

OPEN-ENDED WORKING GROUP

**BUILDING NATIONAL
PHYTOSANITARY CAPACITY**

Discussion Paper
Submitted by
CAB International

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1. Introduction

CPM3 decided to establish an Open Ended Working Group (OEWG) on phytosanitary capacity building, with the aim of producing:

- i. A draft concept paper on national phytosanitary capacity for consideration by the SPTA in 2008 for presentation to CPM4.
- ii. A draft strategy for national phytosanitary capacity building for consideration by the SPTA for presentation to CPM.
- iii. A proposed operational plan for implementing the strategy over the first six years of its operation.

Discussion papers have been invited for contribution to the OEWG. This paper primarily contributes to output (i) above, as this provides the foundation for the development of the capacity building strategy. Some thoughts on (ii) are also provided.

For the sake of brevity, the paper is presented in note form, with quotes from relevant sources. A list of quoted and other useful sources is provided.



Summary statements, key points, questions, or suggestions are indicated like this.

2. Capacity

Capacity is a much used term; different people understand it differently.

Morgan (2006) defines capacity as “that emergent combination of attributes that enables human systems to create development value.”

OECD (2006) defines capacity as “the ability of people, organizations and society as a whole to manage their affairs successfully”.



UNDP defines capacity as: “the ability of individuals, organisations and societies to perform functions, solve problems, and set and achieve objectives in a sustainable manner.” (UNDP: <http://www.capacity.undp.org/>).

The UNDP definition is widely used and adapted for particular contexts. It contains three elements:

People: individuals, groups, organizations, society

Activity: performing functions, solving problems

Objectives: context specific, but sustainability is a co-objective; creating development value is the objective in Morgan's (2006) definition.

Rather than search for an ideal definition, it may be more useful to ask what are the components of capacity. Engel *et al.* (2007) (adapting from Morgan) identify three components covered by different notions of capacity:

Competencies: the energies, skills and abilities of individuals

Capabilities: the collective ability of a group or a system to do something either inside or outside the system. The collective skills involved may be technical, logistical, managerial or generative (i.e. the ability to earn legitimacy, to adapt, to create meaning, etc)

Capacity: the overall ability of an organisation or system to create value for others. The

system must somehow balance and integrate the many capabilities it has developed. Based on a range of case studies, Engel *et al.* (2007) identified five core capabilities, which contribute to the overall capacity of a system to achieve its objectives.

- Ability to survive and act
- Ability to achieve development results
- Ability to relate
- Ability to adapt and self-renew
- Ability to achieve coherence

Insights into what capacity is and how it can be developed can therefore be gained from 'systems thinking' (Morgan, 2005), and the principles and practice of different forms of networks (Taschereau and Bolger, 2007).



Capacity is much more than the knowledge, skills and tools of individuals and organizations. It is a property of a system comprising a range of different actors and the formal and informal linkages between them.

2.1 Phytosanitary capacity

In seeking a definition for national phytosanitary capacity, we can examine the three components of the UNDP definition.

People: Often the implicit assumption is that phytosanitary capacity resides mainly within the NPPO. However national phytosanitary capacity also resides in other individuals and organizations such as the private sector (producers, transporters, importers and exporters etc), training and education organizations, organizations concerned with the management and protection of natural resources and the environment, and others.

Activity: In the context of the IPPC, the functions relate to the obligations of countries (NPPOs) including implementation of the ISPMs. With a wider view of phytosanitary capacity, some of the functions may not be specifically related to the Convention and its implementation.

Objectives: The purpose of the IPPC 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" (Article I.1). As the title of the convention states, this is the protection of plants (from pests). The WTO SPS agreement makes phytosanitary capacity crucial to the facilitation of trade, another possible objective.



A definition of national phytosanitary capacity is required that:

- Includes the three elements of the UNDP definition
- Can be applied to any country
- Takes account of the fact that required capacity is different in different countries
- Includes both plant protection and trade facilitation objectives

3. Capacity Assessment

Capacity assessment or evaluation is a logical step in capacity development; if you don't know what the current situation is, formulating support to capacity development is difficult. There is an extensive literature on capacity assessment; approaches and methods are based on what is meant by capacity. UNDP (2005) summarized 20 capacity assessment tools.

UNDP's capacity assessment framework (UNDP, 2007a) has three dimensions (Figure 1).

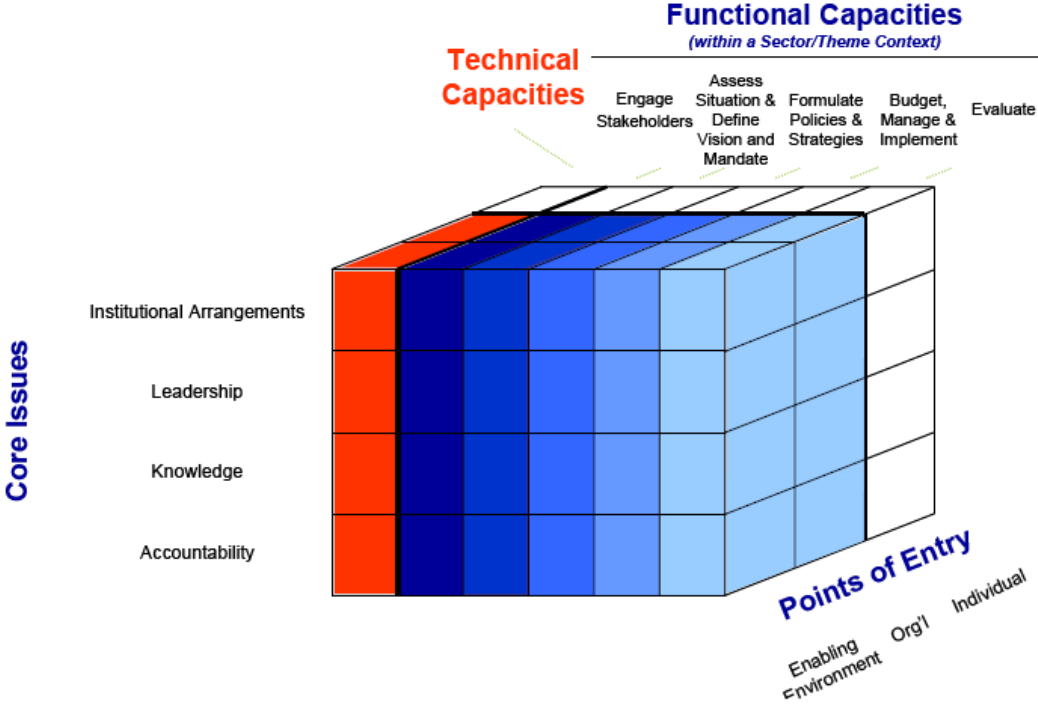


Figure 1. UNDP Capacity Assessment Framework (UNDP, 2007a).

Engel *et al.* (2007) propose a framework suggesting four pointers for each of the five core capabilities they identified (Box 1).

Box 1. A balanced approach to assessing capacity and performance (from Engel *et al.*, 2007).

(A) Ability to survive and act

1. Inspiring leadership/action orientation
2. Ability to plan, decide and act collectively on decisions
3. Effective human, institutional and financial resource mobilisation; low transaction costs
4. Effective monitoring of follow-up

(B) Ability to achieve development results

1. Substantive outcomes such as better health and education
2. Strengthening public and private institutions and services
3. Improving governance and multi-stakeholder participation
4. Improving sustainability of development results

(C) Ability to relate

1. Legitimacy in the eyes of relevant stakeholders
2. Integrity of the organisation, its leadership and staff
3. Operational credibility/trustworthiness
4. Adequate alliances with relevant external stakeholders

(D) Ability to adapt and self-renew

1. Adaptive management culture
2. Opportunities, incentives and discipline to learn
3. Confidence to change: space for diversity, flexibility, creativity
4. Adequate understanding of shifting context and relevant trends

(E) Ability to achieve coherence

1. A clear mandate, vision and strategy
2. A well-defined set of operating principles
3. Leadership intent on achieving coherence, balancing stability and change
4. Consistency between ambition, vision, strategy and operations

Mackay *et al.* (2002) note that “analysts tend to define capacity-related problems using the concepts and terms of their own disciplines. In the field of agricultural research, economists tend to see capacity requirements in terms of policy research and the remedies to lie in regulatory and fiscal mechanisms. Biological scientists see capacity problems in terms of gaps in scientific expertise or technical resources and the solution to lie in opportunities for advanced study and the upgrading of technical facilities. Specialists in the organizational sciences tend to view capacity problems more comprehensively in terms of the systems and subsystems that make up the organization and focus attention on organizational culture, and management practices and processes”.

3.1 Phytosanitary capacity assessment

Phytosanitary capacity assessment has been discussed by Day *et al.*, (2006). Box 2 reproduces their list of 10 different objectives for conducting a phytosanitary capacity assessment; different types of assessment tools would be useful for different objectives.

Box 2. Objectives for phytosanitary capacity evaluation (from Day *et al.*, 2006)

- To lay the basis for a national strategy and business plan (including priority setting)
- To assess capacity and enhance planning in a specific area (e.g. diagnostics, inspection, PRAs, etc)
- To highlight shortcomings and so attract and allocate funds (national or external)
- To convince trade partners of credibility and trustworthiness
- To fulfill (or show compliance with) international obligations (for example with ISPMs, or for accession to the WTO)
- To provide feedback to the IPPC and related bodies on the implementation of ISPMs, or other agreements (e.g. the SPS Agreement)
- To inform and satisfy stakeholders
- To motivate staff to achieve more
- To monitor progress over time against performance indicators
- To contribute to regional or global assessments.

Quinlan *et al.* (2006) developed a list of traits and indicators for a strong plant health system (Box 3), many of which are context specific examples of the general capacity indicators reported above (Box 1).

Day *et al.* (2006) describe a range of capacity assessment tools used in the SPS arena (their Annex 7). The Phytosanitary Capacity Evaluation Tool (the PCE) has been specifically developed by the IPPC for this purpose and contains over 600 questions on a range of topics (Table 1).

Table 1. Aspects of capacity covered by the PCE tool

Topic	Description
Legislation	Existence and content of relevant legislation
Human resources – numbers	The numbers or existence of staff with particular types of expertise
Human resources – capacity	Training and other issues concerning human capacity and its development
Facilities	Buildings, laboratories
Equipment	Laboratory, field, computers
Procedures, documentation	The existence or implementation of procedures and associated documentation
Organisation	Aspects of NPPO capacity not captured elsewhere - organisational structure, management, funding, planning.
Background data	Statistical and factual data on pests, ports, exports, imports etc
Other	Questions asking if there are any other relevant questions to be considered.

A comparison of Boxes 1 and 3 with Table 1 suggests that there are some aspects of capacity that the PCE does not assess.

Van der Meer (2008) has reviewed SPS capacity building needs assessments in 3 countries in Asia, and makes some observations (Box 4) suggesting that for various reasons, good practice in capacity assessment is not always followed.

Box 3. Traits and indicators for a strong plant health system*

(taken from Quinlan *et al.*, 2006).

Robust (works under all conditions, consistent)

- Inspectors trained in clinical diagnosis, provided tools, audited
- Justified and standardised sampling and collection
- Accredited laboratories and appropriate technicians
- System of quarantine facilities or other containment mechanisms
- Reference collections

Comprehensive

- Information and awareness of new threats
- Early detection methodologies in place
- Proper identification or diagnosis
- Possible traceability of products through transport chain
- Monitoring and feedback to detection and surveillance
- Incentives to report, possibly legislative or through compensation

Fully Coordinated (institutionally)

- State to Federal program coordination (County to Province, Municipal to State, etc)
- Standardised diagnostic protocols
- Nationwide procedures in place prior to detection
- International information sharing
- Communication among stakeholders

Efficient (financial)

- Clear criteria for priority setting
- Information on economic (including non-market) impact
- Contingency funding or trigger mechanism for increased surveillance
- Public support for prevention measures
- Legal authority for taking emergency action

Sustainable (will continue to work)

- Research & Development for screening procedures
- Training and quality enhancement for inspectors
- Dedicated funding for equipment and infrastructure renewal
- Analysis of lessons learned from each outbreak or control program
- Equivalence agreements with off shore systems

Equitable

- Differences in ease of detection balanced with priority of disease
- Response of phytosanitary measures proportional to the risk
- Liability assigned to source of disease or pathway
- Distribution of benefits of programs considered and intentional
- General surveillance at vulnerable sites/times

Integrated

- Government-wide (and throughout academia, research institutions, industry, etc) guidance on content, quality, sources of data and mechanism for its collection and review
- Compatibility of plant health related data storage (type of data and archive)
- Timely accessibility to related data banks for purposes of plant health
- Feedback mechanism for all plant health staff

Evidence based decision making for all of the above traits and indicators

* While many of these indicators will evolve in the next decades, the general traits will remain relevant.

Box 4. Observations on SPS Capacity Building needs assessments in Cambodia, Lao PDR and Vietnam (taken from Van der Meer, 2008).

- There is a supply-side dominance in needs assessments, which seems to be related to the complexity of SPS issues and asymmetry in information. It leads to receivers' pragmatism which implies that beneficiaries tend to accept what is on offer rather than actively engaging in the identification of their own needs.
- Senior decision makers in Government appear to be more skeptical on returns to investment in SPS capacity building than service chiefs (e.g. chief veterinary officers). This leads to problems of low national prioritization and sustainability once foreign support ends.
- SPS needs assessments mainly focus on the public sector. There is little attention to the needs and potential of the private sector, and to proper public and private sector roles.
- There is a tendency in capacity building and needs assessment to focus more on inputs than on outcomes. This can reduce cost-effectiveness of capacity building efforts.
- There is insufficient attention to benefits from increased capacities. There are methodological reasons for this, but also lack of efforts to collect empirical evidence.
- Although it is clear that small poor countries cannot afford the same size of capacities as bigger countries can, there is so far not sufficient attention to define what capacities are appropriate in relation to a country's economic size.



If we think equipment is the main component of capacity, our capacity assessment will focus on equipment. The capacity gaps identified will be items of equipment, and capacity development will be concerned with provision of that equipment.

4. Capacity Development

The term Capacity Development is now often preferred to Capacity Building because the latter “suggests a process starting with a plain surface and involving the step-by-step erection of a new structure, based on a pre-conceived design. Experience suggests that capacity is not successfully enhanced in this way” (OECD, 2006). Capacity development is “the process whereby people, organizations and society as a whole unleash, strengthen, create, adapt and maintain capacity over time” (OECD, 2006).

UNDP (2008) defines capacity development as “the process through which individuals, organizations and societies obtain, strengthen and maintain the capabilities to set and achieve their own development objectives over time”.

Thus definitions of capacity development follow directly from what is meant by capacity; different understandings of ‘capacity’ will lead to different capacity development activities.

Important in capacity development is the approach used. Lusthaus *et al.*, quoted by Lavergne and Saxby (2001) suggest there are four broad approaches:

- The organizational approach, focused on building capacity at the level of individual organizations
- The institutional approach, which focuses on the processes and rules that govern socio-economic and political organization in the society at large
- A systems approach, which emphasizes the interdependencies among social actors and the need to promote capacity building in a holistic way
- A participatory process approach, which emphasizes ownership and participation as fundamental elements of CD.

While many capacity development efforts may involve elements of more than one approach, individual initiatives may emphasize one or other approach.

The terms Technical Assistance and Technical Cooperation are often used in association with Capacity Development, and sometimes they are used synonymously. However, Technical Assistance would normally imply an external involvement in an activity, which might or might not be intended to contribute to capacity development; in some situations it could even inhibit capacity development.



The IPPC/CPM should review their use of the term Technical Assistance, and except where the more specific meaning is intended, consider using the term Capacity Development instead.

UNDP has a set of principles for its capacity development activities. These have evolved over time but are now as shown in Box 5.

Capacity development is a recurrent theme in the Paris Declaration on Aid Effectiveness. The declaration emphasizes that capacity development must be country led and owned (Box 6).

Box 5. Basic Principles of UNDP's Approach to Supporting Capacity Development (from UNDP, 2008).

- It gives tangible expression to the concept of **national ownership**, which is about the capabilities of making informed choices and decisions.
- It is not **power-neutral** and involves **relationships, mind sets and behaviour change**. It therefore emphasises the importance of **motivation** as a driver of change.
- It is a **long-term process** and can be promoted through a combination of shorter-term, often externally driven results and more sustainable, locally driven, longer-term ones.
- It requires **staying engaged** under difficult circumstances.
- It links the **enabling environment, the organisational level and the individual level**, promoting an interdependent approach.
- It moves **beyond a singular focus on training** to address broader questions of institutional change, leadership, empowerment, and public participation.
- It emphasises the use of **national systems**, beyond the use of national plans and expertise. It questions the use of stand-alone implementation units; if national systems are not strong enough, they should be reformed and strengthened, rather than bypassed.
- It demands **adaptation to the local reality**. There are **no blueprints**. It must start from the specific capacity requirements and performance expectations of the environment, sector or organisation it supports.
- It demands a **link to a broader set of reforms**, such as education reform, wage reform and civil service reform, to be effective. There is little value in capacity development initiatives that are designed as one-offs or in isolation.
- It results in **unintended (capacity) consequences**. This must be kept in mind during the design phase and should be valued, tracked and evaluated.
- It provides a **systematic approach to measuring** capacity development, with the use of “good practice” indicators, case evidence and available data analysis. It also brings together quantitative and qualitative data to give grounding and objectivity to perceptions and judgments on capacity assets, needs and progress.

Box 6. Excerpt from Paris Declaration on Aid Effectiveness

Partner countries strengthen development capacity with support from donors

22. The capacity to plan, manage, implement, and account for results of policies and programmes, is critical for achieving development objectives - from analysis and dialogue through implementation, monitoring and evaluation. Capacity development is the responsibility of partner countries with donors playing a support role. It needs not only to be based on sound technical analysis, but also to be responsive to the broader social, political and economic environment, including the need to strengthen human resources.

23. **Partner countries** commit to:

- Integrate specific capacity strengthening objectives in national development strategies and pursue their implementation through country-led capacity development strategies where needed.

24. **Donors** commit to:

- Align their analytic and financial support with partners' capacity development objectives and strategies, make effective use of existing capacities and harmonise support for capacity development accordingly

To illustrate how the perceptions and practices of capacity development have evolved, Browne (2002) has contrasted the “traditional” and “new” paradigms (Table 2).

Table 2. Capacity development: traditional and new perspectives and practices (from Browne, 2002).

	Traditional perspective and practices	New perspective and practices
<i>Knowledge acquisition</i>	HRD approach/knowledge transfer <ul style="list-style-type: none"> ▪ Formal training ▪ Scholarships ▪ Reliance on expatriate experts 	Knowledge acquisition <ul style="list-style-type: none"> ▪ Knowledge networks ▪ South-South, South-everywhere exchange ▪ Interactive training ▪ Reliance on national experts ▪ Demand driven
<i>Institution building</i>	Organisational strengthening <ul style="list-style-type: none"> ▪ Public sector emphasis ▪ Imported “best practices” ▪ Top down reform ▪ Reinventing the wheel: each TC project starting afresh 	Transformation/change management processes <ul style="list-style-type: none"> ▪ Organisations and institutions viewed in broader national context ▪ Nurturing of existing capacity ▪ Change management process from within ▪ Attention to incentive systems and sustainability
<i>Institutional environment and partnerships</i>	Narrow view <ul style="list-style-type: none"> ▪ Each organisation considered separately and in isolation ▪ No overview of capacity development needs 	Broad view <ul style="list-style-type: none"> ▪ Consideration of all relevant organisations and institutions, at national/local levels ▪ Concern with institutional environment within which organizations and individuals work ▪ Importance of inter-organisational partnerships
<i>Policy environment</i>	View as neutral <ul style="list-style-type: none"> ▪ Policy environment not considered in most TC, except when projects specifically aim at policy reform ▪ Incentive systems not factored in 	Viewed as integral to, and compatible with, change process <ul style="list-style-type: none"> ▪ Development of alternative policy scenarios ▪ Piloting and feedback to demonstrate impact
<i>Country commitment and autonomy</i>	Weak and subjective <ul style="list-style-type: none"> ▪ Donor domination of the TC agenda ▪ Expressions of interest by immediate TC recipients ▪ Use of externally-funded project implementation units (PIUs) 	Objective, nationally owned and developmentally strategic <ul style="list-style-type: none"> ▪ Commitment by leadership at all levels ▪ Driven by national development frameworks
<i>Results and accountability</i>	Organisationally specific <ul style="list-style-type: none"> ▪ Donor-recipient “closed loop” dialogue ▪ Output-related 	Impact on beneficiaries <ul style="list-style-type: none"> ▪ Beneficiary impact evaluation ▪ Development outcome-oriented (e.g. MDGs)

4.1 Phytosanitary Capacity Development

Phytosanitary capacity development activities are undertaken by a range of organizations. Information on some is available at the Trade Capacity Building Database (<http://tcbdb.wto.org>). According to the External Evaluation of the IPPC, Technical Assistance supported by the Secretariat has been of two types of activity:

- a. Technical assistance related to IPPC core activities. This includes financial support for attendance at IPPC meetings, workshops on draft standards, training on the IPP.
- b. Technical assistance for strengthening national phytosanitary capacity. This has been through project concerned with modernization of plant quarantine facilities and laboratories, drafting and promulgation of phytosanitary legislation, training of manpower. Much of this assistance has been through FAO's Technical Cooperation Programme (TCP), focusing on technical issues such as pest risk analysis.

Many of these activities relate to the capacities assessed by the PCE which has been influential in guiding the IPPC's and FAO's activities in this area. They tend to correspond more with the 'traditional' column in Table 2.

STDF has recently undertaken a study on good practice in SPS-related technical cooperation. Box 7 lists the study's conclusions on key elements of good practice, which show good correspondence with the approaches to capacity development described in Boxes 4 and 5 and the "new" column in Table 2.

Box 7. Good practice elements in SPS-related technical cooperation (WTO, 2008)

Project design

- Paying attention to the country context and absorptive capacity
- Promoting ownership
- Systematically assessing and prioritizing needs
- Ensuring transparency, connectivity and sequencing of activities
- Adopting a value chain approach to maximize the market access impact
- Promoting the active involvement of all concerned stakeholders including the private sector
- Considering the challenges and potential benefits of a regional vs. national approach

Project implementation

- Use strengthened country expertise and systems
- Ensure flexibility in implementation
- Pay attention to results-based management including monitoring and evaluation
- Promote active learning and link skills development to practice. (Strengthening managerial capacity in the agencies responsible for SPS-related technical assistance was emphasized).

Project outputs and the achievement of higher-order objectives

- Maximize impacts and sustainability through greater participation of beneficiaries
- Consider market distortions and promote sustainability in project activities and impact
- Follow a multi-tiered structure of objectives.



IPPC/CPM's phytosanitary capacity development strategy should follow the principles and good practice of the Paris declaration, UNDP, OECD, STDF.

5. The IPPC/CPM Capacity Development Strategy

5.1 Overall Strategy

The IPPC text includes Article XX on Technical Assistance: “The contracting parties agree to promote the provision of technical assistance to contracting parties, especially those that are developing contracting parties, either bilaterally or through the appropriate international organizations, with the objective of facilitating the implementation of this Convention.”

Technical Assistance, as noted previously, and as implied in the IPPC text, is external. It is not necessarily a contribution to capacity development, although sometimes the term is used synonymously.

The Independent Evaluation of the IPPC (FAO, 2007) recommended that FAO, not the IPPC Secretariat should coordinate global support for strengthening national phytosanitary capacity. SPTA disagreed with this recommendation, a position which was endorsed by CPM3, along with the proposal to develop and facilitate implementation of a capacity building strategy. Thus the CPM has clearly decided to involve itself in much more than technical assistance; it wishes to play a strong role in phytosanitary capacity development globally.



The IPPC/CPM strategy for phytosanitary capacity development should be a broad based, global strategy. Only some of the activities it envisions will be the responsibility of the IPPC Secretariat to implement, and it is those that should appear in the Business Plan.

5.2 What is the role of IPPC?

While CPM wishes to take a lead in the development of phytosanitary capacity, the IPPC Secretariat can only be responsible for a subset of the activities it will envisage. An overarching role of the Secretariat could be to develop, promote and update the global strategy for phytosanitary capacity development. Implementation of the various activities within the strategy would be the task of a range of different actors.



In implementing the phytosanitary capacity development strategy, the principle of subsidiarity should be applied.

Some activities would be undertaken/initiated at the global level; others would be best undertaken regionally, such as through RPPOs, FAO regional offices, Regional Economic Communities etc; and others would be appropriate at the national level, often led and coordinated by NPPOs.

Within the global strategy, activities best undertaken by the IPPC could include:

Coordination: Ensuring that at the international level different stakeholders in phytosanitary capacity development are working together.

Leadership: Providing global direction and vision to phytosanitary capacity development.

Advocacy: Demonstrating and promoting the value of phytosanitary capacity and its development, particularly for developing countries. This would be at a general level, as well as for specific countries with specific needs – matching needs with funders.

Information sharing: Ensuring countries have access not only to official information, but to other information that can contribute to their capacity development, and assist with the implementation of the Convention and ISPMs.

Tools development: Supporting the development of tools and techniques for use in all phases of phytosanitary capacity development.

Monitoring and evaluation: Monitoring capacity development needs globally; monitoring and evaluating capacity development efforts; promoting good practice in phytosanitary capacity development initiatives.

Another way to answer the question is to examine the five steps of the capacity development process as defined by UNDP (2008) and assess what role IPPC/CPM could play at each step. A few examples are given below, corresponding to the 6 general areas identified above. Some of these would be activities already undertaken by the secretariat; some would be new.

Step 1: Engage stakeholders on Capacity Development

- Convene and coordinate an international consultative group on phytosanitary capacity development (along the lines of that proposed by the External Evaluation).
- Liaise with other global bodies involved with capacity development related to phytosanitary systems

Step 2: Assess capacity assets and needs

- Develop and promote the use of capacity assessment and evaluation tools
- Implement a mechanism for capturing and analyzing national capacity development needs globally
- Studies on implementation of ISPMs (such as the one on ISPM3, Kairo *et al.*, 2003)

Step 3: Formulate capacity development response

- Promote capacity development needs with funders
- Assist with the design of phytosanitary capacity development programmes and projects
- Maintain and update the global phytosanitary capacity development strategy

Step 4: Implement Capacity development response

- Develop the IPP to contain a wide range of information, not just official information (eg tools, e-learning modules, ISPM implementation guides etc etc)
- Support (? Mentoring/coaching as well as financial) developing country participation in IPPC and its bodies

Step 5: Evaluate capacity development response

- Contribute to regional and/or global assessments
- Develop and promote criteria/indicators for evaluating the performance of national phytosanitary systems

6. References

- Boa, E. (2007).** Plant healthcare for poor farmers: An introduction to the work of the Global Plant Clinic. APSnet. <http://www.apsnet.org/online/feature/clinic>
- Browne, S. (ed) (2002).** Developing capacity through technical cooperation. Country experiences. UNDP/Earthscan Publications.
- Day, R.K., Quinlan, M. and Ogotu, W. (2006).** Analysis of the application of the phytosanitary capacity evaluation tool. Report submitted to the Secretariat of the International Plant Protection Convention.
- Engel, P., Keijzer, N. and Land, T. (2007).** A balanced approach to monitoring and evaluating capacity and performance. Discussion paper No 58E, European Centre for Development Policy Management.
- FAO (2007).** Independent evaluation of the workings of the International Plant Protection Convention and its institutional arrangements. Report presented to the 98th session of the FAO Programme Committee, 17-21 September, 2008, Rome.
- Kairo, M.T.K, Cock, M.J.W. and Quinlan, M.M. (2003).** An assessment of the use of the code of conduct for the import and release of exotic biological control agents (ISPM No.3) since its endorsement as an international standard. *Biocontrol News and Information* **24**, 15N-27N.
- Kairo, M., Oduor G., Lopez, V., Ali, Bibi, Day, R. and Quinlan, M.M. (2005).** Knowledge Network Participation By Small States Using The Third International Standard For Phytosanitary Measures (Ispm3) As A Case Study IDRC Grant No. 101678-005. *Final Technical Report: Scientific* June 2005.
- Lavergne, R. and Saxby, J. (2001).** Capacity Development: Vision and Implications. Capacity Development Occasional Series No 3.
- Mackay, R., Horton, D., Dupleich, L. and Andersen, A. (2002).** Evaluating organizational capacity. *Canadian Journal of Program Evaluation* **17**, 121-150.
- Morgan, P (2005).** The idea and practice of systems thinking and their relevance for capacity development. Discussion paper, European Centre for Development Policy Management.
- Morgan, P (2006).** The Concept of Capacity. Draft Discussion paper, European Centre for Development Policy Management.
- OECD (2006).** The Challenge of Capacity Development. Working towards good practice. DAC Guidelines and Reference Series.
- Quinlan, M.M., Phiri, N., Zhang, F. and Wang, X. (2006).** Foresight, Infectious Diseases: Preparing for the future. The Influence of Culture and Governance on Detection, Identification and Monitoring of Plant Disease, A comparative assessment of the United Kingdom, China and Sub-Saharan Africa. Office of Science and Innovation, London.
Accessible at:
http://www.foresight.gov.uk/Detection_and_Identification_of_Infectious_Diseases/Reports_and_Publications/Final_Reports/D/d4_1.pdf [Substituting "plant health" for the original wording of "DIM system for plant health"]
- Taschereau, S and Bolger, J. (2007).** Networks and capacity. Discussion paper No 58C, European Centre for Development Policy Management.
- UNDP (2005).** A brief review of 20 tools to assess capacity. UNDP Capacity Development Group, Bureau for Development Policy.
- UNDP (2007a).** Capacity Assessment: Practice Note.

UNDP (2007b). Capacity Development: Practice Note.

UNDP (2008). Supporting capacity development: The UNDP approach. UNDP Capacity Development Group, Bureau for Development Policy.

Van der Meer (2008). Overview of SPS Capacity Building Needs Assessments and Compliance Studies for Cambodia, Lao PDR and Vietnam 2000-2006. Research work for the Standards and Trade Development Facility.

WTO (2008). Good practice in SPS related technical assistance: an overview and synthesis of the findings of STDF/OECD research. G/SPS/GEN/875.