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## **USDA Agricultural Outlook Forum 2007**

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### **INTERNATIONAL STANDARDS AND IMPACTS ON DATA NEEDS**

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#### **Summary**

International standards for phytosanitary measures have as their major aim, the facilitation of trade – by increasing the understanding of concepts, by providing principles of action, by describing procedures that are used by most countries in the export and import of plant material and by providing a basis for many of the technical justifications, such as pest risk analysis, that support agreements between trade partners.

The increase in the data used for and produced by risk analyses has become a problem for many countries. There are a number of ways to help deal with this including:

- developing standards concerning information used for technical justification purposes;
- the more effective management of information, including the sharing of information on appropriate databases;
- increased liaison between trade officials, which may make it possible to utilise the services of a professional authority that could provide reasoned guidance where there are difficulties between countries.

The case for developing countries is one that involves the provision of special assistance. This should include the continued availability of training courses, the use of collaborative programmes and capacity development to aid the implementation of international standards.

Whilst developing techniques to deal with information management for the application of standards, officials should recognise that public acceptance of delays in the name of plant protection may be limited. Programmes to increase public understanding of the need for international plant protection may be needed.

#### **Introduction**

The development and adoption of international standards is intended to facilitate trade and improve the protection of agricultural and environmental resources. Although standards have provided much-needed guidance, they have also led to the strong demand for technical information. This is supported or exacerbated by the requirement to

technically justify national import regulations. The proliferation of technical information in different forms itself causes more problems. There may be means to mitigate these problems – but they require effort, common sense and backbone.

### **International standards**

Some international standards have created procedures that demand great files of information so they can function. Other standards are considerable files of information in themselves. Examples of the former are standards such as those for pest risk analysis, for pest free areas, for areas of low pest prevalence, and for the preparation of pest lists. Examples of the latter are the diagnostic protocols and phytosanitary treatments. The result is that information is gathered and reordered into different forms – in the above cases either in the form of technical justification or specific technical guidelines. In general, all standards for phytosanitary measures cause more problems for developing countries than they do for developed countries.

### **Data requirements**

The demand for data grows stronger all the time – this is particularly so for pest risk analyses. The use of specific standards, when they are available, may well decrease the need for risk analysis – but there are few such phytosanitary standards available at the moment. However, the present standards, for example those for PRA, for pest free areas and areas of low pest prevalence, are quite detailed in the effort to cover as many cases as possible and lead to the accumulation of considerable amounts of information. The use of risk analyses arises because of the uncertainty known to exist in the information used for the setting of import regulations. The consequent regulations are then frequently contested in an adversarial system that concentrates on the detection of technical flaws in the relevant PRA. It is so much easier to justify decisions that are based on a superabundance of information and to deflect stakeholder or political criticism. There are a number of ways to try to deal with this situation – for example, to try to limit the demands for information or to try to manage more effectively information collection, storage, and availability.

### **Decision making**

There may be some assistance for NPPOs in the examination of the procedures of decision-making within phytosanitary systems. Biosecurity New Zealand has been looking at the process and information requirements for decision-making, what overall principles are involved and where such information might be limited. The principles should be checked for application to phytosanitary processes. They include:

- expressing all factors with transparency so that they are expressed in clear terms – including the basis of consideration, the uncertainty that is recognised and the range of options
- ensuring that the aim of the procedure is fully understood, for example: to improve the national economy, including sound environmental values
- dealing with uncertainty with reasonable decisions, maintaining options whilst recognising assumptions and uncertainties
- ensuring that those best placed, with the right information and skills, make the decisions

- managing the process so it is timely and well informed:
  - o with the level of information/analysis being proportional to the size of the risk and timeframe
  - o that there are clear parameters on how much analysis is needed and how much uncertainty to accept
  - o the costs of delay are considered
- following consistently the selected process
- ensuring that all affected parties are involved (they are likely to have information on the range of options available) and that no decisions are made until consultation is completed.

It has to be recognised that whereas society used to accept that accountable bureaucrats could make decisions, the litigious nature of present day society makes this virtually impossible.

#### Level of confidence

There is also the point that the level of confidence required may be too high – usually 95 or 99 % confidence level for all cases. We tolerate risk likelihoods in other areas much higher than those we are prepared to tolerate in phytosanitary decisions - for example regulatory decisions regarding the confidence associated with the committing of a crime such as “beyond reasonable doubt”. This particular sense may not apply to phytosanitary decisions but many of the problems that are not controversial or high profile could be reviewed using a different level of confidence and this would save resources.

#### The identification of strains

The variability of situations in different countries for different commodities for different pests makes it difficult to set out guidelines for the amount of information that should be required for a PRA or to provide technical justification for PFAs and ALPPs. The issue of strains has the potential to derail all reasonable import requirements and produce more trade barriers than has been seen before. This issue should receive the attention of the Commission on Phytosanitary Measures before it receives political attention.

#### Input from interested parties

There is always the matter of political input. Such input usually reflects public concerns or those expressed by civil society or those of particular lobby groups. Only too often such concerns are not based on scientific risk assessments. Logically, such inappropriate input should be able to be dealt with by long-term information sharing, transparency and consultation – but logic does not always apply to the situations that arise. Long-term strategies to influence public perceptions could possibly affect the demands of dissenting lobby groups. In New Zealand public perceptions on biosecurity have been changed in the last few years (with the assistance of a television programme on border control and public programmes advertising biosecurity) as have those on global warming.

The increasingly litigious nature of discussions has been noted. However, many parties in other areas of business which have used the courts and arbitration systems are now moving to use mediation. The speed, lower cost and, frequently, a more amicable result is

leading to the greater popularity of this alternative dispute resolution method. This type of method should be considered in dealing with plant import/export related disputes.

#### Application of international standards

##### Procedural

The application of procedures to facilitate action related to risk analysis, PFA etc may assist in speeding up action and reducing information based delays. The draft standard for the recognition of PFAs and ALPPs, to be presented for adoption at the second meeting of the Commission on Phytosanitary Measures in March 2007, is an example of an administrative standard intended to facilitate access negotiations. There is the opportunity for further standards describing in more detail aspects of this procedure. The present proposed rule concerning the requirements for requests to amend import regulations from USDA describes the type of information that can be supplied by an exporting country to assist an importing country consider an import and thus facilitate trade. Other countries will doubtless follow the lead of the United States in this area. This type of procedure will encourage straightforward dealings and avoid insufficient information provision.

##### Protocols/schedules/methods

The next step in the development of international standards to assist with information access is the development of specific standards. Such standards, relating to a particular pest or specific circumstance such as the use of a treatment, are now being developed by Technical Panels of the Commission on Phytosanitary Measures. Countries are even more careful with their scrutiny of detailed specific standards so agreement and adoption will take time.

The IPPC Secretariat started work on a standard for surveillance on citrus canker in 1995 ... and it is still not available. Countries find it difficult to agree on the figures. But apart from this, there is a worse problem in that most countries do not undertake adequate surveillance programmes – they are just too expensive. This could well be the most difficult area for trading countries to agree on – whether the correct surveillance has been conducted to show presence or absence. Here new technologies or new methodologies will have to be developed. The development of non-survey methods to demonstrate quantifiable freedom from a pest shows promise and could be a way to cut the costs of surveys and produce quantitative results.

Within each country there is the opportunity to shape risk analyses to particular situations – information resources requirements can be minimized by developing specific analyses or in other cases such resources can be saved if the analysis is broad and covers several pests, or commodities or countries. Careful attention to the required outcome of the analyses can save resources over time.

The non-availability of experts all over the world for this sort of work will further delay the already delayed standards. There are some standards that aim to help with the function of standards and their use – such as the standard on equivalence. It may be that other standards, such as that on the recognition of pest free areas and areas of low pest prevalence for fruit flies (not yet adopted), will have a similar effect. As noted earlier, it may well be difficult to develop a series of standards to guide the requests for

information related to risk analyses, pest free areas, areas of low pest prevalence, phytosanitary treatments. There is so much variability in the requests for commodity access that general rules will be hard to prescribe. However, USDA has provided a basis document with its proposed rule so a start has been made.

### **The sharing of information/collaboration**

There is without doubt a proliferation of databases. One of the most useful regarding plant-related information is the International Phytosanitary Portal (IPP - <https://www.ippc.int>). This was established by the Commission on Phytosanitary Measures to provide a centralized service for IPPC contracting parties to make official phytosanitary information available in order to improve transparency and meet their reporting obligations under the IPPC. The information includes regulated pest lists, phytosanitary requirements, pest reports, ports of entry with restrictions and emergency actions. Many countries have started providing this information through the IPP.

At the moment ways are being explored to make available unofficial scientific information in support of the implementation of the IPPC and ISPMs. This database would include information on organisms, pests and non-pests, information on detection, identification, control and treatment, diagnostic protocols, pest and non-pest data sheets, phytosanitary treatments, general pest reporting, training material for NPPOs and ISPM implementation, discussion groups / fora (eg wood packaging, PRA, electronic certification), on-line phytosanitary assessment tools (including the PCE), operational manuals, lists of research and teaching organizations, descriptive publications e.g. explanatory documents for ISPMs such as those from IAEA, CABI, weed / invasive species risk analysis, remote learning tools, on-line conferences, electronic phytosanitary tools (e.g. PRA tools, modelling) that may be supplied by interested parties. If this site can be developed and all the procedural issues solved, regarding submission of information and its verification, then this would be of great assistance to NPPOs.

There are opportunities to share information between countries. This could include the sharing of risk analyses and biological data sheets. There is the example of the collaboration amongst Australia, Canada, New Zealand and the United States. There are opportunities for collaboration between regional plant protection organisations but this is limited to date.

Another system has been set up to include databases on biological material at one site. This is GBIF (Global Biodiversity Information Facility). This is “An international, free-standing, not-for-profit megascience organisation established 1 March 2001”. Its mission is “Making the world’s biodiversity data freely and universally available via the internet for the benefit of science, society and a sustainable future”. GBIF hopes to establish a technology to allow the connection of databases in a network. Agencies in New Zealand, for example, are involved in creating standards to allow databases for invasive alien species to communicate with each other. GBIF is establishing lists of the names of organisms (an electronic catalogue of names of known organisms or ECAT). This is linked to ITIS (Integrated Taxonomic Information System) and Species 2000. GBIF is

also mobilising primary data and making this observation data available. Unfortunately, this does not support surveillance or monitoring data.

### **Guidance for information requirements**

Where demands are made by a potential trade partner, there is only the sense of right and reason, and the general principles of the SPS Agreement, in its WTO context, and the principles of the IPPC that guide each country involved.

It may be that in the future a body such as the IPPC Secretariat or a nominated audit body may be able to carry out assessments, for pest free areas and the like, and provide useful guidance. Or members of the Subsidiary Body on Dispute Settlement could provide guidance on what is reasonable and what is unreasonable. The form for requesting advice on phytosanitary issues concerning the IPPC or ISPMs, found in the IPPC Dispute Settlement Manual, could lead to the provision of sound, balanced advice. In the absence of specific standards for all pests, and this will be the case there is no doubt, some form of intermediate professional assessment and guidance is what is needed.

The Commission on Phytosanitary Measures is to consider the proposal to establish a non-compliance mechanism such as those used by several multilateral environmental agreements. This may well offer more opportunities to develop capacity within developing countries and build systems that facilitate discussion between trading partners.

### **The case for developing countries**

Aspects of technical assistance or capacity development take time to consider so the area is touched on lightly. For developing countries information access is a problem, language is a problem, training is a problem, the retention of trained staff is a problem ... etc. Some of the extensive PRAs prepared by developed countries, and some of the WTO rulings imply that massive amounts of precise data are required.

But with developing countries, are these massive amounts of information really necessary? Is a Pacific Island country going to take the United States to the WTO? Also, some Asian states, similarly technically challenged, manage to settle their differences to their mutual satisfaction without the access to vast silos of information.

Perhaps there is a case for obtaining reasonable amounts of information followed by the discussion, negotiation, mediation of differences. Apart from this, there does remain the matter of data availability. Developing countries continue to need assistance in this area. The situation with in-country information also needs assistance. In so many countries pest surveillance is not undertaken, government or international funds seem to be declining, and industry links for funding are absent.

The FAO and the Commission on Phytosanitary Measures have put much effort into capacity developing projects – but it is never sufficient. If developed countries are serious about plant protection, systems in developing countries must be built or strengthened. If

this is to be done, a long-term (eg 10 years), global programme should be initiated – possibly under the Commission on Phytosanitary Measures – implemented and sustained.

### **Final comments**

Most countries can recognise their own problems. To deal with them, countries may tackle each aspect separately or develop national strategies. The development of international strategies should also help.

To summarise the points made above, national strategies could include:

- efforts to affect public, political, industry and stakeholder perceptions
- the development of systems for the sharing of information – collaboration, cooperation
- the development of procedures:
  - o that improve decision-making where possible
  - o to use different levels of confidence, coverage or detail for different problems and countries
  - o to develop information storage and retrieval systems
  - o to facilitate the understanding of the problems of developing countries.

International strategies could include:

- the development of supportive international standards that facilitate information supply
- the more rapid development of diagnostic protocols and schedules of phytosanitary treatments that facilitate market access. The needs of developing countries could be given more attention.
- the development of inexpensive, effective surveillance systems and technology
- further development of systems for database linkage
- the continued development of systems that aid the discussion of problems and the contribution of clarification, advice or guidance.

Overall, I do not think that time is on our side. The public, stakeholders, industry and politicians become impatient with the delays caused by scientific considerations. However unreasonable this may be, it is a fact that cannot be ignored. Some form of action has to be developed to ensure that unrealistic time constraints are not placed on the consideration of trade matters. Systems have to be developed to speed up the considerations involved in safe trade, and at the same time government agencies have to develop an increased understanding within their communities of the complexities of biological studies and the importance of plant protection.

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### **Abbreviations**

ALPP	Areas of low pest prevalence
CABI	CAB International
ECAT	Electronic catalogue of names of known organisms
FAO	Food and Agriculture Organization
GBIF	Global Biodiversity Information Facility
IAEA	International Atomic Energy Agency
IPP	International Phytosanitary Portal
IPPC	International Plant Protection Convention
ISPM	International Standards for Phytosanitary Measures
ITIS	Integrated Taxonomic Information System
NPPO	National Plant Protection Organization
PCE	Phytosanitary Capacity Evaluation
PFA	Pest free area
SPS	Sanitary and phytosanitary
USDA	United States Department of Agriculture
WTO	World Trade Organization



# The role of international standards and their impacts on data needs

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# International standards for phytosanitary measures

- **Designed to clarify**
- **Increase understanding**
- **Facilitate trade**
- **Usually increase information requirements**
- **Frequently make life difficult for developing countries**

# Data requirements

- **Decision making**
- **Level of confidence**
- **The identification of strains**
- **Input from interested parties**
- **The application of international standards**
  - **procedural**
  - **protocols/schedules/methods**

# The sharing of information/collaboration

- **International phytosanitary portal**
- **Between countries**
- **Between regional plant protection organizations**
- **other organizations such as the Global Biodiversity Information Facility**

# **Guidance for information requirements**

**Discussion with guidance from**  
**IPPC Secretariat**  
**Subsidiary Body on Dispute Settlement**  
**Other professional advice**

**The non-compliance mechanism – if developed – may assist**

# **Developing countries**

**Use of more basic systems**

**Capacity development in all areas – in particular surveillance**

**Longterm integrated development programme should be considered**

# **National strategies**

- **Perception changing**
- **Systems for sharing information**
- **Procedures**
  - **different levels of consideration**
  - **information storage and retrieval systems**
  - **facilitation of developing countries**

# **International strategies**

- International standards supporting information supply**
- Rapid development of protocols and schedules**
- Inexpensive surveillance systems**
- Systems for database linkage**
- Systems for discussion with guidance**



Thank you for your attention

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