# **SPS Balance Sheet for CLV**

# Strengthening links between supply and demand of SPS-related technical assistance in a sub-group of ASEAN countries (Stage 2)

Research work for the Standards and Trade Development Facility

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# **Abbreviations and Acronyms**

AADCP ASEAN-Australia Development Cooperation Program
ACIAR Australian Centre for International Agricultural Research

ACMECS Ayeyawaddy-Chao Phraya-Mekong Economic Cooperation Strategy

ADB Asian Development Bank
AEC ASEAN Economic Community
AFTA ASEAN Free Trade Area

AI Avian influenza

APEC Asia-Pacific Economic Cooperation

APHIS Animal and Plant Health Inspection Service (United States)

APO Asian Productivity Organization
ASEAN Association of Southeast Asian Nations

AusAID Australian Agency for International Development CIDA Canadian International Development Agency

CLV Cambodia, Lao PDR, Vietnam

CLMV Cambodia, Lao PDR, Myanmar, Vietnam

CSF Classical swine fever

DANIDA Danish International Development Agency

EC European Commission
EU European Union

FAO Food and Agriculture Organization of the United Nations

FMD Foot and mouth disease GAP Good agricultural practice

GMS Greater Mekong Subregion, includes Cambodia, China (Yunnan Province and

Guangxi Zhuang Autonomous Region), Lao PDR, Myanmar, Thailand and Viet

Nam

HACCP Hazard Analysis and Critical Control Points

HPAI Highly pathogenic avian influenza

IF Integrated Framework for Trade-Related Technical Assistance to least developed

countries

IPM Integrated pest management

ISPM International Standard for Phytosanitary Measures

IPPC International Plant Protection Convention
JICA Japan International Cooperation Agency
Lao PDR Lao People's Democratic Republic

Multi multi-country

MUTRAP Multilateral trade assistance project

NAFIQAD National Agro-Forestry and Fisheries Quality Assurance Department

NORAD Norwegian Agency for Development Cooperation

NZ New Zealand

NZAID New Zealand's International Aid & Development Agency
OECD Organisation for Economic Co-operation and Development

OIE Office International des Epizooties or World Organisation for Animal

Health

PCB Phytosanitary capacity building

PRA Pest risk assessment

RPS Regional partnerships scheme

SEAFMD Southeast Asian Foot and Mouth Disease Control Programme

SECO State Secretariat for Economic Affairs (Switzerland)

SPS Sanitary and phytosanitary

SPSCBP The Sanitary and Phytosanitary Capacity Building Program

STDF Standards and Trade Development Facility

TA Technical assistance

TAD Transboundary animal disease TBT Technical barriers to trade

UNIDO United Nations Industrial Development Organization

WB World Bank

WHO World Health Organization
WTO World Trade Organization

### 1. Introduction

- 1. The objective of this STDF research work is to further strengthen the linkage between "supply" and "demand" of technical cooperation in the area of food safety, animal and plant health (collectively known as sanitary and phytosanitary or SPS) requirements. As such, this research is being carried out in the framework of the broader Aid for Trade initiative. The work builds on existing capacity assessments in the SPS area conducted by international organizations such as the Food and Agriculture Organization (FAO) as well as other studies and reports. It is not a capacity evaluation, but rather an attempt to consolidate the results of previous studies.
- 2. Individual balance sheets for Cambodia, Lao PDR and Vietnam (CLV) have been prepared which present needs for and supply of SPS-related technical assistance. The balance sheets aim to establish the link between supply and demand for SPS-related technical cooperation by:
  - acting as a vehicle for information sharing of needs evaluations and ongoing and planned activities; and
  - identifying gaps where they exist and further mobilizing the provision of capacity building resources as necessary.
- 3. This report presents a similar balance sheet from a regional perspective. In contrast to the country balance sheets, it does not discuss institutional and legislative issues. The focus is instead on enforcement issues that can be dealt with at regional level, such as surveillance and monitoring and diagnostic capacity.

## 2. SPS capacity building in the GMS region: National and Regional challenges

- 4. Regional economic cooperation is a driving force for SPS capacity building. Ongoing efforts to liberalize trade in the region under the ASEAN<sup>1</sup> Free Trade Agreement (AFTA) and the commitment to establish an ASEAN Economic Community (AEC) by 2015 imply harmonization of standards.
- 5. ASEAN, Greater Mekong Subregion (GMS), WTO and bilateral requirements pose a serious compliance challenge for Cambodia, Lao PDR and Viet Nam. The more developed ASEAN and GMS countries increasingly ask their neighbours to provide better information on plant pests, animal diseases and potential food safety hazards, under international rules. Moreover, the main trading countries China, Thailand and Vietnam, which have major exports to demanding OECD markets, want to reduce the risk of importing products from neighbors that could affect trust in their own products in world markets. Therefore, imports of food and agricultural products from Cambodia, Lao PDR and Myanmar to neighbouring trading partners necessitate monitoring, surveillance, and reporting.
- 6. A regional integration initiative in which CLV countries are involved is implementation of the GMS Cross-Border Transport Agreement. The GMS Agreement covers all aspects of cross-border transport facilitation. Of particular interest in the area of SPS controls are provisions for single-stop/single-window customs inspection and transit traffic regimes which include exemptions from physical customs inspection as well as phytosanitary and veterinary inspection.

<sup>1</sup> ASEAN member countries are Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam.

4

Implementation of this agreement requires movement away from current mandatory inspection of consignments to SPS controls based on surveillance and risk assessment.

- 7. Capacity in Cambodia, Lao PDR and, to a lesser extent, also in Vietnam, for dealing with cross-border issues is limited. Much of the trade between the three countries takes place on an informal and uncontrolled basis. Thus many of the SPS needs of these three countries impinge on their ability to engage in regional integration processes. Particular SPS needs include the following areas:
  - monitoring and surveillance of hazards in food safety, plant health and animal health;
  - exchange of information;
  - controlling transboundary animal and plant pests and diseases;
  - diagnostic capacity;
  - harmonization of standards and equivalence; and
  - developing and implementing mutually agreed SPS border procedures

## 3. Overview of ongoing and planned donor assistance

8. In the period 2001-2006, there were 90 multi-country projects involving either one or more of CLV or with other ASEAN countries, with a total value of approximately US\$200 million (see table 1 below). These projects are being led by regional institutions, primarily ASEAN and Asian Development Bank (ADB).

Table 1: Multi-country SPS assistance, 2001-2006

Number of projects		Value of Projects	(US\$'000)
Food safety	29	Food safety	24,909
Animal health	9	Animal health	8,023
Plant health	15	Plant health	9,819
HPAI	20	HPAI	130,608
General	17	General	26,328
Total	90	Total	199,687

- 9. When Cambodia, Lao PDR and Vietnam became ASEAN members, it was understood that these new members were behind the existing members in economic development and that special effort would be needed to bridge the gap.<sup>2</sup> International donors were asked to provide special support for the less developed ASEAN members. As a result, donors launched several regional SPS support projects bilaterally and through ASEAN, APEC and GMS. Support is mainly from developed countries in the region such as Australia, New Zealand and Japan. There is also South-South technical assistance provided by Thailand, China, and Vietnam under Ayeyawaddy-Chao Phraya-Mekong Economic Cooperation Strategy (ACMECS) and GMS.
- 10. The more important multi-country projects are the NZAID/FAO/WHO Food Safety project, the OIE Foot and Mouth Disease project in Southeast Asia, NZAID's Phytosanitary

<sup>2</sup> ASEAN was established on 8 August 1967. Vietnam acceded on 28 July 1995, Lao PDR and Myanmar on 23 July 1997, and Cambodia on 30 April 1999.

5

Capacity Building for the countries of Cambodia, Lao PDR and Vietnam and the various donor projects on avian flu. A detailed overview of regional SPS support is provided in Annex 1.

- 11. Since the first detection of HPAI cases in 2004, assistance in the area of HPAI has come to dominate SPS-related regional assistance. In the period 2001-2006, HPAI accounted for 65 per cent of all SPS assistance at regional level. This figure will probably grow further as additional HPAI assistance commitments become disbursements.
- 12. To implement the agriculture component of the ASEAN Vision 2020, two strategic action plans were agreed on ASEAN co-operation in food, agriculture and forestry (1999-2004 and 2005-2010). The SPS elements of the latest Action Plan are reproduced in Annex 2. Funding and implementation of this Action Plan, however, are still to be decided.
- 13. Possibilities are explored of a lending project to the GMS countries by the World Bank and/or ADB for implementing GMS action plans with an SPS component.

### 4. Overview of outstanding regional SPS needs

- 14. Promising areas for bilateral and sub-regional cooperation include:
- Joint preparation of priority plant pest lists;
- preparing lists of plant products with high, moderate and low risks in bilateral trade as the basis for border control measures;
- Joint cross-border programs for the containment and reduction of priority animal diseases.<sup>3</sup>
- Exchange of information about major food safety risks;
- Joint monitoring programs on the use of agrochemicals;
- Developing and implementing mutually agreed SPS border procedures for GMS; and
- A joint assessment of needed laboratory and other diagnostic facilities in the region, which includes consideration of affordability for small countries and possible designation of subregional centers for expensive tests and highly specialized tasks.
- 15. Many of these areas are covered by the ASEAN strategic action plan, which is not funded. So most gaps are remaining. Some gaps, e.g., in diagnostic infrastructure could be funded through other planned assistance such as World Bank / ADB GMS co-operation. Moreover, main challenges for bilateral and sub-regional cooperation are to overcome differences in capacity and resources between countries and asymmetries in costs and benefits. The solution might be found in combining bilateral cooperation between GMS countries with outside donor support.
- 16. In recent evaluations the cost effectiveness of some of regional (ASEAN) projects appeared low because of components that could better have been dealt with in bilateral or sub-regional projects. In particular high transaction costs, language difficulties, differences in formal education of participants, and differences in needs at the workplace require selectiveness in topics to be included in international project. However, regional approaches in capacity building can

<sup>3</sup> The SEAFMD project is an example of such a project. Although opinions about the success of this project differ, it may provide good lessons for setting up regional projects for other livestock diseases.

provide major advantages if there are synergies. In particular, in the GMS sub-region there are major opportunities for beneficial cooperation. The countries have similar agro-ecological characteristics, long porous borders and pests and diseases prevalent across borders. Plant and animal disease outbreaks and food safety hazards in one country can easily spread to neighbouring countries and therefore countries have a common interest in the containment of risks.

# SPS Balance sheet: Regional

			Priorities
diseases and food borne diseases in do	omestic markets, data manageme	ent and risk evaluation	1
tems for agro-chemicals			1
ional" labs that may be utilized by any	of the CLV		1
1		1	
Needs	Assistance	Gaps	Priorities
Better control of sale and use of agrochemicals among CLV  Stronger bio-security controls for protection of plant and animal health	Various donor projects (mentioned below) have provided assistance on animal and plant health management, surveillance and diagnostic capacities.  ADB GMS secretariat  Possibly World Bank and	More effective monitoring of agrochemicals	1
	Needs  Better control of sale and use of agrochemicals among CLV  Stronger bio-security controls for protection of plant and animal health	Needs  Needs  Assistance  Better control of sale and use of agrochemicals among CLV Stronger bio-security controls for protection of plant and animal health  Stronger bio-security controls for protection of plant and animal health  ADB GMS secretariat	Needs  Assistance  Gaps  Better control of sale and use of agrochemicals among CLV Stronger bio-security controls for protection of plant and animal health  Various donor projects (mentioned below) have provided assistance on animal and plant health management, surveillance and diagnostic capacities.  ADB GMS secretariat

**SPS Balance sheet: Region** 

Status	Needs	Assistance	Gaps	Priorities
Animal health (aquatic and terrestrial)  Surveillance. There may be some degree of surveillance programs (at least reporting systems) from projects involving FMD, AI and village veterinary workers, though information may not be properly managed through database.  Input monitoring. There is overall lack of capacity for surveillance, diagnosis and control of sale and use of veterinary drugs.  Diagnostic capacity. There are varying degrees of capacity for three countries based on donor assistance received  Risk analysis. There is overall limited capacity for risk analysis.  Six labs of NAFIQAD (Vietnam) accredited for ISO 17025 to perform microbiological and chemical analyses; 2 labs accredited to use advanced analytical methods for pesticide and drug residues and heavy metals. One lab was designated by ASEAN as reference lab in toxic algae and marine biotoxin analyses.	Increase capacity to do surveillance of animal health, specifically for diseases other than FMD and AI  Establish databases on animal health situation  Increased capacity to do risk assessment (Vietnam) and risk evaluation (Lao PDR and Cambodia)  Increased diagnostic capacity	FAO/ADB on transboundary animal diseases OIE SEAFMD AusAID SPSCBP JICA animal disease control project	Design of surveillance programs, management of data bases of animal diseases (establishment of database in the case of Lao PDR and Cambodia) manage data bases and do more risk analysis  Assessment of diagnostic capacity for the region, to identify "regional" labs that may be utilized by any of the CLV	1
Plant health  Surveillance. Vietnam has a pest surveillance action plan and pest surveillance programs for PRA for market access requirements. Lao PDR and Cambodia have no such programs and only ad hoc surveillance activities by donor programs for selected pests and products.  There is no program for monitoring of pesticides in three countries.  Diagnosis. Lao PDR and Cambodia have no capacity for pesticide residue analysis. Vietnam lacks capacity in virology and weed science.	Surveillance and monitoring There is limited capacity to reduce risk of pest introduction or early detection, especially for Lao PDR and Cambodia.  Diagnosis Overall very limited capacity to undertake pest diagnosis due to lack of skilled human resource, procedures and labs	NZAID PCBP – plant health structure, pest diagnosis, surveillance, database, PRA  Japan-FAO GCP Phytosanitary Capacity Building, assessment of phytosanitary capacity	Design and implementation of surveillance programs for main exports and imports and establishment of data bases on plant health hazards  Assessment of diagnostic capacity for the region, to identify "regional" labs that may be utilized by any of the CLV	1

Risk analysis. The three countries have limited capacities to do		
risk analysis, more so for Lao PDR and Cambodia, because of		
lack of surveillance data.		

SPS Balance sheet: Region

Status	Needs	Assistance	Gaps	Priorities
Food safety				
Surveillance. There is no active surveillance program on food		NZAID/FAO/WHO food	There is a need for a well	1
safety. There is no database on food-borne hazards.	Surveillance	safety management –	designed program of	
·	Lack of program for surveillance	diagnosis, surveillance,	surveillance that provides	
Input monitoring. There is overall lack of capacity for	of food-borne diseases	inspection, national plan	information on main risks	
surveillance and diagnosis of pesticides.		for pesticide residue	of food borne diseases.	
	Weak capacities for monitoring	testing		
Diagnosis. There are agencies that perform physical, chemical	agricultural inputs, especially		There is a need for a	1
and microbiological analyses of food samples. Capacities are at	pesticides and veterinary drugs	ASEAN workshops on	coordinated and effective	
varying levels among three countries, generally still limited and		handling of perishable	monitoring and control	
no lab has been accredited.	Diagnosis	crops and standardizing	systems for agro-	
	Lack of analytical capacity on	pesticide tests	chemicals	
Risk analysis. Given the limitation in surveillance information,	microbiology, and chemical		1.	
there is little capacity for risk analysis. Trainings have been	(pesticide residue) analysis		Assessment of diagnostic	
given.			capacity for the region, to	1
			identify "regional" labs	
Border inspection. Cambodia and Vietnam have procedures for			that may be utilized by	
food inspection at the border. Laos mandate was abolished by			any of the CLV	
PM decree. Inspections are still not risk-based.				

#### Notes to the Balance sheet

Columns Notes

Status The capacities are based on country reports from FAO conferences, donor project

documents and other available studies (See References below), and updated in

interviews with stakeholders in government, private sector, donors and

international agencies.

Needs Obtained from the same sources.

Assistance The donor activities were from projects identified in the research work prepared

for the Manila Aid for Trade workshop (in References).

Gaps These are needs that have not been addressed by present or forthcoming donor

work.

Priorities Priority scales used:

 $1-high \ and \ immediate \ priority;$ 

2 – medium-term priority; and

3 – low and long-term priority

Principles used for prioritization:

Impact

Costs and benefits

Sequencing

➤ Rule of law: major investment in diagnostics and inspection has to be preceded by legal framework and risk management

#### References

Balance sheet info derived from individual balance sheets of Cambodia, Lao PDR and Viet Nam

APO. 2002. Report of the APO Seminar on Sanitary and Phytosanitary Measures held in Japan, 4-11 December 2002 (02-AG-GE-SEM-09). Asian Productivity Organization.

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**Annex 1: Multi-country SPS-related Technical Assistance, 2001-2006** 

	Assistan	ice
Projects	Value (US\$'000)	Type
Food safety		
EU food standards and import requirements for fishery and aquaculture (EC, 2006)	7,684	S
EU food standards and import requirements for fruit and vegetables (EC, 2006)	7,684	S
WTO compliance -capacity building training in the development of food standards (based on risk management framework) (APEC, 2003-2004)	57	S
APEC capacity building workshop and symposium for harmonization of food safety regulation in fisheries and seafood products (APEC, 2003)	98	S
Training in risk assessment in support of food safety measures (APEC, 2001-2002)	95	S
Management of marine algal toxins in seafood products in the APEC region (APEC, 2001-2003)	38	S
Development and validation of phycotoxin analytical methods, standards and		
reference materials for seafood product certificate and safety (APEC, 2003)	204	S
HACCP cooperation among APEC members (APEC, 2006-2007)	113	S
Capacity building on GAP for developing APEC economies (APEC, 2006)	63	S
Capacity building for implementation of management systems for food safety and quality control of agricultural products in Vietnam and other APEC economies	70	q
(APEC, 2005-2006)	73	S
Technology cooperation on the improvement of efficiency in the handling of perishable crops in ASEAN countries (ASEAN, 2001-2004)	1,032	S
Standardizing test methods for residues of pesticides and food additives in crops and food commodities, study on production of monoclonal antibodies to develop ELISA <sup>4</sup> kits (ASEAN, 2001)	1,486	S
Improving food safety and its management in Cambodia, Lao PDR and Vietnam (NZ-FAO/WHO, 2003-2008)	1,278	Н
Strengthening risk assessment capability to support food safety measures project (AADCP, 2005-2007)	942	
Quality assurance systems for ASEAN fruit and vegetables (AADCP, 2004-2007)	1,397	Н
Quality assurance and safety of ASEAN fish and fishery products handling, processing and packaging (AADCP, 2004-2007)	731	S
Food microbial control (Japan, 2002)	6	S
Operationalize guidelines on responsible movement of live food finfish project (AADCP-RPS, 2005-2007)	206	S
Monitoring mycotoxins and pesticides in grain and food production systems for risk management in Vietnam and Australia (ACIAR, 1999-2004)	580	S
Conference on harmful algae management and mitigation (USA, 2001) Vietnam included	20	S
USFDA Food safety conference for Asia (USA, 2001) Vietnam included	150	S
Cochran program workshop on food safety (USA, July-Aug2002) Vietnam included	6	S
Cochran program-funded training on marketing of high-value agri products (USA, May2002)-Vietnam included	13	S
Cochran fellowship-funded training workshop on food storage (USA, April-May2004) - Vietnam included	26	S
Conference on food safety programs influencing public health and trade (USA, Aug2001) - Cambodia and Vietnam included	6	S
Improving food safety in the fish sector (Norway, 2006-2007)	98	S

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<sup>&</sup>lt;sup>4</sup> Enzyme-linked immunosorbent assay.

	Assistan	ce
Projects	Value (US\$'000)	Type
FDA Senior-level discussions on SPS issues and future TA programs (USA, 2006) - Vietnam included	58	S
Global inventory, reference materials and food safety training program for improving the quality and safety of fresh fruit and vegetables (FAO, 2005)	750	S
Third country training course on transfer technology of food sanitation to neighboring countries (Japan, 2003)	15	S
Animal health		
EMPRES emergency centre for transboundary animal disease operations (FAO, 2004-2006)	370	S
Strengthening animal health management and biosecurity in ASEAN (AADCP, 2004-2006))	875	S
OIE South East Asia Foot and Mouth Disease Campaign (Australia, 1995-2007)	3,003	Н
Transboundary animal disease (TAD) control in the Greater Mekong Sub-region (FAO-ADB, 2005-2007)	1,000	Н
Strengthening aquatic animal health capacity and biosecurity in ASEAN (AADCP-RPS, 2005-2007)	272	S
Establishment of a reference laboratory for the Southeast Asian foot and mouth disease control program (AADCP-RPS, 2005-2007)	191	S
Animal disease control in Thailand and neighboring countries (JICA, 2001-2006)	2,186	Н
Cochran program-APHIS' import-export control system for live animals/animal products (USA, July2004)-Vietnam included	13	S
Improved diagnostic and control methodologies for livestock diseases in Lao PDR and Yunnan Province, PRC (ACIAR, 1997-2003)	113	Н
Plant health		
Support for control of coconut beetle (USA, 2005)	20	S
Capacity building in the surveillance and diagnosis of leafminer, whiteflies, thrips and mealybug pests in developing APEC economies for improved market access (APEC, 2006-2007)	129	S
Building biosecurity planning and surveillance capacity for APEC member economies (APEC, 2005)	102	S
China-ASEAN training course on plant pest risk and analysis (ASEAN, 2004)	75	S
Strengthening ASEAN plant health capacity (AADCP, 2005-2007)	1,115	S
Integrated control of mango insect pests using green ants as a key element (ACIAR, 2001-2005)	556	S
Management of phytophthora diseases of durian (ACIAR, 1998-2003)	305	S
Survey toolbox for plant pests - A practical manual for the surveillance of agricultural crops and forests (ACIAR, 2004-2005)	79	S
Phytosanitary assessment (NZ, 2001)	302	S
Phytosanitary capacity building in the Mekong (NZ, 2005-2009)	1,349	H
Cooperation for the improvement for phytosanitary capacity in Asian countries through capacity building (FAO-Japan, 2006-2009)	896	S
Development and application of integrated pest management in vegetable growing in south and southeast Asia, phase II (FAO-Norway, 2005-2007)	4,747	S
Plant disease diagnostic manual (ACIAR, 2006-2007)	24	S
FAS-funded training workshop for plant quarantine officials (USA, Oct2003) - Vietnam included	20	S
FAS and American Seed Trade Association training workshop on plant quarantine (USA, April2005) - Vietnam included	100	S
Avian influenza		

	Assistan	ice
Projects	Value (US\$'000)	Type
Diagnostic laboratory and surveillance network coordination for control and		
prevention of AI in Southeast Asia (FAO, 2004-2006)	394	Н
Emergency regional support for post AI rehabilitation (FAO, 2004-2005)	398	S
Emergency regional coordination assistance for the control of AI in Southeast Asia (FAO, 2004-2005)	384	Н
Support to and collaboration with FAO to control HPAI in Asia (FAO-Netherlands, 2005-2007)	495	Н
Emergency assistance for the control and prevention of AI (FAO-Multi, 2005-2007)	19	Н
Emergency assistance for the control and prevention of AI (FAO-Multi, 2006-2007)	3,697	Н
Emergency assistance for the control and prevention of AI (FAO-Sweden, 2006-2007)	6,600	Н
Japan-FAO joint emergency program for the control of AI in Cambodia, Indonesia, Lao PDR, Vietnam (FAO-Japan, 2004-2005)	1,610	Н
Surveillance and investigation of the epidemic situations in Southeast Asia (France,	,,,,,	
2006-2010)	7,784	S
Regional coordination of AI control and prevention in Asia (FAO-ADB, 2006-2008)	6,490	S
Prevention and control of AI in Asia and the Pacific (ADB, 2006-2008)	38,000	S
Regional communicable diseases control project (ADB, 2006-2010)	30,900	Н
Emergency regional support to address the outbreak of SARS and emerging diseases (ADB, 2004)	142	Н
Strengthening the control and prevention of HPAI and enhancing public awareness (FAO-Japan, 2006-2008)	10,794	S
Strengthening coordination network for diagnosis and surveillance for the control and prevention of HPAI in Southeast Asia (FAO-Japan, 2006-2009)	431	S
AI response program in countries affected by the epizooty (FAO-Multi, 2006-2008)	500	Н
The epidemiology, pathogenesis and control of HPAI in ducks in Indonesia and Vietnam (ACIAR, 2006-2009)	982	S
Control of HPAI in ASEAN countries (EC, 2006)	18,112	S
Promoting strategies for prevention and control of HPAI that focus on smallholder livelihoods and biodiversity (FAO-Germany, 2006-2009) - Cambodia included	1,928	
Awareness raising of AI (Australia-CARE, 2006)	948	S
General		
Trade law course for developing countries in Asia and the Pacific region – Introduction to the WTO for LDCs and countries in Accession; introduction to the multilateral trading system; market access and tariff negotiations; agreements on agriculture and SPS (WTO, 2003)	18	I
Coordination of APEC's capacity building response to DOHA (APEC, 2002)		S
Capacity and awareness building on import risk analysis for aquatic animals (APEC, 2001-2004)	116	T
Operation of national points of enquiry under the TBT and SPS agreements of the WTO (APEC, 2001-2003)	177	Т
APEC resource pack and symposiums for operation of national points of enquiry under the SPS and TBT agreements of the WTO (APEC, 2001-2002)	177	Т
Pilot for training in the application of risk analysis in conformity assessment of foods (APEC, 1999-2001)	51	Т
Regional training course for APEC/ASEAN countries on WTO Agreements on Agriculture/SPS (Japan, 2003)	5	I
US Codex office technical seminar on risk analysis (USA, 2002) CLV included	75	T
Applied training in the SPS Agreement (WTO, 2004)	71	T

	Assistan	ce
Projects	Value (US\$'000)	Type
Applied training in the SPS Agreement for Asian economies, including OIE training for veterinary officials (WTO, 2005)	140	Т
Application and implementation of the SPS agreement in selected Southeast Asian countries (WTO, 3/2003)	76	I
Regional WTO capacity building program (Australia, 2002-2006)	2,230	I
EC-ASEAN Standards and Quality Co-operation Programme (EC, 2003-2006)	8,482	S
SPS capacity building program (Australia, 2003-2004) -plant and animal health	3,516	S
Strengthening ASEAN standards and conformity assessment project (AADCP, 2004-2007)	1,691	S
APEC economic integration program (CIDA, 2003-2009) CLV included	7,692	T
Market access and trade facilitation support for Mekong Delta countries through strengthening institutional and national capacities related to standards, metrology,	1.605	a
testing and quality NORAD-funding countries (NORAD-UNIDO, 2003-2005)  Forthcoming projects (including projects starting in 2007)	1,695 Value (US\$'00	
Food safety	(03\$ 00	<u>U)</u>
Harmonization and implementation of ASEAN good agricultural practices (AADCP-RPS, 2007)		339
Strengthening of food inspection and certification for shrimp and bivalve molluscs in ASEAN member countries (AADCP-RPS, 2007)		338
Latest developments and challenges in food safety and opportunities for practical actions in the APEC region (APEC, 2007)		51
Animal health		
Understanding livestock movement and the risk of spread of transboundary animal diseases (ACIAR, 2007-2012)		219
Plant health		
Plant quarantine capacity development training (JICA, 2007-2009) - CLV		-
Avian influenza		
Sharing experiences with the management of the avian influenza H5N1 threat (APEC, 2007)		61
Implementation of APEC action plan on the prevention and response to avian and influenza pandemics: progress review and building capacity for future work (APEC, 2007)		75
General		
FAO regional training workshop "Integrated approach to food safety, animal health and plant health (biosecurity) and the assessment of biosecurity capacity needs (FAO-Norway, 2007)		500

Note: "I" – Information
"T" – Training
"S" – Soft infrastructure development projects
"H" – Hard infrastructure development projects

<sup>\*</sup>Table was derived from Appendix 2 of Ignacio (2007).

Annex 2: Strategic Action Plan for ASEAN Co-operation in Food, Agriculture and Forestry – main SPS action (2005-10)

Harmonization of phytosanitary measures for crop products	Compilation and comparative analysis of endemic pest lists for selected crops.
Enhancement of compliance to WTO/SPS	Development of cross-border management procedures for rice and potato
requirements for market access and competitiveness	Revision of quarantine/ endemic pest lists through surveys according to ISPM standards.
Strengthening national frameworks for Pest Risk	Rehabilitation/ development of biological collections and databases to underpin pest lists.
Analysis (PRA).  Biosecurity planning	Capacity building and ASEAN cooperation in pest diagnostics and identifications. Regional protocols for pest surveys.
Harmonization of pesticide maximum residue limits	Capacity building in PRA.
(MRLs)	Development of shared database of pest information and IRAs on exotic pest threats.
Establishment of ASEAN Genetically Modified Food (GMF) Testing Network  ASEAN Standards for Horticultural Produce.  ASEAN-Pesticide Database Network  Identification of improved production/ post-harvest technologies available in the region and elsewhere for possible adoption in ASEAN Member Countries	Compilation of an ASEAN list of common exotic pest threats and potential invasive alien species, including comprehensive biological data and intervention strategies.
	ASEAN cooperation in contingency planning incursion management and emergency response procedures.
	Harmonization of MRLs of commonly used pesticides for vegetables that are widely traded between ASEAN Member Countries.
	Establishment of ASEAN Harmonized Standards (Mango, Pineapple, Durian, Papaya, Pummelo, Rambutan and Mandarin
Establishment of ASEAN –AVRDC Regional Network for Vegetable Research and Development.	Compilation of information on the national pesticide regulations
	Common system for accessing database through electronic media
•	Establishment of database on a range of aspects related to facilitation of control and management of pesticide
	Enhancement of compliance to WTO/SPS requirements for market access and competitiveness  Strengthening national frameworks for Pest Risk Analysis (PRA).  Biosecurity planning  Harmonization of pesticide maximum residue limits (MRLs)  Establishment of ASEAN Genetically Modified Food (GMF) Testing Network  ASEAN Standards for Horticultural Produce.  ASEAN-Pesticide Database Network  Identification of improved production/ post-harvest technologies available in the region and elsewhere for possible adoption in ASEAN Member Countries  Establishment of ASEAN –AVRDC Regional

Sector	Overview	Specific actions
Fisheries	Standardization of Quality control measures and processing techniques for fish and	Establishment of the ASEAN Network on Cultured Shrimp Inspection Authority
	fisheries products.	Assuring Quality and Safety in Shrimp Aquaculture Production and Trade
	Standardization and development of good aquaculture practices, particularly for shrimps. (2005-2010)	Encourage and educate the fishery stakeholders to enable production of fishery products through a Code of Conduct measures issued by FAO to promote the development of "Made in ASEAN" products and services.
	Harmonization of fisheries SPS measures among ASEAN Member Countries.(2005-2010)	Comply with Good Aquaculture Practices (GAP) in order to produce a better quality of aquaculture products that can compete in the international markets as an ASEAN Product
		Adopt the WTO Agreement on Sanitary and Phyto-Sanitary Measures and develop implementation guidelines appropriate for ASEAN
		Comply with Hazards Analysis Critical Control Point standard unanimously among ASEAN countries that have been approved by WHO and FAO
		Establish MRA for selected fisheries products.

Sector	Overview	Specific actions
Livestock	Establishment of an accreditation scheme for livestock and livestock products that are widely traded between ASEAN Member Countries.  Strengthening animal diseases control programme among ASEAN Member Countries.  Facilitation of the intra-ASEAN trade in animal vaccines.	Develop and finalise criteria for accreditation of livestock and product establishments (Ducks for slaughter, Dairy Cattle, Duck eggs, Horses for sporting event, Porcine semen and embryo, Bovine semen and embryo, Sheep and goat for Breeding and Slaughter)  Control and eradication of economically important animal diseases: FMD; Avian-flu; Classical Swine Fever.  Establishment of Foot and Mouth (FMD) Diseases Free Zones in ASEAN Member Countries.  Establishment of Animal Health Trust Fund  ASEAN Mekong Basin Livestock Development Cooperation  Mekong Basin Animal Quarantine Network  Develop equivalent animal disease diagnostic technique amongst ASEAN Member Countries.  Accreditation of animal vaccine testing laboratories in ASEAN Member Countries.  ASEAN Register of Animal Vaccines.  ASEAN Standard Requirements for Animal Vaccines.
Training and Extension	Establishment and maintaining of an information network for ASEAN Member Countries in agricultural and agro-forestry technology transfer, training and extension programmes.	Establishment and operationalisation of the ASEAN IPM Knowledge Network
Internationa I co-	Coordinating and strengthening joint	Developing ASEAN positions in international and regional fora and organizations such as

operation	positions on	WTO, FAO, APEC, CODEX, OIE, IPPC, and ASEAN Dialogue Partners.