SPS Balance Sheet for Lao PDR

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 AFTA ASEAN Free Trade Area

AHIF Avian and Human Influenza Facility

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

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
DOLF Department of Livestock and Fisheries
DTIS Diagnostic Trade Integration Studies

EC European Commission
EU European Union

FAO Food and Agriculture Organization of the United Nations

FDD Food and Drug Department

FDQCC Food and Drug Quality Control Center

FMD Foot and mouth disease
GAP Good agricultural practice
GDP Gross Domestic Product
GHP Good hygienic practice
GMP Good manufacturing practice

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

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

Viet Nam

GTZ German Technical Cooperation

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

IPPC International Plant Protection Convention

JICA Japan International Cooperation Agency

Lao PDR Lao People's Democratic Republic

LDC least developed country

LNCCI LAO National Chamber of Commerce and Industry

MAF Ministry of Agriculture and Forestry

MOH Ministry of Health

MOIC Ministry of Industry and Commerce

MPDF Mekong Private Sector Development Facility

Multi multi-country

NAHC National Animal Health Center MUTRAP Multilateral trade assistance project

NORAD Norwegian Agency for Development Cooperation

NPPO National plant protection organization
NSTA National Science and Technology Authority

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 PQD Plant Quarantine Division PRA Pest risk assessment

RPS Regional partnerships scheme

SEAFMD Southeast Asian Foot and Mouth Disease Control Programme

SME Second Small and Medium-Sized Enterprise SMTQ Standards, metrology, testing and quality

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
TDF Trade Development Facility

UNIDO United Nations Industrial Development Organization

WB World Bank

WHO World Health Organization
WTO World Trade Organization

Balance sheet of SPS capacity building needs

1. Introduction

- 1. The objective of this STDF research work is to 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), the World Bank and OIE as well as other relevant studies and reports. It is not a new capacity evaluation, but rather an attempt to consolidate the results of previous studies.
- 2. This report presents a balance sheet of needs and supply of technical assistance in the SPS area for Lao PDR. Similar balance sheets are being developed for Cambodia and Viet Nam. The aim of the report is to strengthen the supply of 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.

2. Overview of SPS needs

- 3. In its National Growth and Poverty Eradication Strategy, the Government of Lao PDR set out ambitious poverty reduction goals: eradicating mass poverty by 2010, eliminating poverty and tripling per capita income by 2020. Key to that success is sustaining present economic growth rates. Agricultural development will play a role in achieving this target. Agriculture accounts for just under half of GDP and remains the main source of income and livelihood. Agriculture has high growth potential and strong growth in the sector has been reported over the past decade. Nevertheless, various food safety and agricultural health issues act as a brake on agricultural production and market access, and impact negatively on the health of the domestic population.
- 4. As a landlocked Least Developed Country (LDC), Lao PDR faces many fundamental challenges, including poor infrastructure, nascent market institutions, an embryonic private sector and a public sector with little experience of managing a modernizing market economy. Given the dependence on agriculture as a source of income and livelihoods, SPS issues were identified as high priority in the Integrated Framework (IF) Diagnostic Trade Integration Study (DTIS) validated in September 2006. WTO accession is also proving a spur to action in the SPS area, particularly given the decision to accelerate the current drive to membership.
- 5. According to health statistics reported by the World Bank, food-borne disease is the major cause of morbidity. The UN World Food Programme estimates that every second child in rural parts of Lao PDR (approximately 255,000 children) is chronically malnourished. Malnutrition and food-borne diseases often work in combination and diarrhoea-related diseases commonly associated with food-borne contaminants are one of the leading causes of mortality, particularly among children. Dysentery, typhoid, hepatitis A, E.coli, salmonella and vibrio

cholera are all hazards in the food supply. A particular issue relates to intestinal helminth and fluke infections related to consumption of raw or undercooked fish.

- Animal husbandry of buffalo, pigs, poultry and cattle is a growing sector, but hampered 6. by a variety of different diseases. Anthrax, haemorrhagic septicaemia, black leg disease, classical swine fever (CSF), Newcastle disease and various parasites all inflict production losses. Lao PDR is one of seven Southeast Asian countries where foot and mouth disease (FMD) is endemic. In January 2004, highly pathogenic avian influenza (HPAI) was also reported. Since that time, a further ten outbreaks of HPAI have been reported in poultry and a total of two human fatalities have occurred. Control of animal diseases is hampered by Lao PDR's position as a major transit corridor for livestock trade between Cambodia, China, Thailand and Viet Nam and the impracticality of implementing quarantine measures at frontiers given porous borders and scarce human and budgetary resources to run these facilities. Efforts to control diseases through vaccination are also hampered by difficulties in establishing movement controls, the general weakness of national veterinary services and the cost of instituting such campaigns. The animal disease status of Lao PDR severely limits its opportunities for formal livestock and meat trade. In practice, what trade that does take place is mostly on an informal basis through porous border regions.
- 7. Food and water-borne diseases, the prevalence of contaminants in foodstuffs and misuse of agro-chemicals represent a threat not only to domestic consumers, but also to export opportunities. At present, these are latent threats. Fish exports are a good example. At present, regional exports of fish are small or take place on an informal basis. Expansion of Laotian fish exports to higher value raw fish products will be increasingly called into question or subjected to costly sub-deep freezing treatments if the general sanitary (and in particular the trematode) situation stays the same. Thus the current sanitary situation acts as a potential brake on future growth.
- 8. Overall, Lao PDR lacks a functioning SPS management system. It has insufficient ability to assess the situation on plant pests, animal diseases and food hazards and to provide basic data on these hazards for trading partners. It has very little ability to control agro-chemicals and imported genetic material. The components of the SPS management system regulatory and institutional frameworks, standards, diagnostic capacity, surveillance and inspection and quarantine still have major gaps and are not sufficiently connected. This forms a threat to sustainable growth of exports and imports. While significant potential exists to promote production of high-value horticultural products and export-oriented agriculture, this is seriously constrained by a general lack of awareness among producers, government and the private sector about good agricultural practices (GAPs), good hygiene practices (GHPs), good manufacturing practices (GMPs) and quality assurance schemes (e.g. HACCP), and inadequate capacity to implement such schemes. Moreover, the food safety situation in the country is very poor, and productivity of crops and livestock is negatively affected by insufficiently controlled pests and diseases.
- 9. An absolute priority is to get the basics of the system right. This requires not only additional donor support, but raising awareness among political leaders that more government resources are needed for building and operating an effective SPS system. Integration into the global trading system through WTO membership and implementation of ASEAN Free Trade Area (AFTA) commitments represent an opportunity to create the necessary awareness.
- 10. In 2006, the Government of Lao PDR endorsed the World Bank report "Lao PDR Sanitary and Phytosanitary Standards Management: Action Plan for Capacity Building". This

action plan evolved from the IF DTIS and contained a plan of investment to upgrade SPS management. The report recommended a proactive approach to the country's implementation of SPS measures to comply with WTO and AFTA requirements, as well as to more effectively participate in and benefit from international trade within and outside the region. The report further recognized the extent of needs vis-à-vis the limited resources, and identified specific priority areas that included legislation and surveillance information.

- 11. The total estimated costs of the recommended actions for the public sector was US\$7.7million, spread over the first three years. An additional annual cost of US\$1 million was assumed for operational costs, maintenance and depreciation. The Bank estimated that internal rates of return on these investments would range between 21-25 percent with benefits occurring through:
 - increased exports through improved market access;
 - reduced risks of non-compliance with international requirements and so less risk of trade bans in foreign markets;
 - lower agricultural production losses by improved prevention of damage from animal and plant pests and diseases;
 - lower losses of productive days for workers through better surveillance, control and prevention of food-borne hazards; and
 - lower medical costs from reduced mortality and reduced suffering from food related health hazards.

3. Overview of ongoing and planned donor assistance

- 12. Donor assistance to Lao PDR in the SPS area has grown over the past five years. In the period 2001-2006, Lao PDR benefited from fourteen country projects (valued at about US\$24 million). Table 1 below gives an overview of SPS assistance received in the period 2001-2006.
- 13. Significant donor support has been provided for animal disease control, led by efforts to control HPAI. Further donor assistance can be expected in the area of HPAI; at the end of 2006 some \$27 million in committed funds for HPAI had not yet been disbursed. A detailed overview of donor SPS support to Lao PDR is provided in Annex 3. Direct assistance includes EC support to the livestock sector, avian influenza projects by the FAO and World Bank, as well as EC MUTRAP assistance for WTO accession.

Table 1. Direct SPS assistance received by Lao PDR, 2001-2006

Number of projects		Value of Projects	(US\$'000)
Food safety	1	Food safety	750
Animal health	4	Animal health	7,056
Plant health	0	Plant health	0
HPAI	4	HPAI	12,295
General	5	General	3,815
Total	14	Total	23,916

14. In the Southeast Asia region, a large proportion of technical assistance for SPS has been carried out on a "multi-country" basis. As one of the more recent members of ASEAN, Lao PDR has been eligible to benefit from a wide range of projects totalling approximately US\$200 million.

Table 2. 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

- 15. Noteworthy multi-country projects include the NZAID/FAO/WHO food safety project, the Southeast Asian Foot and Mouth Disease Control Programme (SEAFMD), NZAID's Phytosanitary Capacity Building for the countries of Cambodia, Lao PDR and Viet Nam and various donor projects on avian influenza.
- 16. Lao PDR is a member of the IF. In September 2006, a National Workshop took place to validate the IF DTIS. SPS constraints figured highly in the DTIS. To help turn the DTIS priority areas into action, a multi-donor trust fund, the Trade Development Facility (TDF), has been established. This trust fund is managed by the World Bank and includes an SPS component that consists primarily of strengthening the SPS institutional, legal and regulatory framework, promoting the private sector and developing risk-based SPS management. Further funding is expected to be added to the TDF in coming years. Additional financing should also become available for Lao PDR through the enhancement of the IF. An overview of the planned TDF support is provided in Table 3.
- 17. Another area where Lao PDR can expect further assistance is in relation to implementation of the Greater Mekong Subregion (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. Implementation of this agreement requires movement away from current mandatory inspection of consignments to SPS controls based on surveillance and risk assessment. National inspection services are currently unable to design and implement such risk-based controls. To address this situation, the World Bank and ADB are considering a lending project with a SPS component to assist implementation of the Cross-Border Transport Agreement.
- 18. In the livestock sector, further donor support can be expected to be provided for animal disease control. Most of this assistance will be directed to the on-going fight against HPAI. One particular challenge will be to ensure that efforts to control endemic animal diseases such as CSF, FMD and Newcastle Disease are not marginalized as a result of the concentration on HPAI.
- 19. One particular constraint is the low absorptive capacity of Lao PDR for technical cooperation. The establishment and maintenance of a fully functioning SPS system will require

long-term commitment from both the Government and donor agencies. In the World Bank Action Plan, a strong argument was made that due to the limited human and financial resources available, it was important that additional funding should be selectively applied, include efforts by the private sector, and be effectively prioritized. It was recommended that major investments in diagnostics, inspection and surveillance should be sequenced and delayed for a second phase of capacity building.

Table 3. The SPS-TBT and related private sector components of the Trade Development Facility

Sub-component	Budget	Objectives
1. Institutional, legal	700,000	- improve institutional alignment between institutions with SPS
and regulatory reform		responsibilities
and adjustments for		- assist in drafting amended laws and regulations
SPS		- amend border procedures
		- support consensus building, training and dissemination
2. Risk-based policies	400,000	- create risk evaluation (assessment) capacity in support of SPS
and measures		policy making
		- provide on the job training and training abroad
		- carry out a program of risk evaluations for support of drafting
		regulations and preparation of policy reform
3. SPS sub-Project	500,000	Under the policy guidance of the SPS Working Group and the
Implementation Unit		administrative guidance of the TDF-NIU:
		- prepare and implement annual and quarterly plans
		- draft TORs, conduct procurement and contracting
		- organize training activities
		- cooperate with all SPS projects
	155000	- advise the Working Group on coordination issues
4. Institutional, legal	166,000	- assess the institutional, legal and regulatory framework for TBT
and regulatory reform		with regard to WTO compliance and effectiveness in enabling a
and adjustments for		market economic system and make a plan of action for drafting
TBT		legal texts.
Total SPS/TBT	1,766,000	
Strengthening the role	100,000	- Fostering and strengthening private sector associations that have
of the private sector in		roles to play in aspects of SPS management;
managing SPS		- Mandating and supporting private sector entities, under proper
		regulation and supervision from Government, to assume active
		responsibility in the implementation of aspects of SPS
		management;
		- Introduction and improvement of quality and safety management
		systems;
		- (support for) Enterprises that buy produce from small-scale farms
		and make efforts to upgrade quality and safety of their products for
		better market access can receive time-bound support for (i) training
		of their own staff that assist farmers; and (ii) for training activities
		provided to small farmers and farmers groups.

Source: TDF Project Appraisal Document

4. Overview of outstanding SPS needs

- 20. Although SPS assistance has increased over the past five years, fundamental constraints remain. In essence, the components of the SPS management system institutional capability, regulations and standards, diagnostic capacity, surveillance, inspection and quarantine are still not in place. This is particularly the case in the food safety and plant health sectors which have received relatively less focus in donor attention. A further need exists to promote the adoption of GAPs, GHPs, GMPs and quality assurance schemes among exporters as a means to enhance access to international markets, particularly for high-value horticultural products. Furthermore, there are still major gaps in the capability to collect and evaluate basic data on pests, diseases and food hazards and to conduct basic risk management.
- 21. From the gap analysis of technical cooperation needs and the supply of technical cooperation, the following priorities for capacity building ¹ emerge as not currently being addressed through on-going or planned programmes:
 - Assistance in the accelerated drive for WTO membership. Information and training has been provided on the WTO SPS Agreement to senior officials in the Ministries of Industry and Commerce (MOIC), Agriculture and Forestry (MAF), Health (MOH) and the National Science and Technology Authority (NSTA) in preparation for WTO accession. However, among middle rank managers and specialists in these ministries and in the provinces (who are responsible for SPS implementation) there is still little awareness about the implications of WTO membership. It is recommended that a major in-country training event for middle-level management and specialists in MAF, MOH, NSTA and provinces be provided on WTO accession. This training should build on the Cambodian and Vietnamese experiences of accession. As part of this training, focused help should be given to make the SPS/TBT Enquiry Point operational.
 - Efforts to control endemic animal diseases have no "easy fix". In addition to the economic losses in terms of animal productivity and market access forgone, the continued prevalence of these diseases may create difficulties in implementing aspects of the GMS Cross-Border Transport Agreement, particularly in respect of the facilitation of transit trade. It would appear appropriate thus that this issue be addressed in forthcoming support projects. Addressing the underlying disease situation will require sustained long-term investment and technical assistance programmes designed at a regional level. In this regard, the SEAFMD programme is a model that deserves further study for possible broader application for other diseases.
 - Assistance to increase awareness about, and facilitate the implementation of relevant international standards, GAPs, GHPs and GMPs. To complement the above support for WTO membership, assistance is also required to ensure that government departments, producers and the domestic private sector are knowledgeable about national, international and regional regulations and standards related to food safety and quality, and that the required institutional framework and human resources are in place to facilitate the effective application of good agricultural, hygiene and manufacturing practices.

listed items can cover many detailed activities.

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¹ Items listed here and in the balance sheet have already received support in the past. The criterion for being included here is that substantially more work is needed for which funding is not available yet. In describing gaps a level of aggregation is being pursued that limits the number of items listed. However, the

- Assistance in surveillance of food-borne hazards, pests and diseases. A project is required that would help with the design and implementation of surveillance and data collection on the most important pests, diseases and food hazards, assist in the evaluation and sharing of data, in particular with trading partners. A second stage to such a project would focus on using the data to establish risk-based management systems for food safety, plant health and animal health risks.
- Assistance in training and development of academic/vocational training in the SPS area. Training of staff and specialists is crucial for building a viable SPS system. The current skilled labour shortage is also a constraint which reduces the absorptive capacity of the country for SPS technical cooperation. In part this constraint is caused by an absence of academic and vocational training opportunities in Lao PDR. Thus as part of a training programme for Laotian officials, consideration should be given to the development of academic and vocational training courses in the SPS area. This would help in delivering training opportunities which are in-country and on-the-job.

SPS Balance sheet: Lao PDR²

Overview of SPS priority action areas				Priorities
Greater awareness and information on WTO, SPS, Codex, IPPC a to WTO accession, including capacity for SPS/TBT Enquiry Poin		specialists in MAF, MOH and pro	ovincial government related	1
Capacity for data collection on pests, diseases and food hazards and risk evaluation needed to better manage risks in food safety, plant and animal health				1
Needs assessment of human resource development – identify skill	Is needs and areas where training is ne	eeded		1
Support for promoting GHP and GMP among SMEs in selected for	ood industries.			1
Development of academic/vocational training in the SPS area				1
Overall needs assessment for upgrading of lab capacities				2
Overall increased capacity for enforcement				3
Status Needs Assistance Gaps				
Specific market access constraints New requirements on providing data on pests and risks for existing and new imports of plant products by neighbouring countries (Viet Nam and Thailand) provide a threat for exports from Lao PDR.	Basic capacity to collect pest data and evaluation of risks that can be used for (1) better risk management by national authorities in exports and imports, and (2) compliance with data provision requirements by trading partners.	NZAID provides initial support for pest data collection on a few pilot products Lao PDR Trade Development Facility (TDF) will provide support for establishing capacity for risk management	Basic capacity for data collection and risk evaluation needed for better managing plant health risks for main imports and exports	1

² See notes for clarification at the end of the table.

Status	Needs	Assistance	Gaps	Priorities
Institutional structures, clarity and capacity				
SPS institutions				
Ministry of Agriculture and Forestry (MAF) – food safety of unprocessed food from production to retail markets. Plant Quarantine Division (PQD) – plant health. PQD – National Plant Protection Organization (NPPO) contact	No legislation that provides clear delineation of responsibilities or identifies areas of collaboration on the management food safety risks	Lao PDR Trade Development Facility (TDF) – review of institutional and legislative framework; drafting of legislations and related	Lack of awareness among political leaders that more resources are needed for building up an effective SPS system	1
PQD – National Plant Protection Organization (NPPO) contact office and IPPC Secretariat. Department of Livestock and Fisheries (DOLF), National Animal Health Center (NAHC) – animal (including aquatic) health, unprocessed animal products, border controls and quarantine; safety and control of animal feed and vet drugs, import of breeding stock, animal movement control, vet certification and relevant lab tests. Food and Drug Department (FDD) under MOH – food safety management; quality assurance of imported and domestic food products; Codex contact point. Food and Drug Quality Control Center (FDQCC) under MOH – analysis of domestic and imported foods. Foreign Trade Policy Department under the Ministry of Industry and Commerce (MOIC) – coordinating WTO accession. National Science and Technology Authority (NSTA) (successor of STEA) – national standards development body; SPS/TBT Enquiry Point. Food and Drug Administration (FDA) – chaired by MOH, includes MOH, MAF, MOIC, NSTA, Ministry of Finance, and Ministry of Internal Affairs.	Institutional and legislative issue on decentralization that may pose potential (inconsistent or weak) implementation problems Review and update role and function of FDA to be in line with food law Lack of awareness among political leaders that more resources are needed for building up an effective SPS system Workshop for review of food control, management responsibilities and collaboration among various agencies related to implementation of the food law Overall lack of skilled human resource in the SPS area	negisiations and related capacity building NZ/FAO/WHO food safety management – food safety action plan and alignment between agencies.	Development of academic/vocational training in the SPS area	1

Status	Needs	Assistance	Gaps	Priorities
Public-private interaction Mostly small-scale companies; still a number of state-owned enterprises. Limited awareness, knowledge and skills among government, private sector and producers in GAPs, GHPs, GMPs, etc. HACCP implemented by a few agribusinesses that export to foreign markets.	Strengthening of private associations More assistance to promote the application of GHPs, GMPs, etc.	TDF FAO/NZAID – GMP in selected industries UNIDO – assistance to LNCCI ADB SME development GTZ SME development MPDF SME development	Support for promoting GHP and GMP among SMEs in selected food industries.	1
International participation ASEAN, ACMECS, Codex, OIE, IPPC, GMS. WTO (applied for accession). Codex contact point – FDD of MOH. SPS/TBT Enquiry Point – NSTA.	SPS/TBT Enquiry Point was placed at NSTA but is not yet fully functional	EU MUTRAP for Enquiry Point ADB-GMS coordination among CLV on SPS issues ACMEC coordination among CLV on SPS issues	Capacity for SPS/TBT Enquiry Point to make it functional	1
Animal health (aquatic and terrestrial) Awareness There is growing understanding of SPS issues among senior managers in MAF and MOIC.	Greater awareness and information for middle management and specialists in MAF and provincial government about WTO, SPS, etc. related to WTO accession Greater awareness among farmers and consumers of sanitary risks	AusAID SPSCBP – awareness of senior officials on SPS-trade linkages FAO HPAI project WB – SPS action plan	Greater awareness and information for middle management and specialists in MAF and provincial government about WTO, SPS, etc. related to WTO accession Greater awareness among farmers and consumers of sanitary risks	1

Status	Needs	Assistance	Gaps	Priorities
Animal health (aquatic and terrestrial)				
Regulation Draft Veterinary Law in parliament planned to be adopted this year. Regulations needed to implement law.	Legislations with provisions on enforcement Improved institutional framework for quarantine management that is riskbased	FAO HPAI project Legal and regulatory issues and related capacity building being addressed by TDF	No further gap has been identified.	
Enforcement Inspection and certification. DOLF has supervisory responsibility for 10 border check points; technical supervisory responsibility for abattoir and slaughter slab inspections but provincial and district offices have operating responsibility and issue certificates.	Increased capacity to do surveillance for other animal diseases Establish databases on	ADB/IFAD Northern region sustainable livelihoods through livestock development project – animal health management	Design of surveillance programmes and establishment of data bases (including training)	1
Diagnostic capacity. NAHC has supervisory responsibility for central and provincial disease diagnostic labs. Performs analysis of animal parasites. Surveillance. There is mix of active and passive surveillance,	animal health situation Increased capacity to do risk evaluation Increased diagnostic capacity	FAO HPAI project – vet structure, diagnostic, surveillance (reporting), emergency response	Needs assessment of human resource development – identify skills needs and areas where training is needed	1
but results not yet in database due to lack of qualifications among staff. There is a reporting system for diseases from grassroots level involving trained village vet workers. Certain diseases (AI and FMD) have active surveillance systems supported by donor assistance.	Functional quarantine management system	animal diseases, some diagnostic capacity SEAFMD on surveillance for FMD, establishment of FMD-free zones Various HPAI projects, surveillance, diagnostic capacity AusAID SPSCBP, training in risk management, manual on diseases management	There is overall need for increased capacity for various areas of enforcement (surveillance, diseases diagnosis and border inspection), however, this should be based on prior risk evaluations to determine the exact needs.	3
		JICA animal disease control project, some diagnostic capacity		

EC Livestock Support, animal health management	
TDF risk evaluation	

Status	Needs	Assistance	Gaps	Priorities
Plant health				
Awareness There is growing understanding of SPS issues among senior managers in MAF and MOIC.	Greater awareness and information for senior middle management and specialists in MAF and provincial government Greater awareness among enterprises and farmers about phytosanitary risks	AusAID SPSCBP – awareness of senior officials on SPS-trade linkages NZAID PCBP- awareness among senior officials of plant quarantine systems WB – SPS action plan, TDF	Greater awareness and information for middle management and specialists in MAF and provincial government about WTO, SPS, etc. related to WTO accession Greater awareness among enterprises and farmers about phytosanitary risks	1
Regulation A number of regulations on plant quarantine. MAF has regulations on pesticide management.	National law on plant quarantine Legislation to grant search and seizure power to PQD	TDF legal component NZAID – review of phytosanitary legislation	No further gap has been identified.	
Enforcement Border control. PQD issues phyto certificates and import permits at international airport and 3 land border posts in Vientiane capital. There is a computerized certification process. Phyto certificates and import permits at the provincial land border posts are issued by the 18 Provincial Agricultural and Forestry Offices with assistance of District Offices. Search or seizure of "risk" goods done by Customs officials.	Overall lack of sufficient numbers of trained personnel Inspection Need for information exchange between PQD and provincial offices. Lack of skilled inspectors.	NZAID PCBP – plant health structure, pest diagnosis, surveillance, database, PRA AADCP plant health projects JICA phytosanitary project	Needs assessment of human resource development – identify skills needs and areas where training is needed Design and implementation of surveillance programmes for main	2
Surveillance. PPC with the Provincial Agricultural Offices does limited surveillance and pest categorization. No long-term	Surveillance and monitoring There is very limited capacity to reduce risk of pest introduction	TDF risk evaluation	exports and imports and establishment of databases	

programme. No systematic monitoring of	pesticides market. or early detec	ction. UNIDO SMTQ – diag	gnostic
Human resources are the main constraint.		capacity	

Status	Needs	Assistance	Gaps	Priorities
Plant health				
Enforcement (continuation) Diagnosis. PPC lab serves as reference lab for plant quarantine.	Diagnosis Overall very limited capacity to undertake pest diagnosis due to lack of skilled human resources, procedures and labs Risk analysis No capacity or competencies for risk management		There is overall need for increased capacity for various areas of enforcement (pest and disease diagnosis, and border inspection), however, this should be based on prior risk evaluations to determine the exact needs.	3
Food safety				
Awareness There is limited understanding of SPS issues among senior MOH and provincial officials. Occasional courses for MOH staff on food safety.	Workshop on WTO, SPS and Codex among senior MOH and provincial officials Training on SPS for food regulators	NZ/FAO/WHO food safety management – garner ministerial-level support; awareness for rural communities; training of trainers	Provide information/ training courses and workshops for senior MOH and provincial officials on WTO, SPS, and Codex, related to WTO accession	1
	Raise awareness of producers and consumers on SPS issues Insufficient awareness in National Assembly about international good practice in food legislation	IPM projects educate farmers on pesticide use WB – SPS action plan	Greater awareness and information for food producers and consumers	1

Status	Needs	Assistance	Gaps	Priorities
Food safety				
Regulation Food Law has been enacted but lacks provision for enforcement and does not address roles of other agencies.	Develop implementing regulations of Food Law to include: - international trade - registration of both food importing enterprises and local food processors - food inspection - food labeling - use of food additives - control of agricultural inputs Adoption of relevant Codex standards	TDF legal and regulatory component NZ/FAO/WHO food safety management	Mechanisms for cooperation between MOH and MAF to control safety of agricultural inputs in domestic markets	2
 Enforcement Surveillance. National Center for Laboratory and Epidemiology (NCLE) coordinates disease surveillance. No active surveillance programme on food safety. No comprehensive databases on food-borne hazards. Diagnosis. Lab services provided by NCLE and FDQCC. FDQCC does physical, chemical, microbiological analyses of food samples. For imported foods, manufacturer's analyses are often accepted because of the limited capacity to do analysis. Inspection and certification. FDD/FDDQC issue certificates of food analysis for food processors. Border inspection on food safety was abolished by PM decree; 	Surveillance Establish programme at central and provincial level for surveillance of food-borne diseases Train staff on the procedures of food monitoring and food surveillance Provide tool and material (test kits, form check list) for conducting monitoring and surveillance Diagnosis Strengthening analytical capacity	NZ/FAO/WHO food safety management – diagnosis, surveillance, inspection, national plan for pesticide residue testing UNIDO SMTQ – diagnostic capacity UNIDO phase II, agro- processing AADCP – ASEAN GAP FAO IPM project	Establish priority lists of high, medium and low risk foodstuffs, agricultural inputs and food-borne diseases for targeting surveillance and inspections Establish a check list/guidelines for monitoring of drinking water and other priority kinds of basic food products	1
although it was ineffective its abolition shows the void in food safety management since no better alternatives have been	on microbiology, and chemical (pesticide residue) analysis	1 AO II WI project	Needs assessment of human resource development –	1

developed.	Preparation for ISO 17025 for microbiological and chemical analysis	identify skills needs and areas where training is needed
		Design of active food safety surveillance programmes and establishment of databases

Status	Needs	Assistance	Gaps	Priorities
Food safety (continuation)				
	Diagnosis Strengthen the (qualitative) capabilities for analysis (minilabs) in five big provinces to monitor specific health concerns, such as Formalin, Borax, sodium hydrosulfite, food colours, pesticide residues, coliforms Inspection Develop food inspection manual for inspectors Procure equipment and materials for inspection Control of imported food Improve post market monitoring		There is overall need for increased capacity for various areas of enforcement (diagnostic capacity and inspection), however, this should be based on prior risk evaluations to determine the exact needs.	3
	and surveillance of imported food Inputs Virtually no control on imports,			
	marketing and use of agricultural inputs, including			

feed, pesticides and veterinary		
drugs		

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. The gaps have been discussed and verified in interviews and meetings.

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

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.

FAO/WHO 2004. "Country overview on food safety (People's Democratic Republic of Laos)" Conference room document 18. FAO/WHO Regional Conference on Food Safety for Asia and the Pacific. 24-27 May, 2004. Seremban, Malaysia.

Ignacio, L. 2007. "Overview of SPS-related assistance for Cambodia, Lao People's Democratic Republic and Vietnam (2001-06)." Paper prepared for the Standards Trade Development Facility workshop in the Aid for Trade for Asia event, Manila, September 19-20, 2007.

Van der Meer. 2007. "SPS Capacity Building Needs Assessments and Compliance Studies, 2001-2006, Cambodia, Lao PDR and Vietnam." Paper prepared for the Standards Trade Development Facility workshop in the Aid for Trade for Asia event, Manila, September 19-20, 2007.

World Bank. 2007. Lao People's Democratic Republic Sanitary and Phytosanitary Standards Management. The World Bank. Washington, D.C.

Annex 1: Working program, Lao PDR, 18–27 February 2008

Date	Meetings
18 February (Monday)	Mr. Phaydy Phiaxaysarakham, Director Plant Quarantine Division, DOA, MAF
	Mrs. Sivilay Naphayvong, Director Food and Drug Department, MOH
10 February (Tuesday)	Dr. Sounthone Vongthilath, Chief Veterinary Division, DOA, MAF
19 February (Tuesday)	Mme. Banesaty Thepavong, Deputy Director General Mr. Khuanchay Iemsouthi Foreign Trade Policy Department, MOIC
	Mr. Serge Verniau, Representative of FAO, Ms Mirva Ek
	Mr. Phaydy Phiaxaysarakham, Plant Quarantine Division
20 February	Mr. Xaypladeth Choulamany, Deputy Director General Department of Planning, MAF
(Wednesday)	Ms. Miki Matsuura and Mr. Furukawa Midori at JICE office at 11:00 am on Wednesday 20th Feb.
	Savannakhet Produce Company, Savannakhet Province
22 February (Friday)	Ms. Ratsamay Khenpanavanh, Director Khenphanavanh Company, Savannakhet Province
	Dr. Sounthone Vongthilath, Veterinary Division
	Dr. Sisaliao Savengsuksa, Lao Farmers' Products
25 February (Monday)	Mr. Eric Sisombath, Sinouk Café Lao
	Mr. Soumana Choulamany, Director Intellectual Property, Standardization and Metrology Department, NSTA, SPS/TBT Enquiry Point
00 5-1	Lao Arrouny Corporation Mr. Khamsavang Mingboubpha, Director
26 February (Tuesday)	Lao Agro Industry Co.Ltd. Mr. Boonchai Punyalerdchai, Director Management
	Ms. Khankeo Moonvong, EC
27 February	Mr. Warren Hoye, Program Manager, AusAID Ms. Phanthakone Champasith, Program Officer, AusAID
(Wednesday)	Mr. Eric Sisombath, Sinouk Café Lao
	Mrs. Sivilay Naphayvong, Food and Drug Department Mr. Khuanchay Iemsouthi, Foreign Trade Policy Department

Annex 2: List of People Interviewed

- Mr. Phaydy Phiaxaysarakham, Director, Plant Quarantine Division, Department of Agriculture, Ministry of Agriculture and Forestry (MAF)
- Mrs. Sivilay Naphayvong, Director, Food and Drug Department, Ministry of Health (MOH)
- Dr. Sounthone Vongthilath, Chief, Veterinary Division, MAF
- Mme. Banesaty Thepavong, Deputy Director General, Foreign Trade Policy Department, Ministry of Industry and Commerce (MOIC)
- Mr. Soumana Choulamany, Director, Intellectual Property, Standardization and Metrology Department, NSTA, SPS/TBT Enquiry Point
- Mr. Khuanchay Iemsouthi, Foreign Trade Policy Department, MOIC
- Mr. Xaypladeth Choulamany, Deputy Director General, Department of Planning, MAF
- Ms. Ratsamay Khenpanavanh, Director, Khenphanavanh Company, Savannakhet Province
- Dr. Sisaliao Svengsuksa, Co-President, Lao Farmers' Products
- Mr. Thou Bountarath, Director, Lao Farmers' Products
- Mr. Eric Sisombat, Sinouk Café
- Mr. Boonchai Punyalerdchai, Assistant Managing Director, Lao Agro Industry Co. Ltd.
- Mr. Serge F Verniau, FAO, and Ms Mirva Ek Vientiane
- Ms. Miki Matsuura and Mr. Furukawa Midori
- Mr. Warren Hoye, Program Manager, AusAID
- Ms. Phanthakone Champasith, Program Officer, AusAID
- Ms. Khankeo Moonvong, EC
- Ms. Ekaterina Vostroknutova, Senior Economist, World Bank Vientiane

Annex 3: Agenda of the Workshop SPS-related Technical Assistance in Lao PDR for verification of the draft Balance Sheets, 6 May, 2008

Hosted by the Ministry of Agriculture and Forestry

Chair: Mr. Xaypladeth Choulamany, Deputy Director General, Department of Planning, MAF

- 9.30 **Opening by the Chair**
- 9.35 Welcome address by WTO-STDF representative, Ms. Kenza Le Mentec
- 9.40 **The agenda for trade and SPS in Lao PDR**Mr. Khuanchay Iemsouthi, Deputy Director, Foreign Trade Department
- 9.50 SPS capacity building in Lao PDR: from planning to implementation in regional perspective

 Mr. Kees van der Meer, consultant

10.00 **Presentation of draft Balance Sheet** prepared for WTO-STDF (jointly with Ms. Laura Ignacio, consultant) by *Mr. Kees van der Meer*, consultant

Food Safety

elaboration by *Ms. Sivilay Naphayvong*, Head, Food Control Division, FDD

Animal Health

elaboration by *Mr. Sounthone Vongthilath*, Chief, Veterinary Division, Department of Livestock and Fisheries

Plant Health

elaboration by *Mr. Phaydy Phiaxaysarakham*, Director, Plant Quarantine Division, Department of Agriculture

Other Issues

- 11.00 Observations by representatives of donors and international organizations
- 11.15 General discussion
- 11.55 **Observations and next steps** by Mr. Kees van der Meer
- 12.00 Closing remarks by the Chair

Annex 4: SPS-related Technical Assistance, Lao PDR and Multi-country, 2001-2006

	Assistan	
Projects	Value (US\$'000)	Type
Lao PDR		
Food safety		
Improvement and development of fruit and vegetable crops in Lao PDR (Italy-FAO, 2004-2007)	750	S
Animal health		
Livestock farmer support (EC, 2004-2005)	6,596	Н
Management of CSF and FMD at the village level in Lao PDR (ACIAR, 2003-2008)	414	S
Scoping study: assessment of current and potential animal vaccine use in Lao PDR (ACIAR, 2006)	20	S
Diagnosis and epidemiology of foot and mouth disease in Lao PDR 1997-2006 (ACIAR, 2006-2007)	26	S
Plant health		
Laos included in multicountry projects on plant health (see below)		
Avian influenza		
Immediate TA to strengthen emergency preparedness for HPAI (FAO-USA, 2006-2007)	1,000	Н
Lao PDR avian and human influenza control and preparedness project (World Bank-GPAI, 2006-2010)	8,000	Н
Building capacity at the grassroots level to control AI (FAO-Germany, 2006-2009)	2,911	Н
Emergency assistance for the control of AI (FAO, 2004-2005)	384	Н
General		
EC-Laos project on standards, quality and conformity assessment (EC, 2004-2008)	621	S
Multilateral trade assistance (EC, 2002-2005)	1,220	T
Support for Lao PDR's integration into the international trading system (UNDP-Australia, 1999-2004)	639	T
Assistance to Lao PDR integrated framework process (Australia, 2006-2008)	1,185	S
SPS standards management: Action plan for capacity building (World Bank, 2006-2007)	150	S
Multi-country (includes one or more of CLV and/or other Southeast Asian		
countries)		
Food safety	7.604	
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) WTO compliance -capacity building training in the development of food standards	7,684	S
(based on risk management framework) (APEC, 2003-2004) APEC capacity building workshop and symposium for harmonization of food safety	57	S
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	204	C
reference materials for seafood product certificate and safety (APEC, 2003)	204	<u>S</u>
HACCP cooperation among APEC members (APEC, 2006-2007)	113	S
Capacity building on GAP for developing APEC economies (APEC, 2006) Capacity building for implementation of management systems for food safety and quality control of agricultural products in Vietnam and other APEC economies	73	S S

	Assistan	ice
Projects	Value (US\$'000)	Type
(APEC, 2005-2006)		
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 ³	1 406	C
kits (ASEAN, 2001) Improving food safety and its management in Cambodia, Lao PDR and Vietnam	1,486	S
(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
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

³ Enzyme-linked immunosorbent assay.

	Assistan	ce
Projects	Value (US\$'000)	Type
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	Н
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		
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	142	Н

	Assistan	ice
Projects	Value (US\$'000)	Type
(ADB, 2004)		
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)	116	S
Capacity and awareness building on import risk analysis for aquatic animals (APEC, 2001-2004)	116	Т
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
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	Т
Market access and trade facilitation support for Mekong Delta countries through		
strengthening institutional and national capacities related to standards, metrology,		
testing and quality NORAD-funding countries (NORAD-UNIDO, 2003-2005)	1,695 Value	S
Forthcoming projects (including projects starting in 2007)		e (0)
Food safety		
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

	Assistar	ıce
Projects	Value (US\$'000)	Type
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
Laos trade facilitation and exports (World Bank, 2008)		-

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

^{*}Table was derived from Appendix 2 of Ignacio (2007).