



**Project STDF 108  
Final Report  
July 2010**

**Agricultural Health and Food Safety (IICA)**

**July 2010**

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## Executive Summary

The IICA-STDF-108 project was part of a long-standing effort by the Inter-American Institute for Cooperation on Agriculture (IICA) to support the development of institutional capabilities in its member countries (34 members and 28 direct beneficiaries). The project took place in two stages:

- a. Application of the tool *Performance, Vision and Strategy for National Sanitary and Phytosanitary Systems* (PVS-SPS), preparation of 26 national agendas for sanitary and phytosanitary measures (SPS), and preparation and implementation of four regional sub-projects based on the national agendas.
- b. The implementation of specific actions for implementing the regional sub-projects.

Each of the above stages was time-consuming because of the complexities involved in harmonizing SPS priorities and schedules in 28 countries. The national agendas for sanitary and phytosanitary measures were developed in 26 of the 28 direct beneficiary countries, and the Institute's PVS-SPS tool was applied in 24 countries.

The National SPS Agendas (attached as Annex 1.1) outline a number of actions that the countries themselves requested; these agendas provide guidelines for them to set their institutional priorities and for international organizations and donor countries to plan their cooperation actions.

The 26 national agendas derived from Stage I of the project provided inputs to develop an agenda for each of the regions: Caribbean, Central, Andean and Southern. These Regional SPS Agendas, like the national ones, served as guides to orient technical cooperation (Annex 1.2); they also provided the basis to prepare the profiles of four regional projects or sub-projects that were implemented in Stage II of the project (Annex 1.3).

The needs that appeared most frequently in the national SPS agendas were:

- a) **Development of institutional capabilities in SPS:** the STDF 108 project focused on generating the national agenda, putting together a manual on institutional management for national Codex Alimentarius committees, designing courses and handbooks on good practices for participating in international SPS forums, a technical forum on private standards, documentation of cases illustrating successful application of SPS, the preparation of national information systems for managing Codex Alimentarius and SPS documents, and the preparation of and training on audits of national SPS notification procedures.
- b) **Risk analysis:** the project emphasized the preparation of and training on this subject. The phytosanitary hazard profile is a new methodology for use by plant health inspectors at border posts and points of entry in the absence of a thorough risk assessment. In addition,

the project also included training on risk communication and on risk assessment of of microbiological and chemical hazards in food.

c) **Awareness-raising on the importance of SPS:** the project addressed this specific demand from the Caribbean by holding four workshops for high-level decision makers in key entities of the ministries of agriculture and health of seven countries in the region.

It is important to note that the project identified actions to be implemented in certain regions of the Americas. However, political and institutional conditions made it impossible to carry them out in some countries, which points to the need for rethinking the methodology and/or the strategy for the future.

### **General Information on the Project**

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**Project Name:** Sustainable institutional capacity building in the countries of the Americas to consolidate active participation in the SPS Committee and move forward with implementation of the WTO/SPS Agreement.

**Executing Agency:** INTER-AMERICAN INSTITUTE FOR COOPERATION ON AGRICULTURE, IICA

**Project Supervisor:** Dr. Ricardo Molins

### **Project Description:<sup>1</sup>**

#### **Objectives of the Project:**

- a) To foster a common and shared vision within the countries (public and private sectors) and among the countries of the Americas, in order to monitor and consolidate their institutional capacity building in the area of sanitary and phytosanitary measures.
- b) To continue providing support for the development of real and potential capacities in the countries of the Americas, in order to enable them to participate more actively and effectively in the Committee on Sanitary and Phytosanitary measures (SPS Committee) of the World Trade Organization (WTO).
- c) To consolidate technical cooperation between countries in the Americas, as a means for promoting exchanges in the area of technical assistance and support for special and differentiated treatment.

#### **Stages in the Project:**

- a) Gathering country information: this activity was the basis for identifying strengths and weaknesses, as well as opportunities for technical cooperation with other countries.
- b) Assessing progress in capacity building: highlighting the five fundamental variables described in the project and identified in IICA's Initiative for the Americas.
- c) Developing a shared vision: Interactive meeting of public and private sectors to reach consensus on actions needed to improve the situation.
- d) Commitments and agreements on options for addressing and overcoming priority problems in the national and regional spheres.
- e) Documenting the experience and developing 26 country SPS Agendas.

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<sup>1</sup> This is not expected to change from one reporting period to the next, unless a change to the project objectives/scope is approved by the STDF Secretary

- f) Developing four regional SPS agendas using commonalities in the national agendas as a basis.
- g) Preparing four regional project profiles (sub-projects) based on demands and needs identified by the national SPS agendas from the region.
- h) Implementing the four regional sub-projects.

**Project Start Date:** October 1, 2007

**Project End Date:** July 15, 2010

**Beneficiary Countries:** 28 countries:

**Andean Region:** Bolivia, Colombia, Ecuador, Peru, Venezuela

**Caribbean Region:** Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago

**Central Region:** Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama

**South Region:** Paraguay, Uruguay

**Cooperating Countries:** Argentina, Brazil, Canada, Chile, Mexico and the United States of America.

**General Project Activities:**

- a) Gathering information related to the country in question.
- b) Analyzing the level of capability in SPS, using the PVS-MSF tool.
- c) Adopting a common vision.
- d) Commitments and agreements on alternative actions for tackling and overcoming high-priority problems on the national and regional agenda.
- e) Developing national SPS agendas.
- f) Documenting the experience and defining criteria for evaluation.
- g) Developing regional SPS agendas as the basis for preparing four profiles for regional projects (sub-projects)
- h) Implementing four regional sub-projects

## I. PHASE 1: DEVELOPMENT OF NATIONAL AND REGIONAL SPS AGENDAS

The first phase of the project consisted of preparing national and regional SPS agendas. This included gathering information, analyzing the relative progress of SPS capabilities and establishing a common vision among the various stakeholders. The 26 National SPS Agendas can be found in Annex 1.1.

Regional agendas were developed via consultation, on the basis of national agendas. They provided direction for the technical cooperation to be offered by IICA with a regional or hemispheric approach, and were made available for consideration by other technical cooperation organizations. The Regional Projects derived from the National SPS Agendas in each region can be found in Annex 1.2.

The process began with an invitation to all stakeholders involved in SPS to complete the PVS-SPS tool in each participating country. The resulting information was used as the starting point for discussing and preparing the national SPS agenda. A complete explanation of the characteristics and scope of the IICA PVS-SPS tool can be found in Annex 1.3.

The various countries of Latin America and the Caribbean reported very different levels of institutional development, and the decision was made to implement a strategy for horizontal cooperation between those countries that supported the implementation process: the “Steering Group”—Argentina, Brazil, Canada, Chile, Mexico and the United States of America—and those that were project beneficiaries. Technical issues for implementing the SPS Agreement were discussed for the Spanish-speaking countries with the support of a “country expert” (lent by one of the cooperating countries), who provided expertise during the common vision process that led to development of each national SPS agenda. Table 1 shows the topics addressed by the “country experts” during the national agenda preparation activities:

**Table 1: Topics Addressed by the Country Experts in the Common Vision Sessions**

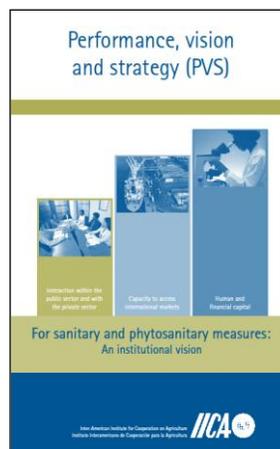
Country	Topic	Expert
Dominican Republic	Strengthening the national SPS committee, transparency and dispute settlement	Maximiliano Moreno, Argentina
Costa Rica	Strengthening phytosanitary work	Orlando Morales, Chile
El Salvador	Quality systems	Mexico
Guatemala	Institutional strengthening and Codex committees	Gabriela Catalani, Argentina
Honduras	A high-level ceremony to sign the national SPS agenda	
Panama	Institutional development, transparency	Maximiliano Moreno, Argentina
Ecuador	Codex Alimentarius and institutional	Gabriela Catalani, Argentina

	strengthening	
Colombia	Dispute settlement, better understanding of the SPS Agreement, institutional strengthening	Maximiliano Moreno, Argentina
Bolivia	Institutional strengthening	Claudia Carbonel, Chile
Peru	Quarantine processes, better understanding of the Agreement	Marcelo Mota, Brazil and Maximiliano Moreno, Argentina
Paraguay	Private standards	Fabian Saenz, Argentina
Uruguay	Legislation	Roxana Blaseti, Argentina

*The methodology applied in the process:*

- a. Gathering information: The goal was to organize the collection of information while respecting a uniform methodology. Before the project began, IICA developed the tool *Performance, Vision and Strategy for National Sanitary and Phytosanitary Systems (PVS-SPS)*, drawing on theme-based PVSs it had developed in the past and adding elements particular to international SPS programs. Countries that apply this tool are able to use it later for continuous improvement, drawing comparisons over time and thus evaluating the development of their SPS system and the impact of investments made.

The tool was applied in two different ways: to groups, as in Costa Rica, or to individuals, as in Uruguay. The advantage of the group approach was that information could be gathered more quickly and uniformly, but the drawback was that this approach did not fully reflect individual concerns, as the different sectors felt inhibited from airing their opinions publically. Application with individuals may have made the data collection process slower and more costly, but it was considered more effective.



- b. Processing the information: Upon completion of each PVS (or group survey), information was entered into a spreadsheet for processing and comparison of data and development of bar graphs.
- c. Common vision and preparation of national agenda: This stage is the heart of the PVS process, bringing together all the stakeholders to discuss final results. Because these

results are not static, they can be modified during the group discussion, which validates or redefines the final outcome and specifically identifies the true level of performance under each variable covered by the tool (level of performance of the country's SPS system in different areas of interest).

- d. Definition of the national agenda: Because the PVS-SPS tool defines different levels of development within the SPS management system, it provides a means to visualize goals, objectives and actions for improving performance. The sum total of these actions ultimately constitutes the NATIONAL AGENDA for improving the performance of the national SPS system. Investment and cooperation organizations can use these national agendas (Annex 1.1) to direct and priority-rank their technical cooperation resources. Such is the case in Honduras, where the national agenda served as the foundation for the STDF-284 project. In another example, IICA has changed the focus of its priorities, as issues associated with transparency have now become an integral part of its work program as a result of Member Country demands. Transparency is also taking its place among the regular activities of national government organizations.
- e. Definition of regional agendas: Regional agendas were developed according to the following criteria: i) common needs expressed in the national agendas, ii) IICA's technical opinion based on its technical cooperation experience, and iii) work performed or emphasized by other regional organizations. Some of the actions identified in the regional agendas (see Annex 1.2) formed the basis for the second stage of the project.

#### Sustainable processes for modernizing national SPS management systems:

This may be the most crucial and sensitive topic in the entire technical cooperation process. The critical elements of sustainability for this type of process are:

- a. Empowerment: The SPS system improvement process will be undertaken and pursued successfully if the stakeholders and institutions are empowered from the time the project is first designed and the strategy is defined. It is clear that technical cooperation processes have evolved over time and authorities in many countries expect to participate actively in the formulation and implementation process. If the process is empowering from the very beginning, stakeholders will participate as needed, and institutions will commit to assume responsibilities.
- b. Ownership of results: Once stakeholders are empowered, the next step is for them to take ownership of the results. This is measured by the degree to which some of them become involved in daily activities of the institutions, assign responsibilities, allocate resources or include project actions in their annual work plans. In this project, as expected, empowerment was more evident in those countries whose institutional structures were already in place.

- c. Engagement of decision makers: This factor was incorporated whenever possible, since political and institutional support is critical for implementation of the work. It was a critical element for the countries of the Caribbean, where it was included in the awareness-raising, international standard-setting workshops, with a view to helping decision makers to understand the advantages of investing in agricultural health and food safety.
- d. Existence of sustainable institutional backing: This is an asset for donors and aid agencies, but its absence is a liability. If ownership, empowerment and institutional backing are all present, sustainability is nearly certain. In many countries where the PVS was applied, institutional backing was indeed present. Uruguay, Paraguay, Colombia, Peru, Ecuador, Panama, Costa Rica, Honduras and Dominican Republic all had an institutional environment favorable to this type of project.
- e. Follow-up: This is vital for keeping the topic on the table. Two possible approaches are, through a person (a specialist) specifically designated for this purpose, or through a cooperation agency or office that has a permanent presence in the country, such as IICA. Staff turnover could threaten this process and is a reality in many countries of the region.

**Table 2: Summary of activities implemented during Phase I of the project**

	Country / region	Assessment	National Agenda	Regional Agenda
	<b>Caribbean Region</b>	X	X	X
1	Antigua and Barbuda	X	X	
2	Bahamas	X	X	
3	Barbados	X	X	
4	Dominica	X	X	
5	Grenada	X	X	
6	Haiti	X	X	
7	Jamaica	X	X	
8	Dominican Republic	X	X	
9	St. Kitts and Nevis	X	X	
10	St. Vincent and the Grenadines	X	X	
11	St. Lucia	X	X	
12	Trinidad and Tobago	X	X	
13	Guyana	X	X	
14	Suriname	X	X	
	<b>Central Region</b>			X
15	Belize	NO	X	

16	Costa Rica	X	X	
17	El Salvador	X	X	
18	Guatemala	X	X	
19	Honduras	NO	X	
20	Nicaragua	NO	NO	
21	Panama	X	X	
	<b>Andean Region</b>			X
22	Ecuador	X	X	
23	Colombia	X	X	
24	Bolivia	X	X	
25	Peru	X	X	
26	Venezuela	NO	NO	
	<b>Southern Region</b>			X
27	Paraguay	X	X	
28	Uruguay	X	X	
	<b>TOTAL</b>	<b>24</b>	<b>26</b>	<b>4</b>

The national and regional agendas are public in nature. However, the country reports on application of the PVS instrument are confidential, unless the countries state otherwise.

The PVS process was not conducted in Nicaragua and Venezuela because those countries chose not to participate in the project. Consequently, the project has no national agenda or PVS outcome for those countries. There was no need to apply the PVS-SPS in Belize and Honduras, because both of them had already undergone the process.

The 26 National SPS Agendas produced through the first phase of the project can be found in Annex 1.1. The Regional Project profiles (sub-projects) are outlined in Annex 1.2.

## **II. PHASE II - IMPLEMENTATION OF THE REGIONAL SUB-PROJECTS**

The second phase of the STDF-108 project was to implement actions identified in the Regional SPS Agendas that had emerged from consolidating the 26 National SPS Agendas – themselves the result of applying the PVS instrument in 24 countries, along with the two developed earlier.

### **II.1 Raising Awareness of SPS and International Standard-Setting Processes – Workshops for the Caribbean Region**

The planned awareness creation activity for the Caribbean region, consisting of conducting a 3-day meeting of Permanent Secretaries of Agriculture and Chief Agricultural Officers from the 14 Caribbean Region countries, hosted by the United States or Canada, was changed after consultations with the region. It was concluded that—considering the high official rank of the intended participants—such a meeting would be heavily burdened by protocol and hard to manage if the intended audience would change; for example, if Permanent Secretaries were to appoint other people to represent them. In the latter case, the main objective of the meeting, which was the creation of awareness about SPS issues at the top decision-making level, would not be achieved. As a result, it was decided to replace the above-mentioned activity with five Codex-SPS workshops

Characteristics of the Workshops: Workshops were held in the Caribbean Region as an alternative to the activities with country experts that took place when agendas were prepared in other regions. They offered the added advantage of allowing more time to develop strategic issues.

For the most part, the countries of the Caribbean Region have done little in the area of international SPS measures and do not attach high priority to this field. Many of them have very limited institutional structure, lack resources for international participation, have established no regional coordination on SPS and have practically no personnel who have been assigned the responsibility or time for these issues. Therefore, the decision was made to hold workshops geared toward raising awareness and clearly explaining the value of investing in SPS and participating in the international arena. The workshops were attended by 192 representatives of the public and private sectors from seven Caribbean countries, and high-level authorities with decision-making power played a key role.

#### Objectives:

- a. To promote awareness of the importance of investing in SPS.
- b. To generate knowledge on the impact and importance of relevant international bodies.
- c. To describe successful experiences with SPS and with institutional structures, emphasizing the value of a region-wide strategy for institutional strengthening.

Results achieved: The workshops helped place all the beneficiary countries (7) on an equal footing in terms of their knowledge of the SPS Agreement of the WTO and its implementation. The workshops also helped the countries understand the interactions between international commitments and the day-to-day work of national authorities. Because the activities were well attended by numerous specialists from participating countries, official authorities should be able to retain at least a significant level of knowledge of the SPS Agreement among their technical teams. However, it should be noted that the participating countries' ability to sustain at least a minimum level of knowledge will depend, in large part, on the frequency with which the countries are exposed to training events and are able to exchange experiences with other countries.



### Caribbean Workshops on SPS

One strategy used in these workshops was to invite guest speakers who are leaders in the region and very knowledgeable about implementation of the SPS Agreement, such as Delilah Cabb from Belize and Carol Thomas from Jamaica. The presence of specialists from Canada, the United States of America and Uruguay was also critical for sharing the experiences of other countries, discussing the benefits of investing in SPS and helping high-level decision makers to understand the advantages of investing in SPS.

**Table 3: Increasing Awareness of SPS and International Standard-setting Processes**

Workshops	Date	Country Experts	Number of Participants
<b>Jamaica</b> (site) plus Tonga, Cook Islands, Samoa and Fiji	April 13-14-15, 2010	<b>Cathy Mc Kinnell,</b> USDA-FAS-USA <b>Beatriz Melcho,</b> Ministry of Agriculture - Uruguay	61
<b>Barbados</b>	May 4 and 5 ,	<b>Cathy McKinnell,</b> USDA-FAS-USA	50

	2010	<b>Delilah Cabb</b> – BAHA-Belize <b>Rolf Schoenert</b> , CFIA- Canada	
<b>Bahamas</b> (site) + <b>Belize</b>	June 22 and 23, 2010	<b>Delilah Cabb</b> – BAHA-Belice <b>Rolf Schoenert</b> , CFIA- Canada	46
<b>Trinidad &amp; Tobago</b> (site) + <b>Suriname</b> + <b>Guyana</b>	July 7 and 8	<b>Delilah Cabb</b> – BAHA-Belize <b>Rolf Schoenert</b> , CFIA- Canada <b>Anjanie Ramlogan</b> Trinidad and Tobago SPS Enquiry Point and Notification Authority	45
<b>Antigua and Barbuda</b> <b>Dominica</b> <b>Grenada</b> <b>Haiti</b> <b>St. Kitts and Nevis</b> <b>St. Vincent and the Grenadines</b> <b>St. Lucia</b>	The workshop planned for these countries was suspended due to lack of interest		

**NOTE:** The workshop held in Jamaica was also attended by representatives from four South Pacific island nations (Cook Islands, Fiji, Samoa and Tonga), at the request of and with funding from the United States Food and Drug Administration (FDA). This was a testimony to the value that other institutions place on IICA's work.

The agendas for the four workshops are presented in Annex 2.

## II.2 Information Systems on SPS and Codex Alimentarius

One of the most significant weaknesses detected in the sessions for building a common vision in the countries was in the field of communication among the various authorities. Communication, which tends to occur only in situations of national or international emergency, is reactive rather than active and preventive in most Latin American and Caribbean countries.

IICA developed communication systems in Ecuador for the SPS Committee and the National Codex Alimentarius Committee, which were readily adaptable to the needs of other countries.

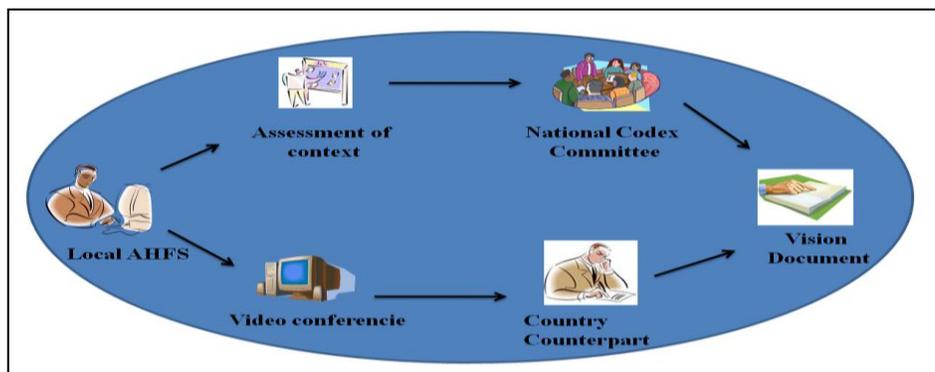
During the first consultation process, Colombia, El Salvador, Guatemala, Peru and Venezuela expressed interest in adapting the above system to their institutional structure immediately, and they have now implemented it for Codex Alimentarius information management. Costa Rica, Dominican Republic and Uruguay, in turn, have shown interest in doing so during a second stage, not to be covered with funds from the current project STDF 108. Only Costa Rica requested the SPS system and Bolivia was the only country that asked for the system to be housed and operated at the local IICA Office. In a later stage (2011), the system will be translated and made available to English-speaking countries as well.

Although many countries revealed weaknesses in SPS information management, the project showed that adaptation of these information management systems does call for certain minimum prerequisites:

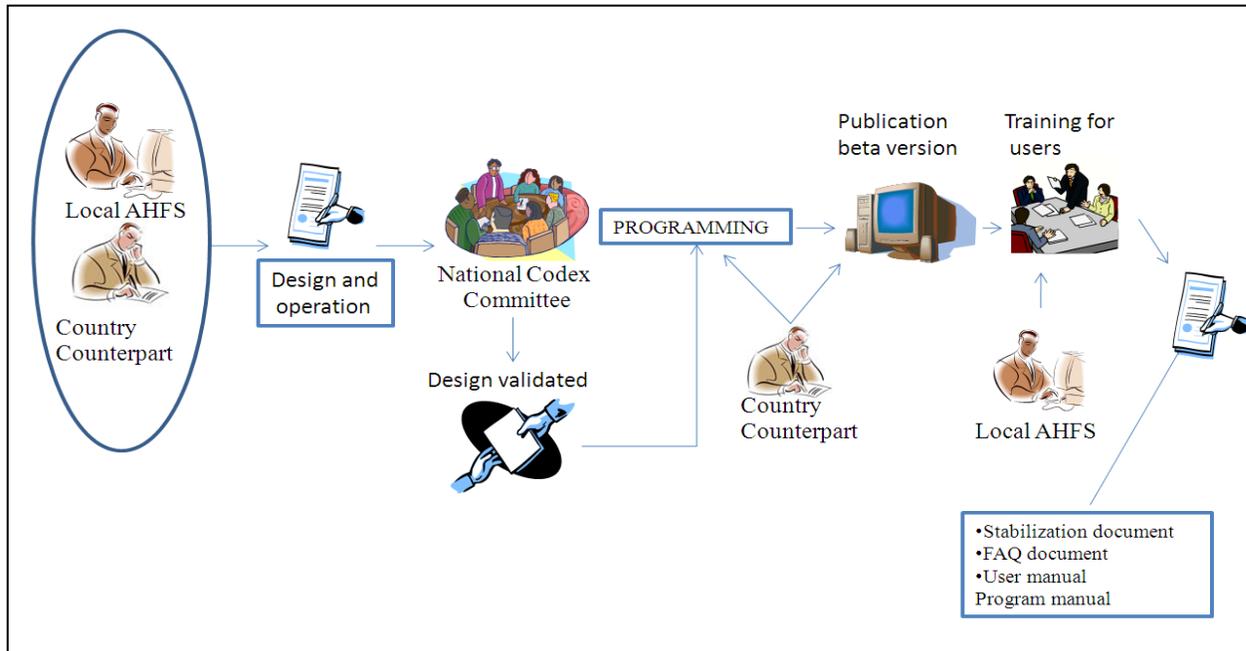
- a. Institutional interest.
- b. An institution responsible for housing the system.
- c. A person responsible for operating the system, with at least a minimum amount of time available for this purpose.

Stages of the information system adaptation process:

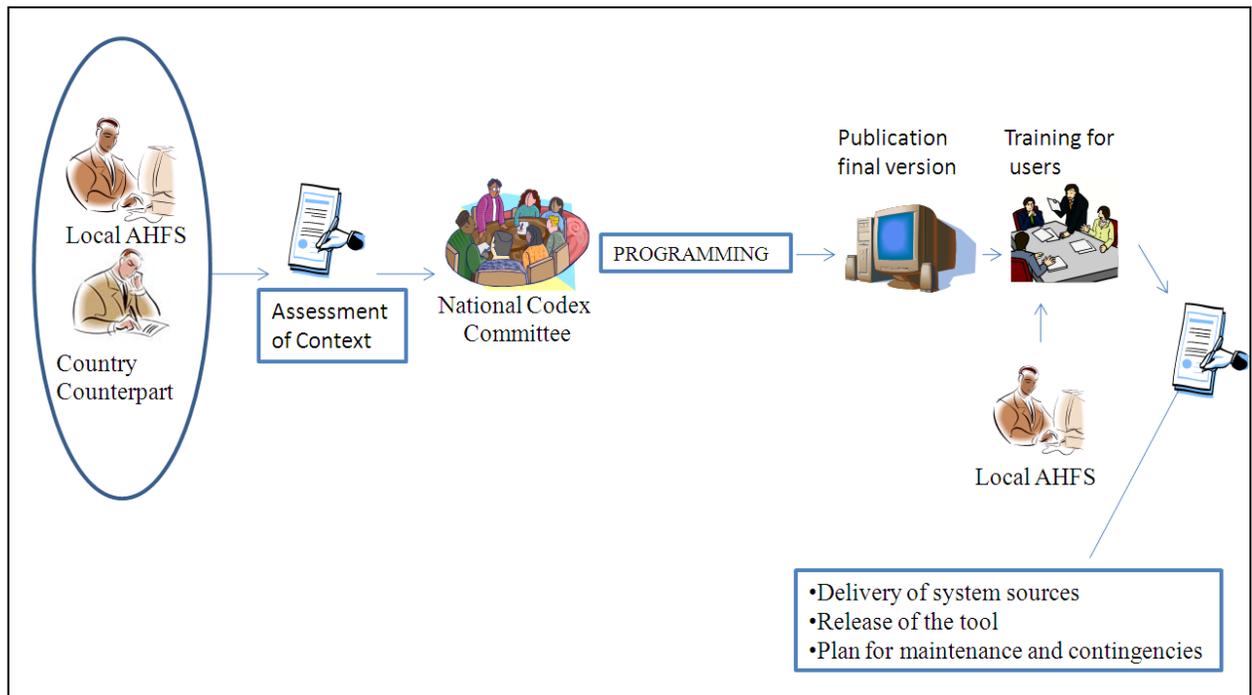
- a. **Conceptualization:** The first step was to contact official authorities and introduce them to the idea of adapting an information management system for their Codex or SPS Committees. Once they agreed, an IICA Agricultural Health and Food Safety (AHFS) staff member in the national office received orientation on the use of the system and then proceeded—together with the National Codex Committee—to perform a background assessment of local system needs (using a questionnaire especially designed for this purpose). This phase identified what was wanted out of the system.



- b. Design and planning: Using the identified needs from step (a), the technical staff from IICA Ecuador—where the system was designed—drafted a work proposal for each country based on local conditions. The locally-based IICA AHFS staff member then presented this proposal to the National Codex Committee.



- c. Implementation: The planning stage led to decisions on what was needed. The IICA Ecuador information technology team then used these decisions to develop a discussion document setting forth a proposed design and operating structure for the system, and worked with the national counterparts to validate the design before entering the programming stage. In the latter stage, the IICA Ecuador technical team produced a beta version or draft agreement of the approved design and published it locally so that testing could begin. The person responsible for Agricultural Health and Food Safety in the local IICA office in each participating country was assigned to train system users. This stage finalized with the production of several documents to ensure the system is used correctly. This mechanism was followed in Colombia, Peru and Venezuela. Another route was used in Guatemala, El Salvador and Bolivia, where the technical people who would be using the system received direct training.



This information management system will be provided to more countries in the coming months.

### II.3 Handbooks and Workshops on Good Practices for Participation in International SPS Fora

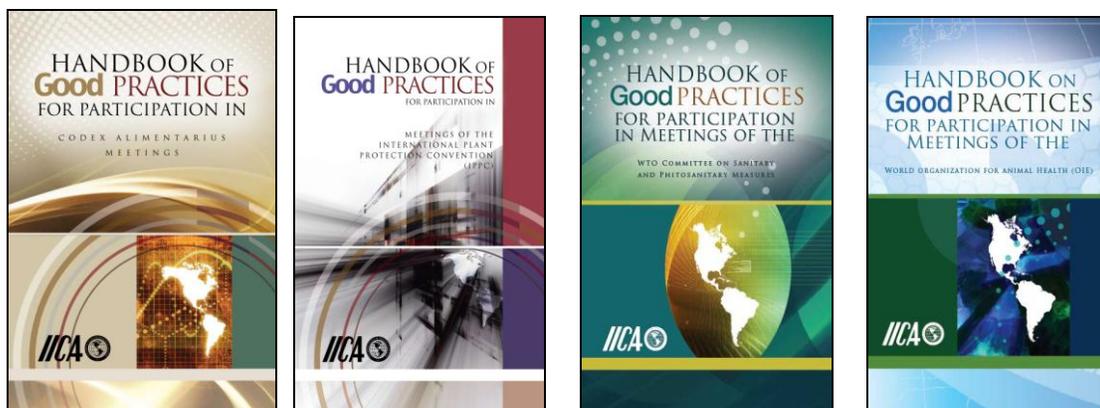
Another priority identified by the countries in their SPS agendas was training in Good Practices for Participation in the International SPS Arena. The countries wanted to have a tool that would allow an inexperienced staff member to learn in advance techniques and strategies that would help him/her perform effectively as his/her country's national delegate on international SPS bodies (Codex Alimentarius, International Plant Protection Convention-IPPC, SPS Committee of the World Trade Organization, and the World Organization for Animal Health-OIE).

The problem arises from a number of situations, including:

- a. A lack of staff members specifically responsible for following international developments.
- b. High staff turnover, in spite of the need for stability over time to develop institutional memory and experience with participation.
- c. Designation of inexperienced staff members with no connection to the topic or organization in question.
- d. The lack of resources to keep delegations stable over time.
- e. Political rather than technical appointment of delegation members.

The project addressed this problem by developing four Handbooks of Good Practices for Participation, whose primary purpose was to build skills in preparing for, participating in the meetings of international SPS fora, and following up after a meeting. The manuals were prepared by experts familiar with each of the organizations and published in Spanish and English, and include a training CD useful for self-study.





**NOTE:** the manual corresponding to the OIE is available in electronic form only. It has not been published or distributed because the OIE expressed objections about such a manual being prepared without its intervention.

The countries of the Central and Andean Regions expressed interest in receiving such training. The countries of the Caribbean received it in the capacity-building and awareness-raising workshops mentioned in section II.1 above.

Additional videoconference courses were conducted for the Andean and Central Regions during July 2010. A total of 120 specialists in all three fields (food safety, animal health and plant protection) were trained. The courses were designed for inexperienced or future delegates.

#### **II.4 Management Handbook for National Codex Committees**

The Management Handbook for National Codex Committees is an additional source of support for institutional building in SPS. The objective of this handbook is to equip national Codex Alimentarius committees and technical subcommittees with tools, strategies and advice for effective institutional management.

The handbook addresses issues such as:

- a. Description and importance of the Codex Alimentarius
- b. Structure of Codex at the national and international levels
- c. Requirements for effective operation of the National Codex Committee
- d. Developing national positions
- e. Participation strategies
- f. Management errors
- g. Recommendations for countries with limited resources
- h. Cases studies: Costa Rica, Chile, and Argentina.

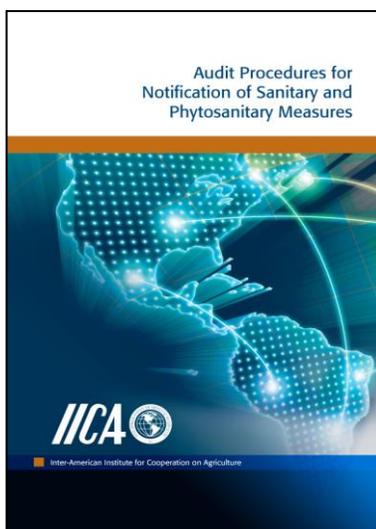
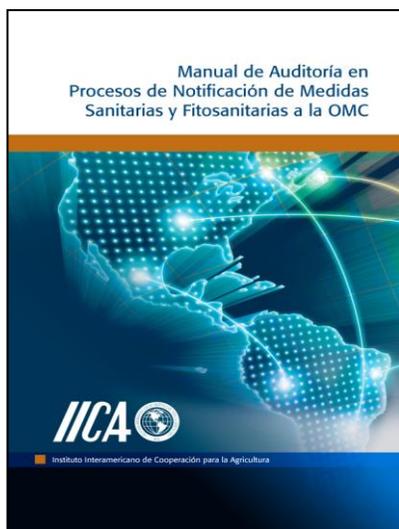
The handbook and case studies were developed by experts in the field, all of them having extensive management experience in their own countries: Antonieta Urrutia (Chile); Gabriela Catalani (Argentina), and Cristina Araya (Costa Rica).

The implementation strategy will be covered with extra-project resources and will stand as one of IICA's priorities for supporting the member countries of the Codex Alimentarius Coordinating Committee for Latin America and the Caribbean (CCLAC). The countries of the Caribbean and Central Regions (and the Andean Region, to a lesser extent) are now ready to undergo training in this field.

The handbook, in Spanish and English, will be introduced alongside a United States Department of Agriculture (USDA)-IICA "Program on Promotion of the Participation of the Americas in Codex Committee Meetings."

## II.5 Handbook on Notification Audits

Some of the topics most frequently requested by the countries when they drafted their national SPS agendas and listed their needs for training or capacity building included notification processes and the issue of transparency in general.



Discussions held during the process of formulating national SPS agendas centered on resource endowment, available tools and processes in need of improvement. A recurring theme cited by numerous countries (mostly in the Caribbean Region, and, to a lesser extent, the Central and Andean Regions), was the almost total lack of duly trained staff able to devote their time to SPS issues and equipped with the resources necessary to use

whatever tools they did have to good advantage, comply fully with notification obligations and benefit from the transparency of trading partners.

To help the countries assess their systems and potential for complying with and benefiting from provisions on transparency, a methodology was developed for them to audit their notification processes. The two-part document is available in Spanish and English. The first section provides a theoretical introduction, and the second contains the audit process itself.

IICA will disseminate this methodology using its own resources. The intention is to map out the countries of the Americas so as to identify specifically the needs of each one. Plans call for the audit tool to be applied in at least 10 countries of the Americas prior to the WTO workshop on transparency, to be held by the SPS Secretariat in October 2010. At the time the present report was presented, Colombia, Costa Rica, Panama and Paraguay were already working on applying the audit methodology to their notification systems.

## II.6 Risk Analysis

Risk analysis is another issue of concern that arose repeatedly in the national SPS agendas following analysis of the PVS-SPS application.

The different variables and national situations were analyzed in detail to identify approaches and priorities in this field, and three main areas were defined:

- a. phytosanitary hazard profiles
- b. risk assessment in food safety
- c. risk communication

One of the most important observations to come out of the PVS-SPS application exercise was that the countries urgently needed a methodology to provide inspectors at borders and other points of entry with the a tool for quick decision making when a previous, thorough risk assessment is not available for specific merchandise.

The solution was to develop a methodology for “*Development of Phytosanitary Hazard Profiles.*” Leaning heavily toward trade facilitation, this methodology provides officers at border posts, airports, etc., with a technical approach to drawing their own conclusions in cases when, lacking access to assistance from central offices in the capital city, they must decide whether or not to allow the entry of agricultural products or goods of plant origin.

Risk assessment of hazards related to food safety was the second component in this project on risk analysis. Discussions of a common vision during the PVS-SPS exercise revealed that the countries had very limited capacity in this field, which can be explained in part by the fact that specialists in charge of assessing the risk of food safety hazards receive little specific training. Working with the University of Nebraska at Lincoln, in the United States, two one-week long high-level courses on risk assessment of chemical and microbiological contaminants in foods was developed and delivered to 185 trainees in 18 countries.

The third component of Risk Analysis covered by this activity within the STDF 108 project was risk communication. Although it is a cross-cutting topic, the project was able to cover it only in the area of animal health.

Emergencies associated with agricultural health and food safety are recurring situations, some of which have major repercussions on international trade. It is nevertheless clear that, in many countries of the Americas, risk communication—as presently handled—falls far short of meeting current needs.

**Table 3: Risk Assessment Courses**

<b>Course</b>	<b>Dates</b>	<b>Number of participants</b>
<b>Assessment of Microbiological Risks in Food</b> Peru, Colombia, Argentina, Brazil, Uruguay, and Paraguay	<i>July 13 to July 17, 2009</i>	30
<b>Assessment of Chemical Risks in Food</b> Peru, Colombia, Argentina, Brazil, Uruguay, and Paraguay	<i>July 20- July 24, 2009</i>	30
<b>Assessment of Microbiological Risks in Food</b> Bolivia, Venezuela, Chile, and Ecuador	<i>July 27 to July 31, 2009</i>	20
<b>Assessment of Chemical Risks in Food</b> Bolivia, Venezuela, Chile, and Ecuador	<i>August 3 to August 7</i>	17
<b>Assessment of Microbiological Risks in Food</b> Mexico, Dominican Republic, Guatemala, Honduras, El Salvador, Nicaragua, Costa Rica, and Panama	<i>July 12 to July 16, 2010</i>	45
<b>Assessment of Chemical Risks in Food</b> Mexico, Dominican Republic, Guatemala, Honduras, El Salvador, Nicaragua, Costa Rica, and Panama	<i>July 12 to- July 16, 2010</i>	43

### *II.6.1 Phytosanitary Hazard Profiles*

One of the most pressing challenges facing the directors of plant protection organizations (PPOs) is for their teams of inspectors to grasp the systemic vision of their work. This means understanding that they and what they do are part of a quarantine system where non-execution or under-execution of phytosanitary interception and inspection tasks will result in a general failure of the system. Therefore, improving the communication and involvement of their teams in the organization's processes of assessment and analysis, can contribute significantly to improving the internalization and practical application of established standards and procedures.

In many plant protection organizations, border post inspectors request guidelines or instructions to strengthen their certainty and safety with regard to decisions they make on plants and plant products they intercept during the course of their work. They want to understand the technical bases of their action and not just act in a mechanical fashion.

While this is true for officers who have been engaged in inspection work for many years, it is even more so for new inspectors who may not have received the necessary introductory training, or when the work is performed in shifts by people whose normal tasks are different from those of border post inspectors.

Plant protection organizations also need to establish transparent relationships with the people they supervise. As passengers go through border control points, they can often be heard commenting about how a product was taken away from them without explanation, or asking why certain products are authorized for entry during certain shifts and the same product is taken away or destroyed in another shift.

These observations make it necessary to standardize decisions: all inspectors should adopt the same measure for a given product and give the same explanation. Phytosanitary Hazard Profiles (PHP) are expected to significantly improve the image of consistency projected by PPOs, as well as inspectors' security and self-esteem. Inspectors' work will be consistent and uniform and they will be able to show people that their decisions are not arbitrary and dependent on the inspector who happens to be on duty. For a given plant product, the decision and explanation will be consistently the same. Moreover, creating the profiles also fosters a process of critical thinking that contributes to learning and team-wide discussion of decisions to be made when plant products are intercepted that they are unsure about.



The methodology for creating phytosanitary hazard profiles was published in the form of manuals (English and Spanish), which are presented in Annex 5.

Two workshops were held when the methodology was ready, one in the Andean Region and the other in the Southern Region, and a total of 62 inspectors and head inspectors from nine countries received training. The agendas for these workshops are also presented in Annex 5. The work has already had a significant cascade effect, with an additional event held in Ecuador outside the bounds of STDF-108 project, using the same methodology under the tutelage of the consultant who originally designed the methodology.

### **Workshop in Paraguay on Phytosanitary Hazard Profiles for the countries of the Southern Region:**

The workshop was organized by the Paraguayan National Service for the Protection and Quality of Plants and Seeds (SENAVE), the Plant Protection Committee of the Southern Cone (COSAVE), and the Inter-American Institute for Cooperation on Agriculture (IICA), within the framework of the IICA-COSAVE Cooperation Program, the 2009 Annual Plan of Operation, and the activities of the Regional Sanitary and Phytosanitary Measures Project “Standards and Trade Development Facility” (STDF-108).

It was financed with COSAVE resources and through IICA-COSAVE cooperation, with resources from the STDF-108 project for the Southern Region. The purpose of the workshop was to build capacity for developing phytosanitary hazard profiles—a new concept for rapid risk assessment of specific phytosanitary hazards needed at border posts or points of entry for products of plant origin.

The workshop took place in Asuncion, Paraguay, November 16-21, 2009. The general objective was to provide assistance for the technical strengthening of the COSAVE region. It was also designed to foster regional cooperation between national plant protection organizations (NPPOs) by bringing them together for technical training.

#### Ojectives:

- a. To train inspectors from the region’s NPPOs in the procedures for formulating International Standards for Phytosanitary Measures (ISPMs), and bring them up-to-date on which ISPMs have already been adopted and which are still in preparation.
- b. To build skills for interrelating and applying ISPMs and for conducting appropriate inspection procedures to improve performance in the region.
- c. To update information on capabilities, standards and operating procedures used in the region for phytosanitary surveillance, identifying strengths and needs.
- d. To train inspectors in the methodology for developing phytosanitary hazard profiles.

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Participating countries and institutions:

- a. National Agrifood Health and Quality Service (SENASA), Argentina.
- b. Plant Protection Division of MAPA, Brazil.
- c. Agriculture and Livestock Service (SAG), Chile.
- d. National Service for the Protection and Quality of Plants and Seeds (SENAVE), Paraguay.
- e. General Directorate of Agricultural Services of the MGAP, Uruguay.
- f. Plant Protection Committee of the Southern Cone (COSAVE).
- g. Inter-American Institute for Cooperation on Agriculture (IICA), AHFS Directorate, AHFS Specialist in the Southern Region and Office in Paraguay.
- h. Animal and Plant Health Inspection Service - International Service (USDA/APHIS-IS).

Based on course objectives, and in the interest of maximizing the impact of the activity, a profile for suggested course participants was made available to the NPPOs. Preference was given to persons who worked in subject areas covered by one of the national organizations in the COSAVE region, who had been designated specifically to attend, who could take the time to attend the course, and who were familiar with relevant national legislation as well as the international agreements and standards (assigned as advance reading for the course).

The course was attended by the five heads of phytosanitary inspection services from the national organizations in the countries of COSAVE, 42 phytosanitary inspectors from the five countries and an Agricultural Health and Food Safety specialist from the IICA office in Brazil.

Results:

- a. Forty-two inspectors from the COSAVE region developed greater skills in the area of phytosanitary surveillance.
- b. Five head inspectors and 42 inspectors from the COSAVE countries were introduced to the “Handbook on Phytosanitary Hazard Profiles” and trained to use it.
- c. Participants exchanged and documented procedures and regulations for phytosanitary inspection in the region, and the members of COSAVE received the latest information on these subjects.
- d. The region’s inspectors and heads of surveillance got to know each other and built stronger working relations.
- e. Aspects of phytosanitary surveillance that could be strengthened in the region were identified.
- f. A regional program was established for continuing education in phytosanitary surveillance.
- g. Participants agreed to put together a harmonized handbook on inspection procedures for the region.



### **Workshop in Peru on Phytosanitary Hazard Profiles for the Countries of the Andean Region:**

#### Objectives:

- a. To familiarize inspectors from the region's NPPOs with the International Standards for Phytosanitary Measures (ISPMs) and develop their ability to interrelate and apply these standards and adopt appropriate procedures for improving performance in the area of phytosanitary inspection in their home organizations.
- b. To strengthen the institutions and improve their performance by providing their professionals with greater knowledge, specifically on inspection of plants and plant parts, improving their fit in a work environment that requires broad knowledge of rules in effect at the global level.
- c. To promote greater understanding of the work of NPPOs as an interrelated system, helping them value the need for feedback and strengthening their working relationships in areas of inspection, quarantine, risk analysis, surveillance and export certification.
- d. To train inspectors on the use of the methodology for developing phytosanitary hazard profiles.

#### Countries and institutions involved:

IICA and the national organizations in the countries of the Andean Region: SENASAG, Bolivia; SENASA, Peru; AGROCALIDAD, Ecuador; as well as the Andean Community of Nations (CAN). The workshop was held in Lima, Peru on 15-19 February, 2010. A phytosanitary specialist from SENASA Argentina served as a consultant.

Results:

- a. Twenty inspectors from the Andean Region and from the academic and private sectors of Colombia built up their skills on phytosanitary inspection.
- b. Twenty inspectors from three countries of the Andean Region were introduced to the “Handbook on Phytosanitary Hazard Profiles” and trained to use it. Participants commented that this tool was highly valuable and extremely useful.
- c. The phytosanitary inspection methodology and regulations used in Ecuador, Bolivia and Peru were documented, and delegates from participating countries acquired the latest information on them. Through the participation of Guillermo Rossi of SENASA, Argentina, participants also learned about the latest standards and procedures being used in the COSAVE Region.
- d. By attending the workshop, inspectors from participating countries got to know each other and to build working relationships, both among themselves and with IICA and COSAVE.

Of all the topics addressed in the workshop, participants felt that the most useful were:

- a. Knowledge of the legal framework within which the phytosanitary standards of the national plant protection organizations (NPPOs) are developed.
- b. Knowledge of real situations facing the NPPOs as they apply phytosanitary standards, and the contribution of experiences from other NPPOs in the region.
- c. Greater understanding of the fact that all the NPPOs in the Andean Region use standards based on those of the IPPC, and heightened awareness of the need to work on national standards so as to strengthen the procedures followed by inspectors.
- d. The opportunity for participating inspectors to identify current strengths and areas still to be strengthened in their own organizations.
- e. The opportunity for participants to learn about exceptional procedures and standards used in other countries that, if adopted, could strengthen their own NPPOs.
- f. Learning about the procedures by which ISPMs are developed.
- g. The opportunity for the region’s NPPOs to exchange experiences and to pick up ideas for improving their own organizations.
- h. The possibility of taking home the new knowledge acquired in the workshop and sharing it with the rest of the staff in their home organizations.
- i. Greater knowledge of international IPPC agreements and the ISPMs.
- j. A broader understanding of the rights that NPPOs hold before the IPPC.

Participants also identified topics that, if strengthened, would have a direct impact on the development of the NPPOs. They singled out the following high priorities for consolidating phytosanitary oversight by the region’s NPPOs:

- a. Training to understand and implement quarantine treatment systems, notification procedures, and certain ISPMs.
- b. Training in inspection and sampling, using practices and simulations.

- c. Procedures and legislation for the work of the NPPOs and the inspectors.
- d. Proposals to combine efforts with other institutions such as the police and customs service.
- e. Internships allowing inspectors to visit other NPPOs of the region and learn more about their activities and how they implement procedures.
- f. Training visits to the inspection system of Bahia, Ecuador, as a new methodology to be implemented.
- g. Strengthening systems for information exchange among different areas of the NPPOs, especially among quarantine and supervision systems, risk evaluators and risk managers.
- h. Documentation of services, especially in Bolivia.
- i. Continuation of regional theoretical-practical phytosanitary training (surveillance, quarantine).
- j. Expanding events of this kind to cover more professionals from the NPPOs in more countries.



### **Workshop in Ecuador on Phytosanitary Hazard Profiles:**

Although this workshop was not financed with resources from the IICA-STDF-108 project, it deserves to be mentioned here because it is an additional positive outcome of the workshop in Peru. Consideration is still being given to the possibility of replicating the workshop in other countries, and resources are being sought for this purpose.

The national workshop held in Guayaquil on March 16-18, 2010, benefitted 28 inspectors from the Ecuadoran Agricultural Quality Assurance Agency (AGROCALIDAD), the national sanitary, phytosanitary and food safety authority. The mission of AGROCALIDAD is to define

and implement policies and to regulate and control production activities in the agricultural sector, backed by national and international standards. Its actions focus on protecting and improving agricultural production, promoting food safety practices, monitoring the quality of inputs, and supporting the protection of public health and the environment, incorporating the public sector and other stakeholders into the implementation of plans, programs and projects.

#### Objectives:

- a. To inform and explain how AGROCALIDAD inspectors, in their day to day work, apply some of the specific standards of phytosanitary measures in the phytosanitary inspection process.
- b. In the interest of ensuring a successful process of institutional modernization, to highlight the systems approach, based on a general understanding of systems theory as applied to the plant quarantine system, emphasizing that the success of the institution and the fulfillment of the mission stated in the preceding paragraph depend on every single component of the system, and that if one component fails, the system will not work.
- c. Through the process of developing Phytosanitary Hazard Profiles, and drawing on experience with plants and plant products confiscated from travelers and others crossing international borders or passing through domestic quarantine posts, to emphasize the value and importance of recording and analyzing information generated in their work.

#### Workshop methodology:

- a. Presentations and interaction with participants, based on real-life cases experienced by the consultant or case resolutions or problems described by inspectors.
- b. Applied exercises using the phytosanitary hazard profiles; a hypothetical problem was developed, based on real-life scenarios from inspectors' work, and drawing on concepts taught in the course, the hazard was rated and the decision justified.
- c. A field visit with an inspection practice at the Guayaquil seaport and the José Joaquín de Olmedo International Airport to explain standards and operations applied in the phytosanitary inspection of imports.

#### Contents of the workshop:

*Plant quarantine system:* This introductory presentation emphasized the definition of the system, adopting the precepts of the Bertalanffy general systems theory, namely, that a system is a set of reciprocally related units. The general characteristics of any system are: interaction of components, common purposes and objectives, and system integrity, meaning that any alteration of a unit in the system affects all the other units because of their reciprocal relationship. A possible definition of a plant quarantine system was proposed for the purposes of the workshop, in the absence of any standard definition. It was described as a complex of reciprocally related components of a national plant protection organization, which when they interact and operate in

coordination with one another, are able to prevent the introduction and/or spread of quarantine pests and ensure official control. The levels into which the system is organized were explained briefly: pre-border, border and post-border. The activities conducted at each of these levels were identified; the emphasis placed on each activity at each point is determined by the strategic guidelines for plant quarantine policy. Discussion then focused on the different levels of the quarantine system and the particular activities in which phytosanitary hazard profiles can be applied and operated.

*General principles of phytosanitary inspection:* The discussion of this topic revolved around implementation of the 2005 International Standard for Phytosanitary Measures No. 23, offering guidelines for inspection and describing the procedures for inspecting shipments of plants, plant products and other articles, both imports and exports. Because the objective of phytosanitary inspection is to verify compliance with phytosanitary requirements by reviewing documentation on the identity and integrity of the shipment and also by visual examination, the workshop emphasized the importance of sampling, the relationship with pest risk assessment, a knowledge of the habits of pests defined as phytosanitary hazards, and the importance of standardized methods, appropriate infrastructure and continuing education and improvement.

The session also underscored the assumptions that underlie phytosanitary inspection, including: that regulated pests produce certain signs or symptoms in plants or plant products that can be seen with the naked eye; that inspection is in fact practical, operationally speaking, meaning that inspection can be performed and will produce the expected results at a reasonable cost. Nonetheless, it is understood that some pests will likely go undetected in sampling, which means that in practice, a certain level of risk has been accepted. A special presentation was given on sampling, a practice that alone accounts for more than 50% of the success of an inspection.

*Methodology and application of phytosanitary hazard profiles:* The inspectors learned why this subject first aroused interest and what its specific scope of application is. These profiles are used only for products taken from passengers and others crossing international borders or domestic quarantine posts, excluding imports whose requirements are established in the corresponding ARP.

It was clearly stated that the concept is not standardized. The phytosanitary hazard profile of a plant, plant product or regulated article can be defined as the full set of characteristics that give a preliminary indication of its potential for introducing a regulated pest. The idea is to offer a body of predictive indicators of the possible phytosanitary risk posed by a plant, plant product or regulated article, but these indicators do not pinpoint the hazard or rate the risk. The presentation detailed the basic concepts of the method, including the difference between hazard and risk, entry vs. introduction of a pest, infection vs. contamination, etc., all of which both sustain and limit its usefulness. Particular emphasis was placed on the importance of recording quality data in order to generate information and then knowledge for decision making. Lastly, the stages of the methodology were spelled out, noting the points where expert judgment needs to be applied.

Participants: Phytosanitary inspectors from the following provinces:

<b>Coordination</b>	<b>Place</b>	<b>Participants</b>
Pichincha	Mariscal Sucre Airport	8
Pichincha	Coordination	1
Pichincha	Central office	2
Guayas	José Joaquín de Olmedo Airport	3
Guayas	Seaport	3
Guayas	Central office	1
Loja	Macará	2
El Oro	Port Bolivar	1
Esmeraldas	Seaport	1
Cotopaxi	Coordination	1
Sucumbíos	Coordination	1
Galápagos	SICGAL Guayaquil	1
Galápagos	SICGAL Quito	1
Galápagos	Port Ayora	1
Zamora Chinchipe	Coordination	1
<b>TOTAL</b>	<b>15</b>	<b>28</b>

### ***II.6.2 Training Workshops on Risk Assessment of (1) Chemical and (2) Microbiological Hazards in Food***

Week-long risk assessment courses on (1) microbiological hazards in foods and (2) chemical hazards in foods were conducted in the Southern Region (Argentina, Brazil, Chile, Paraguay and Uruguay) on 13-17 July and 20-24 July, respectively, and the Andean Region (Bolivia, Colombia, Ecuador, Peru and Venezuela) on 27-31 July and 3-7 August, respectively. A total of 40 professionals from the public and academic sectors were trained. The training was highly technical and delivered via videoconference in cooperation between IICA and the University of Nebraska-Lincoln, United States of America, and its quality was praised by the participants. The study plan and original agenda for the course is presented in Annex 6.

The course was also taught for the countries of Central America (Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama), Mexico and the Dominican Republic in July 2010, in which 82 technical personnel were trained. In total of 19 countries were covered by this activity and 122 persons were trained.

Description of the course: Risk assessment is an inherent part of the process of risk analysis, which in turn constitutes a key element of the process of making science-based decisions regarding sanitary and phytosanitary measures by governments and industry. This workshop on the quantitative assessment of the risk of microbiological and chemical hazards in foods afforded

participants an opportunity to learn about the complex technical and statistical foundations of assessing risks in food.

Objective: To provide knowledge and assistance for understanding the methods and principles used in assessing the risk of microbiological and chemical hazards in foods, and to familiarize participants with the general procedures followed in risk analysis. In addition to lecture sessions and exercises, participants had to analyze problems such as data sets, risk models or case studies related to specific risks for an industry, as a means of putting into practice the knowledge being imparted in the course.

Justification: During the sessions for developing a common vision as part of the application of the PVS-SPS, the countries voiced a great need about training on risk analysis. They expressed this need both for the plant and animal health areas as well as for food safety.

In addition, the Codex Coordinating Committee for Latin America and the Caribbean (CCLAC), in a request for technical assistance submitted to IICA, stated that the countries lacked knowledge on risk assessment methodologies for animal and plant diseases, and in particular, for evaluating the risk of chemical and microbiological hazards in food.

The countries need to be familiar with these methodologies, not only to assess risks, but also to acquire a correct understanding of internationally-validated protocols for generating, compiling and disseminating information needed as support for science-based risk assessments. It is vital for them to acquire a full grasp of the concept and application of risk analysis so that research projects can be designed to generate or compile globally acceptable information. This is why it is so important to provide the countries of LAC with training on the general principles of risk assessment, the types of risk assessment specific to each area of agricultural health and food safety, and the protocols applied in generating, structuring, and disseminating information.

Knowledge acquired by the participants:

- a. The concept of risk analysis of microbiological and chemical hazards in food, especially risk assessment.
- b. Construction of risk pathways and identification of the information needed to develop a simple risk assessment model.
- c. Sufficient knowledge of the qualitative and quantitative assessment of risk.
- d. Practical experience in conducting a quantitative assessment of risk.

Course features and schedule: The course covered risk assessment theory (in regular classes) as well as practical sessions with computer-based exercises using different risk assessment tools (@Risk, Analytica, DMFit, Programd for Pathogen Models (PMP), etc.).

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**Week 1: Topics on risk analysis of microbiological and chemical hazards in food****Day 1:**

- General information on risk analysis and introduction to risk assessment
- Introduction to risk communication
- Probability distribution functions
- Applications and problem solving with @RISK

**Day 2:**

- What is the role of predictive models in risk assessment?
- Microbial growth/destruction models
- Available resources and tools - Combase, USDA PMP, DMFit
- Use of Excel Solver in models
- Applications and practice problems

**Day 3:**

- Strategies for developing a risk assessment model – description of problems, process flowchart, information needs, applications
- Case study 1: WHO-FAO model for *Enterobacter sakazaki* in infant formula – predictive model and risk assessment model
- Web-based software for assessing the risk of *E.sakazaki* in infant formula
- Case study 2: USDA-FSIS model for assessing the risk of *Salmonella enteritidis* in eggs - predictive model and risk assessment model

**Day 4:**

- Demonstration of Excel VBA software for the USDA-FSIS model for assessing the risk of *Salmonella enteritidis* in eggs
- Statistical and graphic output from a risk assessment model
- Guidelines for developing a new risk assessment model
- @Risk and Analytica© software for developing risk models

**Day 5:**

- Analysis of uncertainty and variability (interpretation of results)
- Interpretation of results for making risk management decisions
- Risk communication
- Wrap-up
- The participants bring problems and apply knowledge acquired

**Week 2: Topics in risk analysis of chemical hazards in food****Day 6:**

- General information on risk analysis and introduction to risk assessment
- Introduction to risk communication
- Probability distribution functions
- Applications and problem solving with @RISK

**Day 7:**

- Diagrams of pathways of exposure and transportation and destination models

- Chemical contaminants
- Food allergens and their control
- Modeling transportation and destination and assessment of the risk of exposure to chemical substances
- Applications and practice problems

**Day 8:**

- Components for assessing exposure
- Information on consumption of food (for example, the CSFII), estimation of chronic and acute ingestion
- Interaction with GEMS/WHO to profile the cumulative exposure of the population due to chemical residues in food
- Assignment to demonstrate risk assessment associated with the ingestion of food, using @RISK software
- Applications and practice problems

**Day 9:**

- Characterization of dosage-response
- Factors of uncertainty and safety
- Margin of exposure, hazard quotient, risk of cancer and non-carcinogenic (acute and chronic)
- Use of Excel Solver to include parameters in a dosage-response model
- Applications and practice problems

**Day 10:**

- Analysis of uncertainty and variability (interpretation of results)
- Interpretation of results for making risk management decisions
- Risk communication
- Wrap-up
- The participants bring problems and apply knowledge acquired

Course instructors:

Instructors in the course were engineers, microbiologists, food scientists and agricultural specialists from the Food Processing Center (FPC) of the University of Nebraska-Lincoln.

Dr. David Jones [djones1@unl.edu](mailto:djones1@unl.edu) - Dr. Jayem Subbiah [jsubbiah2@unl.edu](mailto:jsubbiah2@unl.edu) - Dr. Harsha Thippareddi [hthippareddi2@unl.edu](mailto:hthippareddi2@unl.edu) - Dr. Jason Ellis [jellis2@unl.edu](mailto:jellis2@unl.edu) - Dr. Steve Taylor [staylor2@unl.edu](mailto:staylor2@unl.edu) - Steve Stephens [sstephens2@unl.edu](mailto:sstephens2@unl.edu)

### ***II.6.3 Risk Communication***

Another element in the development of capabilities for risk analysis is risk communication, which was requested by the countries as a tool for improving communication with all stakeholders and users, as well as for managing emergency situations and strengthening the capabilities of their technical teams.

Place and date of the workshops:

Colombia: March 2-3, 2010

Ecuador: June 7-8, 2010

Peru: June 10-11, 2010

Number of participants:

Colombia: 50

Ecuador: 20

Peru: 19

Importance: The U.S. National Academy of Sciences defines risk communication as “an interactive process of exchange of information and opinion among individuals, groups, and institutions. It involves multiple messages about the nature of risk and other messages, not strictly about risk, that express concerns, opinions, or reactions to risk messages or to legal and institutional arrangements for risk management.” Risk communication constitutes the foundation for governments to prioritize risks, convey information for risk mitigation, and seek partnerships with the public and their stakeholders for risk management.

Although risk communication is a well-recognized component of how risks are analyzed and managed, the process of actually incorporating risk communication into the activities of government ministries has often proved challenging. A survey of Central American and Andean countries conducted by IICA in 2009 found that among the countries which replied to the survey, 77% of the veterinary and phytosanitary services identified risk communication as an important part of their functions. However, even among ministry communicators, only half of the people surveyed had received any training on risk communication. Based on their position within the ministry, 97% of the respondents felt that training on risk communication was needed.

Objective: Workshops were designed to allow participants to gain an understanding of how risk communication is utilized in a variety of circumstances related to agriculture. More specifically, workshop materials addressed risk communication tools for three separate situations: when the audience needs to take precautions to help reduce a risk, when the audience is outraged about a risk that is in fact quite small, and crisis situations.

In addition, participants gained experience in the application of these tools through group sessions, which applied the tools to problems or experiences which the country may be struggling with.

Technical Focus: The overall technical focus of the workshops was risk communication in agriculture. However, within each country, participants identified specific areas of concern where risk communication needed to be applied. These areas of concern included issues such as pesticides, government-sponsored food programs for children, disease eradication programs, and

disease outbreaks. During group sessions participants worked within these areas to apply risk communication tools and principles.

Participant Profile: In Colombia, participants included technical staff from the Instituto Colombiano Agropecuario (ICA)—the Colombian Agricultural Institute—communicators from ICA, staff from the Ministry of Health, and representatives from academia. In Ecuador the participants were mostly technical staff from the Ministry of Agriculture, and one person from industry. In Peru the participants were drawn from a group of officials involved in the Multi-Sectorial Committee for Food Safety (COMPIAL) who have been working with IICA-Peru on food safety issues. They included people from the Agriculture and Health Ministries.



### Conclusions:

The workshops were well received. In general, the participants who attended had little to no previous exposure in the area of risk communication. The participants from Colombia seemed to be more familiar with the topic and engaged with the presenters much earlier on in the course of the workshop. In Peru and Ecuador, when participants were asked to identify a theme or topic to work with by groups, it was noticed that in most instances no risk communication efforts had been made in these areas.

Some participants expressed concerns that the ability to implement risk communication related to their work might be limited due to a lack of institutional support. Further training targeted at higher-level officials within the ministries will be needed to gain both political and financial support for future risk communication activities.

Although the comments received from workshop participants indicated that they felt they had learned a great deal, these workshops were designed to be basic. Further workshops or consultancies focused on specific technical issues would be useful to allow the participants to more fully design, implement, and evaluate risk communication strategies.

## II.7 Technical Forum on Private Standards

As part of the process of providing the countries with more current knowledge in areas of particular interest discussed by the SPS Committee of the WTO, a technical forum on private standards was held with the participation of 12 countries.

The event took place on October 19, 2009 at IICA headquarters in San Jose, Costa Rica and reached 12 countries directly via videoconference. Thirty other persons in 11 other countries tuned in to the forum via webcast. The objective of the 6-hour forum was to present the perspectives of buyers (retailers) in developed countries, producers and exporters in developing countries and international standard-setting organizations.

The following countries took part in this forum:

Objective: To promote a discussion to help identify the challenges and impacts of private standards or requirements for fresh produce in a multilateral system of commerce and to identify possible solutions that will benefit all stakeholders involved.

### Agenda:

**Date:** October 19, 2009

8:00 – 8:15 Welcome and opening remarks (Dr. Ricardo Molins, Director, Agricultural Health and Food Safety, IICA)

8:15 – 8:45 Introduction (Ms. Tania López, Specialist in Public Policy and Business, IICA)

### ***First Part: The perspective of the industry versus the perspective of producers***

**Moderator: Dr. Ericka Calderon, IICA**

8:45 – 9:30 The buyers' perspective (Dr. Robert Gravani, Professor, Cornell University)

9:30 – 9:50 The producers' perspective 1 (Mr. Daniel Satragni, Technical Manager of the Argentine Chamber of Integrated Fruit Growers, CAFI)

9:50 – 10:10 The producers' perspective 2 (Mr. Sergio Navas, Executive Vice President of the Exporters Chamber of Costa Rica)

10:10 – 10:25 Summary (Ms. Ana Marisa Cordero, Animal Health and Food Safety Specialist, IICA)

10:25 – 10:55 Questions & Answers

10:55 – 11:25 Coffee break

### ***Second Part: Perspective of international standard-setting bodies and the official sector***

**Moderator: Dr. Ericka Calderon, IICA**

- 11:25 – 11:40 The perspective of international standard-setting bodies (Mr. Erick Bolaños, Animal Health and Food Safety Specialist, IICA)
- 11:40 – 12:00 The perspective of the public sector (Ms. Delilah Cabb, Belize Agricultural Health Agency, BAHA)
- 12:00-12:20 IICA’s Vision (Dr. Ricardo Molins, Director Agricultural Health and Food Safety, IICA)
- 12:20 – 12:45 Questions & Answers
- 12:45 – 1:00 Conclusions and closing remarks (Mr. Eric Bolaños, Animal Health and Food Safety Specialist, IICA)

## **II.8 Successful SPS Case Studies**

Two success stories from the Central American region were written up for use in convincing decision-makers of the value of investing in sanitary and phytosanitary measures. The first, taken from Panama, was control and eradication of brucellosis and bovine tuberculosis on the Boca del Toro province, and the other was on control and eradication of fruit fly in Belize.

These success stories are being used in training activities and awareness-raising exercises, as they are one of the most effective ways of demonstrating the value of investing in SPS measures.

The Panamanian case is considered strategic, standing as an example of the control and eradication of two diseases that are currently classified as reemerging. For many years, brucellosis and tuberculosis were the focal point of the main surveillance programs of many veterinary services. However, as time has gone by, priority has shifted to other diseases or activities, and brucellosis and bovine tuberculosis surveillance and control have fallen by the wayside. As a result, the two diseases have reemerged. Today they have gained a strong foothold and become widespread in most of the countries of Latin America and the Caribbean. Therefore, the Panamanian case is an interesting success story for control of these diseases.

Similarly, documentation of the Belizean case serves as a compelling example of how a small country can derive excellent benefits from investing in SPS. This case of fruit fly control and eradication in Belize was also seen as a valuable addition to an STDF video in which it is featured.

The successful SPS case studies (Belize and Panama) are presented in Annex 7

### III. CONCLUSIONS AND RECOMMENDATIONS

Completion of the implementation of Project STDF 108 allows a reflection on some of the issues that impacted the success and future sustainability of activities therein carried out. Some conclusions and recommendations are hereby presented, which may help implementation of other, similar projects and contribute to increase the effectiveness of technical cooperation on SPS.

#### **Political and decision-making environment:**

1. An important component of Project STDF 108 was designed to strengthen institutional capacities in the 28 beneficiary countries, in such areas as communication—inter-sectoral and inter-institutional—the development of national SPS agendas, and strengthening of formal or informal committees or other SPS discussion fora. This type of technical cooperation presents a challenge because it is vulnerable to fluctuations in the surrounding political environment, which in turn may bring about changes in the level of support counterparts offer to or interest they may have in such technical cooperation.
2. Countries where the political and technical environments regarding the adoption of changes or introduction of institutional improvements coincide in a positive way, easily become examples or successful cases to demonstrate the benefits of the above-mentioned type of technical cooperation. These cases can then be used as awareness-creating tools to achieve similar changes in other countries having a more complex political or technical situation.
3. Using technical staff from countries that have achieved technical as well as institutional expertise on handling SPS issues as spokespersons or part of the technical cooperation agency support team (IICA, in this case), was a powerful mechanism during workshops and capacity-building events to convey a convincing message on the need for institutional change. The impact was further potentiated when a successful case was presented by a technical person who himself/herself participated in the process of bringing about change in their country on SPS-related issues, in comparison to having a third party describe it.
4. Another strategy that had good results in terms of impacting decision makers at the political level was the delivery of short events to a selected, reduced audience, something that helped establish a direct, open dialogue that allowed the politicians/decision makers to discuss and analyze various options without exposing himself/herself to the whole national community involved in SPS issues. Quite often, the politicians or other decision makers do not know SPS issues in detail and thus do not have among their priorities to invest in or strengthen these areas, especially within the institutional establishment, because this usually implies increases in personnel, training costs, creation of new institutions and financing of the country's participation in international events.

Therefore, reaching these stakeholders with messages that address the economic benefits of investing on SPS or the negative impacts of not doing it, was strategic.

5. Rotation, attrition and appearance of new stakeholders in a country's political arena and its SPS system is inevitable, as these will always occur in the public, governmental administration. Consequently, strategies must be designed within technical action plans that will induce the SPS stakeholders themselves to be the ones to train and create awareness among their political and decision-making peers.

### **Characterization of the project:**

6. Projects that involve a large number of countries, such as STDF 108 (28 countries), are challenged to "tailor" the project to each individual country. It is to be expected that participating countries will have different levels of development in each of the various components included in the project. For this reason, if "tailoring" of the project to each country is not built in, the project might not generate the expected results or might end up recommending erroneous courses of action.
7. It is very important to have a broad baseline study—preferably conducted by technical personnel who know the country's reality and its SPS system—so that an exact description of the situation at the beginning of the project is made available. However, the observations made during implementation of project STDF 108 indicate that national authorities usually tend to overestimate their strengths and underestimate their weaknesses. Therefore, baseline studies could be lopsided unless the right tools are available (adequate human resources and a methodology that allows wide participation in the diagnostic by all relevant sectors and stakeholders).

### **Sustainability and ownership of the process**

8. Project STDF 108 included a total of 28 countries having great differences in economic development, institutional make up, technical resources and even in relation to the relative importance of agriculture in the national economy, as well as on the development model adopted. These differences account for a difference in the impact of and the benefits resulting from the project in each beneficiary country.
9. An example of the variation in impact attained by the project are some of the Caribbean island nations, some of which ave a population of less than 100,000. Accordingly, the size of their SPS services is extremely small—some having a veterinary service composed of two persons, for example—in part due to very limited financial resources, infrastructure and trained personnel, and partly because their economies, to a large extent, are built around tourism and other services. Agriculture and foreign trade in foodstuffs, therefore, occupy a very secondary place among some of these countries' priorities. This situation accounts for very low investments in SPS-related programs, facilities and

personnel, despite the fact that sanitary and phytosanitary measures are just as important for net importing countries from the standpoint of protection of the health of their own population, fauna and flora, as they are for exporting countries. Therefore, the strategy that must be followed to advance SPS issues in these countries will differ radically from that appropriate for agricultural food exporters.

10. In the Caribbean, in particular, a strategy that the project indicated might be more successful than individual capacity-building efforts in each country is a regional or sub-regional approach. This strategy could focus on creating SPS capacity in some island nations and promoting an association with them by other, smaller nations to handle specific SPS issues, especially those of international nature. One example of the latter would be the representation at international SPS fora; a regional approach might allow resource-poor nations to be heard through a larger or wealthier proxy. In addition, Caribbean countries have regional, representative structures rather well established in the animal health (CaribVET) and plant health (Meeting of Plant Protection Directors) that could speak for a number of their members. In addition, the Caribbean Agricultural Health and Food Safety Agency (CAHFSA) was recently implemented and is being built up under the aegis of CARICOM. These regional institutions could contribute to “economies of scale” by maximizing resources and expertise existent in some of its members or by becoming the spokesperson for a number of members.
11. A clear example of how the proposed collaborative effort mentioned above could work is transparency, where it is close to impossible for each Caribbean country to have a mechanism that would allow it to effectively manage notifications presented by the international community and communications that emanate from the SPS Committee and other SPS fora. Some countries in the region that have well-developed SPS capacities could provide feedback and/or filter such information, process it and relay it to the rest of the Caribbean community.
12. Other regions of the Americas could benefit from the approach described above as well, and in fact, some are already doing it. Such is the case of regional institutions like the Plant Health Council of the Southern Cone (COSAVE) and the Veterinary Permanent Council of the South (CVP), both in the South region of the Americas, and the dynamics of the Central American countries in their commercial and economic integration processes.
13. The sustainability of the results of a project like the STDF 108 depends to a large extent on the follow up and continuity that an entity such as IICA can provide in each of the countries and for each of the products derived from the project. Nevertheless, it is worth pointing out that certain countries (Dominican Republic, Paraguay, Costa Rica and Uruguay, among others) have taken upon themselves to continue the improvement process within their SPS systems. This outcome has been based on the strength of internal institutional articulation provided by a formal or informal SPS committee.

