated within the territory of the importing contracting party".

pest appears within the territory of a country, the NPPO has to decide on the measures to be adopted to treat it appropriately. The NPPO may declare an area to be under quarantine, which triggers a temporary restriction on the exercise of rights by citizens and legal entities and may impose additional duties. The responsible authority has the power to set the limits of the quarantine area, to limit or prohibit the movement of people and plants in the area, to prohibit the planting or replanting in such areas and to adopt all the measures it deems necessary to control and eradicate the quarantine pest. As noted above, under the SPS Agreement, all these quarantine restrictions must have a scientific foundation, and the law should also contain a procedure for review of areas under quarantine and the lifting of guarantine where the danger has abated.

It is worth noting that the discussion thus far has referred only to guarantine pests and regulated non-quarantine pests. This is because surveillance programmes mainly seek to identify the pests and pathways which are of economic concern and are not already widespread in the territory. The NPPO surveys and controls only those pests of economic importance that are either not endemic (a potential quarantine pest) or that affect the planting phase (a potential regulated non-guarantine pest). Nevertheless, nothing in the IPPC, nor in any other international instrument, prohibits the NPPO from monitoring and controlling pests that cannot be declared as regulated pests, either because of limited economic impact or because they are endemic and do not affect the planting phase. Sometimes jurisdictions have included this category of pests in their legislation as "national pests of concern" or "pests of national concern", defining them as non-regulated pests with a significant economic impact whose biological and epidemiological characteristics require that their control in the national territory must be performed at more than a local level. But in order not to violate the IPPC, control measures for such pests can only be carried out in-country, and not with regard to international trade. (See footnote 6.)

Where the NPPO has strong evidence that there is a regulated pest or a national pest of concern on land or at a particular premises, an inspector may use the powers he or she has been granted under the phytosanitary law and enter to carry out an inspection. He or she can serve notice on

the owner or occupier, and if necessary on owners or occupiers of nearby land, ordering them to take whatever measures the inspector considers appropriate to eradicate or contain the pest. Where a land owner does not carry out the ordered treatment within the requisite time period, the NPPO may carry out the treatment, but the land owner retains the obligation to pay. In some cases, however, the law accords the minister or head of the NPPO discretion to waive the requirement of payment for reasons of poverty, or for expediency. This ensures that treatment or destruction of infected plants or plant products will not be delayed in cases where the owner does not have sufficient financial resources or cannot be found, or where such action is considered essential to the national interest.

Certain plant diseases are so recalcitrant and have such a potentially damaging economic effect that they can only be controlled through an eradication programme, and thus the phytosanitary law must give the minister or head of the NPPO the power to order the destruction of plants. The details of the eradication programme are generally contained in standing orders, decrees or orders so that they may be issued rapidly when the need arises. In some circumstances even healthy plants may need to be destroyed, and legislation will have to provide for such potential buffer zones.

In some situations, prevention and surveillance might not be sufficient impede an outbreak of a pest. The NPPO must be capable of responding to such an emergency. Legislative provisions should allow prompt and fast intervention by the competent authorities (for instance, through eradication measures for the recent entry of a pest capable of rapid dispersal) in order to limit the damage to agriculture and to the environment that emergencies might cause. To this end, several provisions can be included in the law. Fundamentally, the law must specify the powers of the authorities in relation to a potential phytosanitary emergency. It must also indicate what constitutes a phytosanitary emergency, or at the least indicate who has the power to make that determination and declare one (which would trigger access to phytosanitary emergency funds, as discussed below). Other provisions should address implementation of the emergency plan, including coordination with the national emergency management organization, if any. Often such organizations at national level

have detailed contingency or action plans prepared with the assistance of expert committees from the NPPO, already on file in anticipation of a phytosanitary emergency.

4.2.6. Funding

Phytosanitary legislation does not generally set the amount of fees to be charged for services but empowers the NPPO or the ministry to do so. Fees can be charged for the issuance of import permits and phytosanitary certificates, as well as for inspections, treatments and other actions carried out on plants and plant products at points of entry, upon export, in storage facilities or in quarantine areas. The SPS Agreement establishes that fees imposed for procedures on imports (e.g. inspections) must be non-discriminatory and non-protectionist as well as no higher than the actual costs of service.

NPPOs generally operate using allotted funds from the national budget. In many countries there is a great deal of interest on the part of NPPOs in establishing a cost recovery scheme, whereby the NPPO retains the fees collected and cycles the funds back into the operation of the NPPO to improve its functioning. If constitutionally permitted in the particular jurisdiction, the phytosanitary law could provide for retention of part of the income generated by the phytosanitary services with the consent of the minister responsible for finance. Additional resources could come from donations from physical or juridical persons, national or international organizations and various contributions from the government.

The law should provide, in general terms, that such resources should be used to pursue the objectives of plant protection and to improve the quality of services provided for by the NPPO, to render the NPPO more efficient and to rationalize and modernize its structure. Auditing the management of the resources should be performed by the national bodies responsible for financial review.

NPPOs often express interest in other potential sources of funds, including fines collected, items sold after seizure under the law and fees assessed per ton of plants and plant products exported. In most countries, however, existing legislation would not permit the NPPO to keep these types of funds, as all revenue is assigned

to the consolidated fund from which disbursements are made to the NPPO and other government units for their respective activities.

Whatever the existing parameters, it is essential that funding be made available under the law to cater for emergencies. Thus a provision in the phytosanitary law could create a phytosanitary emergency fund that is made easily accessible upon the declaration of a phytosanitary emergency by the minister or head of the NPPO. Alternatively, the law may not specifically create a fund, but may simply provide that the minister has a right to go to Cabinet for funds to be appropriated from consolidated revenue in the case of a phytosanitary emergency.

There are likely to be two principal uses of the phytosanitary emergency funds. First, there is the expense of imposing area-wide controls in the event of a pest outbreak. Second, the funds can be used to compensate land owners where diseased or healthy plants are ordered destroyed. The phytosanitary law should indicate whether compensation is permitted and how it shall be authorized and carried out. Regulations or standing orders can contain details such as how compensation will be calculated and whether compensation will be in kind or in cash, depending on whether the government wishes to encourage farmers to resume cultivation of a particular crop.

Whether to permit compensation is a policy decision, to be decided by the government before enactment of a phytosanitary law. There are strong arguments in favour of a compensation policy, since in many cases, promptly compensating farmers whose plants have had to be destroyed may be absolutely essential to arresting the spread of certain diseases. Moreover, from the outset farmers will be more likely to draw the attention of the NPPO to the presence of a pest if they know that the government will assist in any associated losses, and this will also limit the spread of the pest. Equally, where there is compensation, farmers may be more likely to agree to the creation of buffer zones and the destruction of healthy plants, both of which can assist in hindering the spread of a pest.

Nonetheless, the law should make clear that compensation may be payable only in limited circumstances, and should define them. For example, the law should state that

compensation is only payable where the loss suffered is not due to any fault of the farmer. Furthermore, compensation is only payable when the farmer takes prescribed steps with regard to minimizing the loss.

Emergency funds can give rise to several management issues and there is a need for a clear description of the conditions for access to them, with the management being as transparent as possible. Generally, it is the highest authority involved in plant protection, i.e. the ministry, which is responsible for declaring that there is a phytosanitary emergency. Afterwards it is the NPPO that manages the resources, although in some jurisdictions all responsibility rests with the NPPO so that it can take rapid action. The emergency funds should, in any case, be reserved for the management of pests which can cause significant damage to national agricultural or other resources.

4.2.7. Offences and penalties

Once the phytosanitary law has created the powers to be exercised under it, identified the public authorities in whom those powers are to be vested and outlined the parameters within which those authorities operate, it will have to assign to those public authorities the power to punish. Offences must be defined, along with the penalties that may be imposed and finally the procedures applicable once an offence has been committed. It is a policy decision to be decided in the formulation of the law which activities are to be considered civil or criminal offences under the law.

Some of the common offences contained in phytosanitary laws include:

- importing or exporting plants or plant products without the proper documentation or through an unapproved port of entry;
- obstructing or hindering an inspector in the performance of his or her official functions or failing to comply with an inspector's instruction;
- knowingly or recklessly providing false information to a representative of the NPPO
- breaking the seal on a sealed container containing plants, plant products or other regulated articles except in the presence of an inspector;

- intentionally permitting or causing the introduction or spread of a harmful pest;
 and
- failing to safeguard the phytosanitary security of a consignment after issuance of a phytosanitary certificate.

Some of these actions may already constitute an offence according to the general criminal law in place in the country and may not need to be set out in the phytosanitary law.

Offences under the phytosanitary law can be committed not only by members of the public but also by inspectors. The phytosanitary law should include the following offences which can be committed by inspectors or other representatives of the NPPO:

- seizing plants or plant products for any reason other than that they are likely to introduce or spread a pest (this is to prevent corruption);
- disclosing to any other person any information acquired in the exercise of official functions under the law; and
- directly or indirectly asking for or taking any personal payment or other reward, or abstaining from doing an official action for improper reasons.

Having defined the offences, the law must then outline the applicable penalties. Once again it will be a policy choice as to how to punish violations of the law, although the legal and judicial system in the particular country will likely dictate the kinds of penalties that specific offences attract. In some phytosanitary laws it is not simply the plants and plant products that may be seized where an offence has been committed, but also anything used in the commission of an offence. This would permit, for example, the government to seize vehicles used to transport illegally imported plants and plant products.

It is important to ensure that the level of the penalties is high enough to be a deterrent while at the same time low enough not to be disproportionate to the offence committed. It is expected that a judge imposing the fine will link the punishment to the nature of the offence, and to its magnitude. Usually such a judge may impose a prison sentence, or both a fine and imprisonment. Some laws incorporate enhanced fines for persistent offenders.

In many countries the prescribed fines and penalties contained in phytosanitary laws are low or are otherwise not deterrent enough, in part because of the devaluation of the country's currency over time. Because the listed penalties are embodied in the parent enactment, their enhancement would entail an amendment to the law, and so the penalties remain at the same level for years or decades while their deterrent value declines. One solution to this persistent problem is to enact a separate law which includes a multiplier, i.e. which states that all penalties listed in the phytosanitary law are multiplied by 100, 500 or 1000, as the case may be. Another strategy is to avoid listing specific penalties in the law but instead to list a range, and to accord to the court the power to select the appropriate penalty within the listed range. So long as the upper level is sufficiently high, such a strategy can avoid the effects of inflation for a number of years, although it may still be effective only for a limited time.

One innovative solution is to tie the penalties to a neutral economic parameter, for instance the monthly salary of a civil servant of a particular grade. Thus a minor offence might be defined as one quarter the monthly salary of a civil servant of Grade 2, while a serious offence might attract a penalty equivalent to 10 times that same monthly salary. The advantage of this method is that it does not name particular amounts, and thus the penalties can be expected to rise over time (although this assumes that the government eventually raises its civil servants' salaries). This system can be an improvement over listing a fixed amount in a law which may take years to be enacted, during which time the currency may already have devalued and will likely continue to decline. Yet another approach is to adopt the concept by which fines, denominated in penalty units, are indexed to inflation.

One way to ensure that punishments are appropriate for minor infractions such as those committed by airline or cruise ship passengers who enter the country without declaring plants or plant products in their possession, is to incorporate into the law a system of fixed penalties or "spot fines," which can be imposed immediately by inspectors according to the established procedures. Such fines are similar to parking or speeding tickets in many jurisdictions, where a summons immediately issued must be returned with the accompanying

fine, or the offender can choose to appear to contest the charge. The advantage of such a scheme is that offenders are subject to enforceable and immediate punishment without having to enter into the court system, which would otherwise be onerous and might have negative effects on tourism. On the other hand, in some countries a spot fine system can open up possibilities for corruption, and thus each country has to ensure that the fixed penalty scheme is an appropriate feature in its own context.

Responsibility for enforcement of the law may be assigned to the courts, to the minister, to the head of the NPPO or to the inspectors themselves. Some countries rely solely on a criminal enforcement system, while others complement this system by establishing administrative penalties for certain violations of the phytosanitary law. In both common law and civil law systems, administrative sanctions generally share two principal characteristics: first, the power to impose them is vested in an administrative agency, not a judicial body. In the phytosanitary area, this would mean that part of the executive branch of government or the NPPO would have the power to punish certain kinds of violations. Second, administrative penalties are imposed outside the judicial process, i.e. without the intervention of any court. As a consequence, the regulator is not required to prove a matter to the criminal standard ("beyond a reasonable doubt") and is not constrained by criminal court procedures. Administrative penalties thus constitute a viable alternative enforcement mechanism that can be more cost-effective, timely and practical than criminal penalties.

The law should next set out the procedures applicable once an offence has been committed. In countries relying on criminal enforcement, the phytosanitary law will contain few rules of procedure as these will generally be contained in the country's criminal procedure law. By contrast, where there is an administrative penalty scheme, either the basic phytosanitary law will set out the applicable procedural rules or the country's basic administrative procedure legislation, which applies across the spectrum of laws, would apply. Where administrative penalty schemes are in use, the law should provide for resort to courts by persons aggrieved by such administrative decisions.

4.2.8. Standard legal provisions

Phytosanitary laws routinely contain provisions covering issues that do not fit into any of the categories already addressed. For example, miscellaneous provisions may address liability, stating that inspectors or officials are not liable for anything done in good faith in the performance of their functions under the law. Nor will liability attach for damage to plants or plant products imported contrary to the legislation or for destruction of plants where the government had a legitimate reason for taking that step.

Most phytosanitary laws will provide that importers and land owners have the right to appeal against decisions by inspectors to destroy, dispose of or treat plants, plant products or other regulated articles, with the details of the appeals procedure set out in regulations. Once an appeal is filed the minister or head of the NPPO, or whoever has been allotted that authority, should try to stay the treatment or destruction of the item pending determination of the appeal, except where delay would create a significant risk to plant resources or the environment.

Upon the enactment of a new phytosanitary law, there may be some existing laws, regulations or operating instructions which will have to be changed or repealed. In such cases the law will have to list which provisions in other laws must be repealed or amended to reflect the changes. If earlier laws are being replaced, then the new law may state that they are repealed in their entirety, or it may instead list specific provisions that have been repealed. The law may also include some transitional provisions which maintain existing laws or regulations in force until a specific time or until a specified action takes place. For example, many laws state that subsidiary regulations or orders passed under the prior law remain in force until they are specifically repealed or until they are replaced.

Toward the end of the phytosanitary law, there usually appears a provision listing the many subject matters that the minister (or other person in whom the authority has been vested, such as the head of the NPPO) may address through regulations in order to carry out the purposes of the law. The list of regulations may be extremely detailed or it may simply give broad outlines of the kinds of topics that may be

addressed. In either case, the power to make regulations is rarely limited, since the law usually contains a general statement that the relevant authority may "make all regulations deemed necessary to achieve the purposes of the law." Naturally the power to issue regulations also includes the power to establish the format for application forms, permits, certificates and other documents that will be issued under the law. Depending on the subject matter, the responsible authority can be assisted in the preparation of regulations and other subsidiary instruments by the plant protection board or by technical committees established by the board.

Other issues which are likely to appear in subsidiary instruments include provisions on the organization and functioning of the board; detailed procedures for the issuance and repeal of import permits; and rules on how inspectors should go about their work inspecting consignments of plants or plant products. Regulations may also define the qualifications of inspectors and analysts operating under the phytosanitary law. The dividing line between what should be contained in the basic law and what should be included in subsidiary instruments under the law is discussed in the next section.

4.3.Laws vs. regulations

Although the form of the phytosanitary legal framework in a particular country will depend on a number of factors – including the legal system, the legislative tradition and the other influences already discussed – one widespread trend is that most parliamentary-level legislation, including phytosanitary legislation, is generally kept as basic as possible, with the details and specific requirements confined to the subsidiary instruments, including regulations, rules, schedules and forms.

Relegating the details to the implementing instruments (regulations and the like) serves two purposes. First, it facilitates passage of the principal legislation, because the more general the law, the less likely it is to be objectionable to other ministries and government authorities. Second, keeping the legislation basic ensures that any needed amendments based on scientific advancements or changing political circumstances can more quickly and easily be made. That is, instead of having to approach the

legislature to amend the phytosanitary law, the relevant executive authority (usually the minister responsible for agriculture, although in some countries it may be the head of the NPPO, and sometimes the Prime Minister) has the power to issue and amend subsidiary instruments and thus to act upon new developments and as conditions change either within or outside the country – for example where pest status has altered.

Subsidiary instruments under principal legislation appear in several forms, and the terminology varies depending on the jurisdiction. Most generally, the categories include regulations (sometimes called rules), schedules and forms. Regulations or rules are usually written in the same format as parliamentarylevel acts, that is, their provisions read like the substantive articles or sections of laws. Unlike regulations or rules, schedules are usually more in the form of lists. For example, a phytosanitary law may have attached to it a schedule containing lists of inspection fees, lists of regulated pests and lists of the kinds of information which should be contained in an application for a phytosanitary import permit. Forms, like schedules, do not usually resemble parliamentary-level laws or regulations; instead they contain, as the name suggests, the models of forms for applications, certificates, receipts and other documents which are required under the phytosanitary law.

The dividing line between what is to be included in the parliamentary-level legislation and what should be in the subsidiary instruments again depends on the legislative and other traditions in the country, but some general observations can be made. First, as already noted, any elements that are likely to change should not be included in the main law. This would include provisions based on the state of scientific or technological knowledge, as well as any provisions that depend on a particular set of empirical circumstances. For example, pest lists should clearly not be in the main law as these will need to change over time. Nor would it be advisable for the main legislation, in establishing the membership of an advisory board, to include too detailed a list of members (especially if the list has been developed with particular people in mind), since with time, those self-same people may move to different jobs within the same institutions or to different positions altogether. The problem is that if the legislation identifies

the membership too closely, future ministers would nonetheless be bound by those provisions. Similarly, the specific minister or ministry will not generally be named in the main legislation, as portfolios may change, i.e. the Minister of Agriculture and Fisheries may become the Minister of Agriculture and Cooperatives from one year to the next, which risks making at least one provision of the legislation obsolete. Thus generally the legislation would refer to the "minister responsible for agriculture".

It goes without saying that subsidiary instruments should not conflict with the main law. Terms defined in the main law should not have divergent definitions in the regulations, and procedures set out in the principal legislation should be used as the skeleton on which to build more comprehensive procedures in the subsidiary instruments. Equally, every effort should be made to ensure that the phytosanitary rules or regulations create a comprehensive whole in their own right. Thus at some future date if the main act is repealed, the system established in the subsidiary instruments could remain. If the system is well designed, then the repealing act could provide – as is often the case and just mentioned - that all subsidiary regulations issued under the repealed law remain valid as if made under the new law, unless and until they are also specifically repealed.

Another important principle is that the subsidiary instruments should serve the purposes and objects of the main law and not create powers in themselves. Because regulations and other similar instruments are interpreted by reference to the main legislation, they may be subject to challenge if they do anything more than amplify powers and duties established in the main law. Thus, the grant of any official powers must take place in the main legislation. Inspectors could not, for example, be given in regulations the power to stop and search vehicles, since an aggrieved citizen could thereafter challenge those regulations (and the government action taken under them) as ultra vires because not underpinned by the main statute. However, this statement should be tempered by the recognition that once the broad outlines of particular powers have been established in the main law, the details can be left to the subsidiary instruments which will implement the phytosanitary law. Truly operational details,

however, such as the ways particular commodities should be inspected, should not appear in the legislation at all but rather in a freestanding document such as an internal operations manual.

5. Other Considerations

5.1. Pesticides

In some countries, particularly those with civil law legal systems, one law regulates both plant health and pesticides. That is, the law addresses the many phytosanitary issues just reviewed, and also the various aspects of a pesticide regulatory regime. These include the registration of pesticides and the control of their quality, marketing and use. The law will also address the establishment of an institution to carry out the registration of pesticides and will set out the criteria and procedures for registration, labelling, storage, sale and disposal of manufactured and imported pesticides.

An argument in support of this legislative strategy is that phytosanitary issues and pesticides issues are intricately related. Pesticides are one of a number of pest control measures which the NPPO may have to impose in order to prevent the outbreak or limit the spread of a certain pest. In addition, plant protection strategies for infected areas often rely on the evaluation of pesticide effectiveness. Equally, public officials in charge of pesticide control may contribute to pest surveillance through their work with pesticides. And in cases of pest outbreaks, the institutions in charge of pesticide management can contribute to the drawing up of emergency plans.

Another area of overlap between pesticide management and plant health control is the pest management component of pest risk analysis. ISPM No. 14 contains guidelines for the development of a systems approach, which integrates measures for pest risk management. The rationale is that where an individual measure may not be sufficient, there may be gains in efficacy through a systems approach. The application of pesticides may be one of the component measures of a systems approach.

On the other hand, in countries where pesticides are regulated separately from plant health the determination has been made that the goals of

the two regulatory systems are too different to be regulated together. The purpose of plant quarantine is to prevent the entry of harmful pests or control their spread whereas the goal of pesticide management is to reduce the health and environmental risks associated with the use of pesticides. The former requires the establishment of an NPPO with inspection and enforcement powers; the latter requires the establishment of a regulatory body to evaluate applications for the registration, import and manufacture of pesticide products. While both areas relate to plants and the control of pests. the argument here is that there is little overlap in functions. The phytosanitary service (NPPO) operates almost exclusively at the points of entry (ports, airports, border posts, mail exchanges and post-entry quarantine stations), whereas except for the control of imports, the regulatory functions of the pesticide service are conducted at commercial manufacturing facilities, laboratories and farms in the country. Legally, if the one law has a too broad scope and covers different and relatively unrelated areas, the risk of internal inconsistencies, for example in the terminology, is high. A permanent mechanism of consultation between plant protection and pesticide authorities – for example through representation in the other's board - may be enough to guarantee efficiency and information exchange, and, there would be no need for a unified law.

5.2. Invasive alien species

Invasive alien species (IAS) are species introduced deliberately or unintentionally outside their natural habitats into an area where they have the ability to establish themselves, overcome native species and affect the environment. Plants and insects are among the most common types of IAS in terrestrial environments. Prevention, eradication, control and mitigation of their impacts are measures that countries might take with respect to IAS.

Some IAS can be categorized as harmful pests in that they pose risks to the environment. The standards for pest risk analysis (namely, ISPM No. 2: Guidelines for pest risk analysis and ISPM No. 11: Pest Risk Analysis for quarantine pests including analysis of environmental risks and living modified organisms) cover environmental risks, including risks to biodiversity. After the appropriate risk analysis, environmental pests should be included in

regulations developed under the framework of the phytosanitary law. For instance, certain IAS can be categorized as regulated pests and control measures can be established. Amongst the most common pests that are considered IAS are those categorized as weeds, which have traditionally been part of the legislative responsibility of NPPOs.

Since IAS are pests which are covered by the standards on pest risk analysis and general provisions on surveillance, there is no need to include a specific definition of IAS in the phytosanitary law. Any special issues which arise in relation to IAS can be addressed at the operational level. For instance, where pest alert systems are in place as part of the national pest surveillance programme, those systems can be adapted for inclusion of IAS which affect plants. Pest analysis working groups can be established in order to develop pest risk analysis capabilities incorporating biodiversity concerns.

IAS may require collaboration between the NPPO and environmental agencies where impact on the environment cannot be easily demonstrated. Examples would be arthropods such as ants and bees which may not have an economic impact on crop plants but may have an impact, as pests, on humans and other animals. Accordingly, institutional linkages should be established with authorities with responsibility for environmental effects. To that end, the plant protection board can establish a sub-committee with representation of environmental experts as part of the consultative process.

5.3. Beneficial organisms

A modern phytosanitary law should include provisions on biological control agents, which are natural organisms used for pest control. ISPM No. 3 regulates the export, shipment, import and release of these and other beneficial organisms. The standard addresses biological control agents capable of self-replication as well as sterile insects and other beneficial organisms. The standard does not apply to living modified organisms, issues related to registration of biopesticides or microbial agents intended for vertebrate pest control. The ISPM provides guidelines for risk management and lists the related responsibilities of NPPOs or other responsible authorities as well as importers and exporters.

Countries should develop appropriate phytosanitary measures related to the export, shipment, import and release of biological control agents and other beneficial organisms and, when necessary, issue import permits. In its technical capacity, NPPOs should:

- carry out pest risk analysis prior to import or prior to release (applying ISPM No. 2: Guidelines for pest risk analysis and ISPM No. 11: Pest Risk Analysis for quarantine pests including analysis of environmental risks and living modified organisms)
- ensure, when certifying exports, that the phytosanitary import requirements of importing contracting parties are complied with;
- obtain, provide and assess documentation as appropriate, relevant to the export, shipment, import or release;
- ensure that biological control agents and other beneficial organisms are taken either directly to designated quarantine facilities or mass-rearing facilities or, if appropriate, passed directly for release into the environment; and
- encourage monitoring of release in order to assess impact on target and non-target organisms.

The law should impose on importers and exporters the responsibility for providing the NPPO with all the documentation that is required under import and export procedures. Regulations under the phytosanitary law can establish those procedures. Import and export regulations should cover beneficial organisms, either in the form of *ad hoc* regulations or in a specific chapter of general regulations on imports and exports.

The assessment and implementation of measures for beneficial organisms may require inputs from a special committee of the advisory board, because the non-target impact of such organisms may involve or be the responsibility of ministries other than the one responsible for agriculture, mainly the minister responsible for the environment.

5.4. Living Modified Organisms

Emerging issues such as plants or plant products that are living modified organisms (LMOs) should be taken into consideration when drafting or amending phytosanitary legislation.

The Cartagena Protocol on Biosafety defines living modified organisms as those containing "a novel combination of genetic material obtained through the use of modern biotechnology." Modern biotechnology in turn is defined as the application of: (a) in vitro nucleic acid techniques, including recombinant DNA and direct injection of nucleic acid into cells or organelles, or (b) fusion of cells beyond the taxonomic family, that overcome natural physiological reproductive or recombination barriers and that are not techniques used in traditional breeding and selection.

ISPM No. 11 on pest risk analysis includes an annex on phytosanitary risks that may be associated with LMOs and should be taken into account in the application of pest risk analysis. Because certain LMOs are plants or plant products, they are covered under the basic definitions in the phytosanitary law and no special terminology is needed. The regulation of LMOs that are plants or plant products is part of the regular mandate of the NPPO, which has the power to approve or deny approval for the import of plants or seeds which are the products of biotechnology.

Nonetheless, because the assessment of LMOs focuses on non-target impacts and the propensity for traits to move to other related crops, the authorities responsible for environmental matters will have an interest in the regulation of LMOs. A system should be developed whereby other interested statutory authorities or ministries can be consulted. Again, the advisory board can be a forum for permanent consultation on this issue between the NPPO and environmental authorities.

It may be advisable to have direct participation of environmental authorities in the decisionmaking process as well. Specific regulations on imports of LMOs can provide for joint decisionmaking. Import permits might be issued jointly by ministries or separately with both being issued at the same time and dependent on the unanimous endorsement of all those with legislative powers at the point of entry. Such a joint decisionmaking process on the importation of LMOs could be triggered under the legislation by an importer's declaration on an import permit that a particular consignment contains LMOs. Thus, regulations should set out a model application for import permit which includes such a declaration.

The phytosanitary law should be harmonized with any other legislation in place that regulates some or all of the risk assessment for LMOs (e.g. a biosafety law) and should eliminate overlaps in decisionmaking (e.g. between the NPPO and the authorities responsible for biosafety).

It should be borne in mind that pest risk analysis may constitute only a portion of the overall risk analysis for the import and release of a LMO. Pest risk analysis only relates to the assessment and management of phytosanitary risks. As with

other organisms or pathways assessed by an NPPO, LMOs may present other risks not falling within the scope of the phytosanitary law. For example, countries may require the assessment of risks to human or animal health, or to the environment, beyond the risks covered by the IPPC. Box 4 below provides an example of joint institutional arrangements for the regulation of LMOs.

Box 4 – Plant Health Risk Assessment of GMOs/LMOs in the UK

In compliance with EU legislation, the UK statutes recognise two different types of GMO uses: (1) contained use, where specific measures are used to limit GMOs' contact with the general population and the environment; and (2) deliberate release, where no specific containment measures are applied. Part VI of the Environmental Protection Act 1990 and, in England, the Genetically Modified Organisms (Contained Use) Regulations 2002 and Genetically Modified Organisms (Deliberate Release) Regulations 2002 (with the 2004 amendments) constitute the relevant legislation.

With regard to contained use, the Health & Safety Executive (HSE) is the implementing authority. Applicants must provide an environmental risk assessment for the proposed use, and a risk category is assigned. For higher risk categories, HSE's consent for the proposed use is required. Consent is given based on the opinion of government technical advisers who evaluate risks to humans, animals, plants. Comment on plant health risks is provided by the Plant Health Group of the Central Science Laboratory, which is an Executive Agency of the UK Government Department for Environment, Food and Rural Affairs (DEFRA).

For deliberate release, DEFRA is the implementing authority. Separate applications for non-commercial (i.e. research or development) and commercial releases are required. For the former, the applicant's risk assessment is sent for examination to an independent advisory committee of leading scientists (ACRE – the Advisory Committee for Releases to the Environment). The committee provides advice to DEFRA, which can authorise experimental release under specific conditions.

For commercial release, the approval of GMOs and GM products is given at the level of the European Community, the European Commission and the member states which take collective decisions. For those parts of the process which take place at national level, ACRE again advises DEFRA as well as other bodies (e.g. the Food Standards Agency, which controls the risk assessment of food and feed).

Under the 2005 Plant Health Order (as amended in 2006), the importation of prohibited plant pests and diseases is subject to a licensing scheme. ("Prohibited" in this context includes pests which are not normally present in the territory and likely to be injurious to plants, including GM plants that may contain a pathogenic sequence.) The licensing scheme is implemented by DEFRA through its Plant Health Division.

In all these different procedures, the plant health specialists carry out the plant risk assessment by following ISPM No. 11.

6. Conclusion

Modern phytosanitary legislation is at the crossroads between international trade and agriculture as well as the environment. The international legal framework calls on countries to create an enabling national framework for the implementation of international obligations dealing with all three areas. Finding a balance between the protection of natural resources and the encouragement of international trade is a difficult task, especially in countries with limited human and financial resources. Nevertheless, the increasing volume of international trade in agricultural products requires countries to strengthen their controls and at the same time make them more transparent and reliable.

In all of these tasks, the law has a role to play. Good laws establish institutional mandates on a firm ground, create new rights, impose obligations on individuals and formalize cooperation between government institutions, the public and private stakeholders. These guidelines have attempted to identify the elements set out in the international agreements governing trade and phytosanitary control which countries will need to consider in the revision of their plant protection legislation.

After designing the basic framework, countries will need to adapt the specific text to their individual requirements, tailoring the new legislation to their national needs. In this way they can hope to comply with their international obligations, promote their own agriculture and foster international trade.

References and Legal Texts

FAO 2005. **Perspectives and Guidelines on Food Legislation, with a New Model Food Law**, Legislative Study No. 87, Rome.

FAO. 2002. Law and Sustainable Development Since Rio: Legal Trends in Agriculture and Natural Resource Management, Legislative Study No. 73, Rome.

FAO. 2000. Legal Framework Analysis for Rural and Agricultural Investment Projects: Concepts and Guidelines. Legal Paper Online No. 12 (www.fao.org/Legal).

FAO.1999. New Principles of Phytosanitary Legislation, FAO Legislative Study 62, Rome.

FAO. 1984. Plant Protection Legislation, FAO Legislative Study 28, Rome.

Agreement on the Application of Sanitary and Phytosanitary Measures, 1995, available at www.wto.org.

Convention on Biological Diversity, 1992, available at www.biodiv.org.

International Convention on Plant Protection, 1997, available at www.ippc.int.

International Standards for Phytosanitary Measures 1 to 27, 1995-2006, available at www.ippc.int

Appendix

This table lists the main provisions of a phytosanitary law, and links each of these with the articles/sections of the WTO/SPS, the IPPC and the ISPMs which are most relevant. The aim is to facilitate reference to the three international legal instruments in the drafting of the law. For example, in drafting the definitions sections of the phytosanitary law, one should look to Annex A of the WTO/SPS, Article II of the IPPC and ISPM number 5 in its entirety.

NATIONAL LEGISLATION	WTO/SPS	IPPC	ISPMs
PRELIMINARY			
Title			
Scope		Art. I para. 1	ISPM No. 1 secs 1.1, 1.2
Definitions	Annex A	Art. II	All of ISPM No. 5
ADMINISTRATION			
Establishment of the NPPO		Art. IV para. 1	ISPM No. 1 sec 2.12
Functions of the NPPO		Art. IV paras. 2 and 3 Art. VIII	All of ISPM No. 1
Advisory board			
Appointment of inspectors		Art. VII para. 2.j	ISPM No. 20 sec. 5.1.7
Duties of inspectors			ISPM No. 7 sec. 1 ISPM No. 17 sec. 4 ISPM No. 20 sec. 4.6 ISPM No. 23 sec. 1.3
Powers			ISPM No. 1 secs 1.1
of inspectors			and 1.2
IMPORTS	Arts. 2, 3, 4, 5, 7		All of ISPM No. 11 All of ISPM No. 15 All of ISPM No. 20
Phytosanitary requirements and phytosanitary measures for imports (treatments)		Art. VI Art. VII	ISPM No. 7 sec. 1 ISPM No. 11 secs. 3.4.5, 3.4.6, 3.5 ISPM No. 20 sec. 5.1.6 All of ISPM No. 24
Import permit			ISPM No. 20 sec. 4.2.2 All of ISPM No. 23
Inspections	Annex C		ISPM No. 20 secs. 5.1, 5.2 All of ISPM No. 27
Post-inspection measures			ISPM No. 13 secs. 4.1, 4.2 ISPM No. 20 sec. 5.1.6
Plant quarantine stations			
EXPORTS, RE- EXPORTS, TRANSIT	Art. 3		All of ISPM No. 12
Consignments for export		Art. V	ISPM No. 7 sec. 4.1 ISPM No. 12 sec. 3.1
Consignments for re- export			ISPM No. 7 sec. 4.2 ISPM No. 12 sec. 3.2
Consignments in transit			ISPM No. 12 sec. 3.3 All of ISPM No. 25

MONITORING AND	Art. 3		
CONTROL OF PESTS			
Declaration of		Art. VI	All of ISPM No. 2
regulated pests			ISPM No. 8 sec. 4
			All of ISPM No. 16
			All of ISPM No. 19
			ISPM No. 20 secs.
			5.1.3, 5.1.5
			All of ISPM No. 21
Declaration of			ISPM No. 9 sec. 3.2.2
quarantine areas			101 111 1101 0 0001 01212
Declaration of	Art. 6		All of ISPM No. 4
pest free areas			ISPM No. 10 sec. 2
			All of ISPM No. 20
Declaration of areas of	Art. 6		All of ISPM No. 22
low pest prevalence			LODAN 4 400
Implementation of control measures			ISPM No. 4 sec. 1.2.2
control measures			ISPM No. 9 secs. 3.2, 3.3
			ISPM No. 20 sec. 5.1.3
OFFENCES AND			
PENALTIES			
Offences			
Penalties			
MISCELLANEOUS			ICDM No. 4 acces 4.5
Authorities to assist and co-operate			ISPM No 1 secs 1.5, 1.6, 1.9, 2.16 and 2.17.
assist and co-operate			ISPM No. 15 sec. 6
			ISPM No. 20 secs. 2,
			5.1.1, 5.1.5.2
Power to make			ISPM No 1 sec 1.1.
regulations			
Repeal and			
savings			