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ASSISTANCE FOR TRADE CAPACITY BUILDING IN RELATION TO THE APPLICATION OF SANITARY AND PHYTOSANITARY MEASURES (RAISE SPS)

FINAL RAISE SPS SUMMARY REPORT (SEPT. 2002 – SEPT. 2007)



SEPTEMBER 2008

PREPARED BY DAI UNDER TASK ORDER 14 OF PCE-I-00-99-00002-00, "RURAL AND AGRICULTURAL INCOMES WITH A SUSTAINABLE ENVIRONMENT (RAISE), SEPT. 2002 – SEPT. 2007.

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Prepared for USAID under RAISE Task Order 14, "Assistance for Trade Capacity Building in Relation to the Application of Sanitary and Phytosanitary (SPS) Measures", (Subcontract #4105-99S-006), under, USAID/DAI Prime Contract # PCE-I-00-99-00002-00, "Rural and Agricultural Incomes with a Sustainable Environment (RAISE)"

Funded by USAID's Bureau of Economic Growth, Agriculture and Trade (EGAT) and implemented by Development Alternatives Inc. (DAI), the RAISE SPS Project ("Assistance for Trade Capacity Building in Relation to the Application of Sanitary and Phytosanitary Measures") is Task Order 14 under the RAISE ("Rural and Agricultural Incomes with a Sustainable Environment") Indefinite Quantity Contract with DAI as Prime Contractor (Michigan State University, Abt Associates, Winrock International, and Fintrac Inc. are subcontractors). RAISE SPS assisted farmers, processors, exporters, retailers and other participants in agribusiness supply chains to enhance their competitiveness through achievement of international market standards. Concurrently, RAISE SPS assisted regulatory, scientific, technical, and donor institutions better understand the effect of SPS issues and private sector-driven standards on economic growth and poverty reduction. For further information, USAID Missions and Bureaus should contact Jim Yazman, USAID/EGAT Cognizant Technical Officer, at jyazman@usaid.gov.

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Cover Photos:

Upper Left: Vegetable export to Europe

Upper Middle: HACCP support to local food processors

Upper Right: Safer domestic fruit supplies

Middle Left: Fresh flower export to Europe

Middle Middle: Avian influenza training for health and agriculture officials in Eastern Europe

Middle Right: Pest risk assessment training for fruit export to USA

Lower left: Assessing H5N1 risk for small poultry farmers

Lower Middle: Training ministerial level SPS and quarantine officials in Africa

Lower Right: Improved dragon fruit for export to Europe

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INTRODUCTION

BACKGROUND

RAISE SPS was a five-year (2002-2007), \$5.7 million Task Order entitled “Assistance for Trade Capacity Building in Relation to the Application of Sanitary and Phytosanitary (SPS) Measures” launched under a USAID indefinite quantity contract known as “Rural and Agricultural Incomes with a Sustainable Environment”, or “RAISE”. Sanitary (food safety and animal health) and phytosanitary (plant health) measures protect consumers and agri-food systems from human, plant, and animal health hazards. In general, SPS standards are concerned with plant, animal and consumer wellbeing and incorporate measures on animal health, plant health and food safety. The international standards for safe trade in animal and animal products are set forth in the OIE (World Organization for Animal Health) Terrestrial Animal Health Code while international standards for plant health are set by the IPPC (International Plant Protection Convention). Food safety is addressed by the Codex Alimentarius Commission that lays down international standards concerning maximum residue levels of pesticides and veterinary drugs, maximum levels of contamination, food additives, labeling of pre-packaged food, hygiene practice, etc. RAISE SPS was designed to assist private sector stakeholders (farmers, processors, exporters, etc.) stakeholders improve their understanding of and compliance with these agri-food standards, with the objective of improved competitiveness in international markets. Concurrently, RAISE SPS was also designed to assist developing country public sector stakeholders (regulatory, scientific, and technical institutions) ensure safe domestic food supplies, protect agricultural plant and animal health, and preserve natural ecosystems.

The gradual accession of more and more countries to the WTO, as well as the proliferation of free trade agreements, has increased the role and importance of SPS and other standards as the foundation of rules-based trading and of market access. As food industry consolidation continues, changes in procurement and marketing practices have increased the importance of standards as a competitive necessity.

Dealing effectively with emerging standards—both public and private—has become indispensable to sustainable participation of all suppliers in integrated value chains and global supply chains. Although in the early nineties this was true mainly for chains that moved food and agricultural products into the most developed markets, over the past decade the ascendancy of supermarkets in emerging and developing country markets has also made compliance with private standards a prerequisite to supplying the fastest growing channels of distribution in many of the countries in which USAID works. The USAID strategy for agriculture focuses on linking producers to markets, which remains a challenge for all suppliers, but especially for smallholders.

ORGANIZATION OF THE REPORT

During 2002-2007, RAISE SPS conducted research and provided technical assistance that not only helped clarify the nature of the challenge but which also pointed to appropriate development responses. This summary report describes the project structure, management and evolution, relates original project design objectives with actual delivered work products (Section 2), summarizes the objectives and achievements of each of the individual RAISE SPS project activities in five topical areas (Section 3), and provides a thematic results-based discussion of the five topical areas (Section 4). The report concludes with a

discussion of key project successes and shortcomings, and makes some recommendations for future project funding in the area of SPS (Section 5). Key SPS literature references are also provided (Section 6).

ACKNOWLEDGEMENTS

The RAISE SPS activity was a collaborative project which involved the contributions of many people and organizations. DAI Chief of Party John E. Bowman would especially like to acknowledge:

- DAI project coordinators Sally Balenger, Shareen Baquir, Kenneth Jeruchim, Ingrid Ardjosoediro, Alex Hiniker, and Sharmel Genthon for their superb administrative assistance;
- The MSU team of Larry Busch, Dan Clay, Deepa Thiagarajan, Sue Gibbons, and Diane Cox for their coordinative support, and Thomas Reardon for his numerous technical contributions;
- John Lamb, Henk Knipscheer, and Bob Rabatsky for their technical contributions from Abt, Winrock, and Fintrac, respectively;
- Steve Jaffe and Kees van der Meer of the World Bank for their comraderie and technical cooperation;
- Miet Maertens and Johan Swinnen of the Catholic University of Leuven for summation and discussion of the 50 RAISE SPS technical reports presented in this report
- Jerry Martin for RAISE IQC leadership at DAI;
- and David Soroko and Jim Yazman of USAID, for their friendship, inspiration, and strategic vision.

FINAL PROJECT OVERVIEW FOR RAISE SPS

PROJECT START UP

The contractual task order (TO) document was signed between USAID/EGAT/EM and DAI (as Prime Contractor) on September 30, 2002 with an estimated completion date of September 30, 2005 and a maximum ceiling price of \$5,680,412. This activity was designated as TO #14 under the RAISE IQC. Eventually, the project received a total obligation of \$5,632,059 and was granted a no-cost extension of two years, ending on September 30, 2007. A final project closure workshop was held in Washington DC on September 14, 2007, and the agenda for this workshop can be found in Annex C of this report. The official title of the TO was “Assistance for Trade Capacity Building In Relation To The Application of Sanitary And Phytosanitary Measures” – but the lasting abbreviated title of the TO was simply “RAISE SPS”.

CONTRACTOR MANAGEMENT

DAI was the Prime Contractor for the TO and managed the activities of four sub-contractors: Michigan State University (MSU), Abt Associates, Winrock International, and Fintrac Inc. Although initially MSU was indicated to be the Prime Contractor, in October 2002 USAID/EGAT/EM formally requested that DAI take over as Prime Contractor, and Dr. John E. Bowman of DAI assumed the Chief of Party role, holding that position until project closure. Dr. Larry Busch of MSU was appointed as Technical Director of the TO. Key people involved in running the TO were:

DAI

COP – John Bowman

Project Coordinators - Sally Balenger, Shareen Baquir, Kenneth Jeruchim, Ingrid Ardjosoediro, Alex Hiniker, Sharmel Genthon

MSU

Technical Director – Larry Busch

Project Coordinator – Deepa Thiagarajan

Project Assistants – Sue Gibbons, Diane Cox

Abt Associates

Technical Liaison – John Lamb

Project Assistants – Tien Ngo, Gwen Appel

Winrock International

Technical Liaison – Henk Knipscheer

Project Assistant – Christin Hutchinson

Fintrac Inc.

Technical Liaison – Bob Rabatsky

USAID MANAGEMENT

In its five year history, the TO was put under the leadership of three USAID Cognizant Technical Officers (CTOs) as follows:

John Ellis (2002)

David Soroko (2003 – 2005)

Jim Yazman (2006 – 2007)

The TO was assigned to three USAID Contracting Officers over the course of the project:

Michael Gushue (2002)

Charis Nastoff (2003-2006)

Charity Benson (2007)

BUY-INS

Shortly after project start up, DAI was told by USAID that the project would not be fully obligated at any one point in time. Instead, monies were to be added periodically through Contract Modifications. DAI was also told in January 2003 not to expect a full obligation of the \$5.6 million for the life of the project. The TO would be expected to attract buy-ins to supplement whatever core funding became available. Thus the TO had to market itself to Missions, however, the inherent challenge in this was that there was no money allotted for “marketing” activities in the scope of the project. Thus the TO had to be very creative and find/attract marketing opportunities in other ways.

By the end of the project, the TO had attracted 3 major buy-ins and one “add-on” as follows:

USAID/Morocco

Contributed \$250,000 of MEPI (Middle East Partnership Initiative) funds to strengthen export-oriented activities of horticultural and food processing agribusiness associations in Morocco. This activity was led by Don Humpal of DAI.

USAID/EGAT/ESP

Contributed \$200,000 for an outreach activity to WTO delegates to increase their understanding and awareness of biotechnology and biosafety approaches to agricultural development and economic growth. This activity was managed by John Bowman with Craig Thorn of DTB Associates as Technical Lead.

USAID/Office of Global Health

The USAID Office of Global Health orchestrated a \$1.7 million buy-in for RAISE SPS to work on avian influenza activities of high importance, just as the virus was peaking in SE Asia towards the end of 2005. Of these funds, \$400,000 come directly from GH/HIDN, and the rest came from various Missions and Regional Bureaus as follows:

Rwanda:	\$95,000
Philippines:	\$87,999
Asia Near East Bureau:	\$290,000
India:	\$100,000
RDMA/Bangkok:	\$130,000
Europe/Eurasia Bureau:	\$350,000
Bulgaria:	\$100,000
Kazakhstan:	\$170,000
Azerbaijan:	\$30,000

This activity was led by John Bowman.

USAID/EGAT/EM

A TO originally awarded to Michigan State University to study “Trends in the Rapid Rise of Supermarkets in Developing Countries” was added on to the RAISE SPS TO. RAISE SPS managed the \$140,000 activity, provided supplemental funding, and the Technical Lead was Thomas Reardon of MSU.

OVERALL FUNDING STRUCTURE

Based on the buy-in/add-on activities described above, funding for the TO was approximately allocated as follows:

Activities	Funding Level
Morocco Buy-in	\$250,000
Biotech Buy-in	\$200,000
Avian Influenza Buy-in	\$1,753,000
Supermarkets Add-on	\$140,000
CORE (all other activities + Management)	\$3,337,412
Total	\$5,680,412

One year after project closure, and after all invoicing was completed, it was revealed that 98% of all of the obligated RAISE SPS funds were expended. Approximately \$84,000 in core funds were left unexpended.

MEETING USAID'S ORIGINAL OBJECTIVES FOR RAISE SPS

RAISE SPS was designed to support and enhance U.S. foreign agricultural assistance projects by:

- Providing technical analysis and development strategies that increase the capacity of selected partner countries' agricultural producers to meet international SPS standards and expand agricultural exports;
- Strengthening the capacity of selected partner countries' regulatory bodies and scientific and technical institutions to maintain the safety of human food supplies, protect the health of agricultural plant and animal populations, and preserve natural ecosystems

RAISE SPS was given an initial prescription of 6 categories of deliverables to carry out its mission, however, it was understood that this prescription was illustrative and might change significantly based on unpredictable demand from the Missions and Regional Bureaus. The original prescription of deliverables was as follows, followed by the actual deliverables that were approved and implemented by the end of the project. All the reports mentioned can be found in Annex B of this report, and can also be found on the final RAISE SPS Project CD:

1) Three (3) in-depth research studies on SPS-issues of general relevance to all developing countries.

By the end of the project, 11 analytical reports had been produced on topics of global interest. The topics were third party certification, biotechnology/biosafety awareness raising at the WTO, and a global study on the effectiveness of vaccines for control of the avian influenza virus.

The Relationship of Third-Party Certification to Sanitary/Phytosanitary (SPS) Measures and the International Agri-Food Trade. Case Study: Ghana (C. Bain, D. Thiagarajan, L. Busch. November 2002)

The Relationship of Third-Party Certification to Sanitary/Phytosanitary (SPS) Measures and the International Agri-Food Trade. Case Study: Indonesia (M. Hatanaka, D. Thiagarajan, L. Busch. November 2004)

The Relationship of Third-Party Certification to Sanitary/Phytosanitary (SPS) Measures and the International Agri-Food Trade. Case Study: Guatemala – with Emphasis on Food Safety Standards (L. Flores, D. Thiagarajan, L. Busch. August 2005)

The Relationship of Third-Party Certification (TPC) to Sanitary/Phytosanitary (SPS) Measures and the International Agri-Food Trade. Internet Profile Report (M. Hatanaka, D. Thiagarajan, L. Busch. March 2005)

The Relationship of Third-Party Certification (TPC) to Sanitary/ Phytosanitary (SPS) Measures and the International Agri-Food Trade: Global Supermarket Profile Report (C. Bain, D. Thiagarajan, L. Busch. October 2005)

The Relationship of Third-Party Certification (TPC) to Sanitary/ Phytosanitary (SPS) Measures and the International Agri-Food Trade: Report of Interviews with Third Party Certification Firms (M. Hatanaka, D. Thiagarajan, L. Busch. August 2005)

The Relationship of Third-Party Certification (TPC) to Sanitary/ Phytosanitary (SPS) Measures and the International Agri-Food Trade: Case Study - EUREPGAP (D. Thiagarajan, L. Busch, M. Frahm. December 2005)

The Relationship of Third-Party Certification (TPC) to Sanitary/ Phytosanitary (SPS) Measures and the International Agri-Food Trade: The Relationship Between U.S. Food Retailers and Third Party Certification (M. Hatanaka, D. Thiagarajan, L. Busch. August 2005)

The Relationship of Third-Party Certification (TPC) to Sanitary/ Phytosanitary (SPS) Measures and the International Agri-Food Trade: Final Report (L. Busch, D. Thiagarajan, M. Hatanaka, C. Bain, L. Flores, L. Busch. December 2005)

Biotech Trade Policy Education and Capacity-Building: WTO Outreach and Kenya Case Study (C. Thorn. September 2007)

Avian Influenza Vaccines: Focusing on H5N1 High Pathogenicity Avian Influenza – HPAI (K. Grogan, D. Halvorson, R. Slemmons. October 2007)

2) *Eight (8) regional or sub-regional analytical reports, identifying key developing country agricultural trade interests affected by the application of SPS measures in major markets.* By the end of the project, seven (7) reports on regional topics had been completed. These included a regional SPS benchmarking activity for Central America; analytical work on supermarket evolution in Central America and Africa; market channels for cattle in Central America; and avian influenza workshops tailored for Eastern Europe, Africa, and Asia.

Benchmarking of SPS Management Capacity in Five Central American Countries (Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua) (T. Bernardo, C. Aguilar, L. Flores, J. Lamb, J. Karpati, J. Velez. November 2003)

The Rise of Supermarkets in Central America: Implications for Private Standards for Quality and Safety of Fruits and Vegetables (T. Reardon, J. Berdegue, F. Balsevich, L. Flores. November 2003)

The Rise of Supermarkets in Africa, Private Standards for Quality and Safety of Fruits and Vegetables, and Implications for Producers (D. Weatherspoon, R. Fotsin, H. Katjuongua, D. Neven, T. Reardon. December 2003)

Cattle Producers' Participation in Market Channels in Central America: Supermarkets, Processors, and Auctions (F. Balsevich, P. Schuetz, E. Perez. December 2006)

Two Day Training Workshops for USAID Avian Influenza Commodities (R. Graham, J. Bowman, A. Miles, M. Busquets, A. Hiniker, W. Smiley, N. Kennedy, C. Brown, M. Palmer. December 2006)

Training Workshops for USAID Avian Influenza Commodities: Ethiopia, Ghana, Mali, Uganda (A. Hiniker, C. Brown, A. Miles, P. Marchot, G. Mullins, N. Kennedy. September 2007)

Training Workshops for USAID Avian Influenza Commodities: Afghanistan, Laos, Vietnam (J. Bowman, A. Hiniker, A. Miles, J. Jagne, D. Shaul, H. Kiezebrink. September 2007)

3) *Eight (8) evaluations of previous SPS-related agriculture or other international technical assistance projects.* Evaluations were not a high demand request coming from the Missions. By the end of the project, only two evaluations were commissioned, an evaluation of recent SPS programs in Central America, and an evaluation of the RAISE SPS project itself.

Evaluation of Recent SPS-Related Programs in Central America (P. Bash, R. Lopez-Garcia. May 2003)

Linking Producers to Markets: The Challenge of Emerging Standards - A Final Summary and Evaluation Report of USAID's RAISE SPS Task Order (M. Maertens, J. Swinnen. September 2007)

4) Six (6) comprehensive country-specific diagnostic reports, drawing on stakeholder consultations and conferences and providing a strategic framework for prioritizing SPS-related assistance activities. By the end of the project, approximately 37 country-level diagnostic reports had been completed on a wide range of topics. Most of these topics involved SPS aspects of high value horticulture, livestock, laboratory assessments, supermarket evolution, general assessments of SPS strengths and weaknesses, and country-specific aspects of the avian influenza crisis. This category also included four in-depth country assessments of national SPS capacity done in collaboration with the World Bank. The final reports were World Bank products, completed with the assistance of one or more RAISE SPS experts imbedded into the World Bank diagnostic teams.

Benchmarking and Diagnostic SPS Mission to Nicaragua (J. Velez, J. Karpati, L. Flores. May 2003)

Benchmarking and Diagnostic SPS Mission to Guatemala (J. Velez, J. Karpati, L. Flores. July 2003)

Zoonotic Testing Laboratory Assessment for Armenia (T. Deeb, E. Graf. April 2007)

Design of an SPS-Focused Food Safety Project for Armenia (T. Deeb, E. Graf. April 2004)

SPS Assessment of the Horticulture Sector in Croatia (H. Winogron, D. Georgievski. July 2004)

Report on Bumpers and Import Sensitivity Analysis for Moroccan Citrus (D. Humpal, K. Jacques. October 2003)

Report on Bumpers and Import Sensitivity Analysis for Moroccan Tomatoes (D. Humpal, K. Jacques. November 2003)

The Role and Impact of the Private Sector on Sanitary and Phyto-Sanitary (SPS) issues in Vietnam (C. Clingman. October 2004)

Assessment of Sanitary and Phytosanitary (SPS) Issues and Marketing Needs for the Livestock – Meat Sector of Ethiopia (Author: Greg Sullivan et al. February 2005)

Highly Pathogenic Avian Influenza in India: A Situational Analysis (J. Gingerich, H.L. Shivaprasad. July 2006)

An Assessment of the National Avian Influenza Prevention and Preparedness Plan for USAID/Philippines (S. Goyal, I. Neu. January 2006)

Avian Influenza Rapid Assessment: Ukraine (B. Krushinskie, J.Lambers. March 2006)

Avian Influenza Virus in Azerbaijan: A Situational Analysis for USAID (A. Mirande. February 2006)

An Assessment of Ethiopia's Diagnostic Capacity in Sanitary and Phytosanitary Measures Related to Fresh Fruit and Vegetables (T. Deeb, P. Hanemann. January 2006)

Assessment and Strengthening of the Government of Rwanda's National Action Plan Against High Pathogenicity Influenza (R. Fulton, M. Busquets, A. Hiniker. June 2006)

Needs Assessment Report: Avian Influenza Training for Bulgaria (L. Detwiler. July 2006)

Avian Influenza Surveillance, Monitoring and Training Project for Bulgaria: Final Report for USAID/Bulgaria (D. Neven, L. Detwiler, E. Krushinskie, J. Westergaard, T. Wilson, H. Kiezebrink, E. Lindner, A. Hiniker. December 2006)

The Rise of Kenyan Supermarkets and the Evolution of their Fruit and Vegetable Supply Systems (D. Neven, T. Reardon. December 2006)

Supermarkets and Consumers in Africa: The Case of Nairobi (D. Neven, T. Reardon, J. Chege, H. Wang. December 2006)

Supermarkets, New-Generation Wholesalers, Tomato Farmers, and NGOs in Nicaragua (F. Balsevic, T. Reardon, J. Berdegue. December 2006)

Tomato Farmer Participation in Supermarket Market Channels in Guatemala: Determinants and Technology and Income Effects (R. Hernandez, T. Reardon, J. Berdegue. December 2006)

Horticulture Farmers and Domestic Supermarkets in Kenya (D. Neven, M. Odera, T. Reardon. December 2006)

Food Sector Transformation and Standards in Zambia: Smallholder Farmer Participation and Growth in the Dairy Sector (D. Neven, H. Katjuongua, I. Ardjosoediro, T. Reardon, P. Chuza, G. Tembo, M. Ndiyoi. December 2006)

Urban Consumer Preferences for Poultry from Supermarkets versus Traditional Retailers in the Era of Avian Influenza in Ho Chi Minh City, Vietnam (P. Tam, T. Reardon. April 2007)

The Government of Vietnam's Implementation of the WTO Agreement on the Application of Sanitary and Phytosanitary Measures (K. Kennedy. March 2007)

National Assessment of Avian and Pandemic Influenza Preparedness – Kingdom of Jordan. (M. Sanchez, J Schaeffer. January 2007)

Morocco Food Processors Study Tour to New York City and the NASFT Fancy Food Show (B. Rabatsky. July 2004)

Middle-East Partnership Initiative (MEPI): Moroccan Agribusiness Associations Support (D. Humpal. September 2007)

Strengthening National Avian Influenza Preparedness through Public Information and Community-Based Early Warning Systems in the Philippines (L. Detwiler, H. Go, J. Bowman, K. Hartigan Go, A. Faraan, J. Dulawan, R. Teredasai. September 2007)

Food Sector Transformation and Standards in Zambia: Smallholder Farmer Participation and Growth in the Tomato Sector (D. Neven, H. Katjuongua, I. Ardjosoediro, T. Reardon, P. Chuza, G. Tembo, M. Ndiyoi. February 2008)

Kenya Study Tour for Zambian SPS Stakeholders (J. Kigamwa, M. Sichilima, J. Bowman. February 2006)

RAISE SPS Collaborative Trade Capacity Building Project in Support of Vietnam's Fruit Sector: The Case of Dragon Fruit (Bowman, Thao, et al. August 2007)

Final Report: Expert Services to Assist National Avian Influenza Prevention and Preparedness Planning in Kazakhstan (J. Dale. September 2007)

Collaborative Report with the World Bank - Moldova: Managing Food Safety and Agricultural Health: An Action Plan (K. van der Meer, D. Humpal, X. Qin. May 2007)

Collaborative Report with the World Bank - Uganda, Standards and Trade: Experience, Capacities, and Priorities (S. Jaffee, T. Deeb, T. Obrien, Y. Strachan, R. Kiggundu. September 2007)

Collaborative Report with the World Bank - Zambia: SPS Management (S. Jaffee, A. Sergeant, D. Cassidy, M. Abegaz, T. Deeb, M. Sewadeh. July 2007)

Collaborative Report with the World Bank - Vietnam Food Safety and Agricultural Health Plan (J. Gutman, I. Johnson, M. Wilson, K. Cleaver, H. Kim, S. Ganguly, D. T. Nguyen, C. de Haan. September 2007)

5) Ten (10) project designs for implementation of SPS-related assistance activities and related contracting documentation. There was very little demand from the Missions for RAISE SPS to do actual project “design” work, as in the designing of new SPS projects for USAID. However, the following three activities had strong aspects of “design” in their make up:

Design of a Vietnam Dragon Fruit Trade Capacity Building Activity

This activity was designed by RAISE SPS from scratch, after seeking input from a pre-existing field project (VNCI), an AusAid project with similar objectives, and key government counterparts. The Mission asked RAISE SPS to design a collaborative activity that would help support the VNCI Project in one of its primary cluster areas – the fruit sector. RAISE SPS, together with VNCI, first interviewed many private and public sector stakeholders in the fruit sector, to determine what should be the highest priority fruit(s) to receive trade capacity building support. It was determined that “dragon fruit” was the fruit that key stakeholders (especially the Ministry of Agriculture) wanted to receive support. Once that was decided, RAISE SPS designed a collaborative activity in collaboration with VNCI whereby trade capacity building support was shared between the two projects. In addition, RAISE SPS/VNCI designed the project in close consultation with an AusAid initiative that was also starting to strengthen the dragon fruit sector. For example, it was decided that the AusAid project would strengthen aspects of dragon fruit research and development through support of infrastructure and programs at SOFRI (the Southern Vietnam Fruit Research Institute), and would undertake a large training program in Tien Giang Province that would attempt to get 200-300 farmers EurepGAP-certified over a 3-4 yr period. Alternatively, RAISE SPS/VNCI would not support any R&D efforts, but would focus on rapid rollout of a pilot capacity building program in Binh Tuan Province that would result in EurepGAP certification for 30-50 farmers in 1-2 yrs. RAISE SPS would focus on aspects such as the principles of SPS/GAP training, marketing support, postharvest assistance, pest risk assessment, and understanding of quarantine issues for the EU and US markets. VNCI focused on the actual field training of the farmers in EurepGAP procedures, designing new national dragon fruit standards that were more adapted to international markets, and farmer association building. The design worked as 30-40 Binh Tuan farmers did receive group EurepGAP certification in 2006. A comprehensive final report on the Vietnam dragon fruit activity was produced which includes chapter reports on all of the technical assistance activities:

RAISE SPS Collaborative Trade Capacity Building Project in Support of Vietnam's Fruit Sector: The Case of Dragon Fruit (J.Bowman, N.P. Thao, J.Thaw, E.Mitcham, D. Husnik, S. Humphreys, K. Kennedy. August 2007)

Design of a Capacity Building Program for Morocco Agribusiness Associations

After receiving some initial guidance from the Mission on desired outcomes, RAISE SPS was asked to design this buy-in activity from scratch, focusing on opportunities in the U.S. market. First, a series of analytical studies were commissioned to study the competitiveness of Moroccan products in U.S. markets. Niche market opportunities and freight constraints were a focus of these studies. Additionally, a U.S. study tour for Moroccan exporters was designed and executed by RAISE SPS. Finally, a series of workshops were held in Morocco whereby experts from the U.S. spoke on U.S. entry requirements, the structure of the U.S. wholesale and retail food industry, and factors that would determine the competitiveness of Moroccan products in the U.S. market. Part of the design was to provide one series of workshops for Moroccan exporters of fresh horticulture products, while another series of workshops focused on processed products. A comprehensive final report on the Moroccan activity summarizes the key learnings of this activity and can be found on the RAISE SPS CD:

Middle-East Partnership Initiative (MEPI): Moroccan Agribusiness Associations Support (D. Humpal. September 2007)

Design of a Training Program for USAID Avian Influenza Commodities

Starting in 2005, in response to the growing AI crisis, USAID was sending thousands of pre-packaged “kits” of commodities to high priority countries and regional distribution centers. These AI response kits consisted of commodities such as personal protective equipment (PPE), disinfection equipment, rapid antigen test kits to determine the presence of infection in both birds and humans, and international shipping materials (used to send field samples to international reference laboratories). Included in these kits were some instructional materials, but these were considered to be too cursory given the severity of the crisis, and high degree of variability in skill-level among the different recipients of the kits. Under very short notice, a team of RAISE SPS experts designed a teaching curriculum for all of the commodities in the kits, which included fully detailed instruction manuals and powerpoint slide presentations. In addition to formally designing the curriculum for the commodities, various RAISE SPS teams were formed to travel to high priority countries and use the newly designed curricula to train select animal and human health workers in a “Training of Trainers” approach. RAISE SPS AI commodities trainings were held in Africa (4 countries), Eastern Europe (6 countries), and Asia/Near East (4 countries). Three major reports were produced covering all of these trainings:

Middle-East Partnership Initiative (MEPI): Moroccan Agribusiness Associations Support (D. Humpal. September 2007)

Training Workshops for USAID Avian Influenza Commodities: Ethiopia, Ghana, Mali, Uganda (A. Hiniker, C. Brown, A. Miles, P. Marchot, G. Mullins, N. Kennedy. September 2007)

Training Workshops for USAID Avian Influenza Commodities: Afghanistan, Laos, Vietnam (J. Bowman, A. Hiniker, A. Miles, J. Jagne, D. Shaul, H. Kiezebrink. September 2007)

6) 12 technical training courses on selected SPS issues and 12 workshops in which those courses will be delivered

The RAISE SPS training/workshop record is presented as a Table in Annex A. By the end of the project, 45 training events had been implemented in 21 distinct countries, and approximately 1400 beneficiaries had been trained. In addition to the workshops mentioned in the table, RAISE SPS made major technical contributions and provided experts for a web-based, “E-Learning Course” on Food Safety and Agricultural Health Standards that was designed and implemented by the World Bank. This was an interactive course held over a 6-week period in 2005, which reached over 200 beneficiaries (mainly World Bank field staff and their highest priority stakeholders) in over 20 countries.

OVERVIEW OF THE RAISE SPS REPORTS, THEIR OBJECTIVES AND ACHIEVEMENTS

The RAISE SPS studies include a large number of reports on varied topics related to food standards in general—SPS measures in particular—and agricultural trade. Some studies analyze the situation in a specific country and/or sector; other reports focus on a specific topic in a broader geographical context.

In order to structure this summary report the RAISE SPS project reports are presented according to the specific topical area they deal with. This is not an exact classification, rather a method to structure the different studies and this summary report. Many reports deal with several of the main identified topics at the same time. We have classified the reports according to their main focus point. More specifically, the reports are categorized into the following five topical areas:

1. SPS capacity in developing countries
2. Avian Influenza
3. Certification and accreditation
4. Modern supply chains: supermarkets in developing countries
5. Modern supply chains: small farmers in modern supply chains

Table 1 summarizes how the various RAISE SPS reports fit in this classification and presents for each individual report a short summary of the objectives and main achievements of the specific project. The reports summarized here are not a complete compilation of all RAISE SPS reports, but a selection (95% of total project reports) of those that were presented for evaluation at the project closeout workshop. This table shows that the RAISE SPS Task Order has resulted in a wide variety of reports and activities on SPS-related issues; covering a large part of the developing world; and leading to direct actions for improvement, better insights into the issues and recommendations for further actions.

SUMMARY AND CLASSIFICATION OF THE RAISE REPORTS

Report Authors	Report Title, Objectives and Achievements
1. SPS CAPACITY IN DEVELOPING COUNTRIES	
Regional Report #1 T. Bernardo, C. Aguilar, L. Flores, J. Lamb, J. Karpati, J. Velez (Nov. 2003)	<p>Benchmarking of SPS Management Capacity in Five Central American Countries</p> <p>Objectives: to review and benchmark the SPS management capacity of the five countries (Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua), considering the implications for the most important agricultural traded produce and related technical assistance requirements.</p> <p>Achievements: In all five countries, key public and private sector stakeholders in the agri-food supply chain were interviewed on the basis of a benchmarking survey questionnaire, during the second quarter of 2003. The participants included farmers, producer associations, brokers, distributors, input suppliers, transporters, export associations, importers, retailers, laboratories, food safety officials, animal/plant health officials, ministries of health, agriculture, and trade, port officials, etc. The retail sector (particularly supermarkets) was analyzed to determine the nature and modus operandi of supply chains. A total of eight consultants were involved over the five countries and usually two weeks of time was spent per country.</p>
Evaluation Report #1 P. Bash, R. Lopez-Garcia (May 2003)	<p>Evaluation of Recent SPS-related Programs in Central America</p> <p>Objectives: 1) to evaluate USDA/USAID-funded programs of the last five years addressing SPS conditions in four Central American countries (Honduras, El Salvador, Nicaragua, and Guatemala) after Hurricane Mitch; and 2) to guide the design of technical assistance programs that help food industries comply with SPS requirements and take advantage of trade opportunities</p> <p>Achievements: During March–April 2003, interviews were conducted with over 100 stakeholders (project implementers, cooperatives, trade associations, government officials, and farmers) who were either involved in the implementation and delivery of the assistance programs or recipients of the assistance. Two consultants were involved and very specific recommendations for increasing compliance with SPS standards and competing in international markets are made</p>
Country Diagnostic Report #1 J. Velez, J. Karpati, L. Flores (May 2003)	<p>Benchmarking and Diagnostic SPS Mission to Nicaragua</p> <p>Objectives: performing a SWOT-analysis of the SPS system in Nicaragua and benchmarking it versus the U.S. system</p> <p>Achievements: Three persons interviewed public and private sector stakeholders, and international organisations—including USAID/USDA.</p>
Country Diagnostic Report #2 J. Velez, J. Karpati, L. Flores (July 2003)	<p>Benchmarking and Diagnostic SPS Mission to Guatemala</p> <p>Objectives: performing a SWOT-analysis of the SPS system in Guatemala and benchmarking it versus U.S. system</p> <p>Achievements: Three persons interviewed public and private sector stakeholders, and international organisations—including USAID/USDA.</p>
Country Diagnostic Report #3 T. Deeb, E. Graf (Apr. 2007)	<p>Zoonotic Testing Laboratory Assessment for Armenia</p> <p>Objectives: The purpose of this project was to evaluate Armenia's veterinary testing laboratories—public and private - and to determine their current capabilities. An additional assessment was conducted of the supporting infrastructure needed for an ongoing veterinary testing program, such as training.</p> <p>Achievements: A systematic three-step process of assessment was followed in which the current state of the overall system was determined, a gap analysis performed, and an action plan for a sustainable veterinary diagnostic testing system developed. This was based on interviews and site visits from 20th March 2004 until 2nd April 2004: Ministry of Agriculture, USDA Extension, Yerevan State University, Central Laboratory of Yerevan, Exlab (a commercial analytical testing centre), Director of the Central Testing Laboratory, Director of the marz laboratory in Sevan, Yerevan local market laboratory and meat inspection service, USDA representative for slaughter facilities, and several commercial enterprises.</p>
Country Diagnostic Report #4 T. Deeb, E. Graf (Apr. 2004)	<p>Design of an SPS-Focused Food Safety Project for Armenia</p> <p>Objectives: Design of a multifaceted two-year SPS food safety project in Armenia, as an extension of a current development program in order to build on existing client relationships and to expedite the direct assistance to key agribusinesses. The goal of this program should be the certification of 5 to 10 food companies and the improvement of the infrastructure to</p>

Report Authors	Report Title, Objectives and Achievements
	<p>increase food safety and export to the EU, US and other countries.</p> <p>Achievements: Evaluation of nine different companies representing a variety of industries, site visits and interviews with several organizations (Government agencies, universities, government laboratories, commercial laboratories USSDA, consulting firms, EU fishery consultant, review of previous ASME and FAO consultant reports—resulting in a recommended food safety project plan.</p>
<p>Country Diagnostic Report #5 H.Winogron, D.Georgievski (Jul. 2004)</p>	<p>SPS Assessment of the Horticulture Sector in Croatia</p> <p>Objectives: The goal of this project is the promotion of fruit and vegetable sales to the rapidly growing local supermarket sector as well as increased product exports. This was to be accomplished through a demand analysis, which would determine the levels of product demand and identify the most promising sectors, and establish the current level of local SPS programs and EUREPGAP compliance, and make recommendations for programs that will move Croatia forward in these areas. The assessment should identify and describe the sanitary and phytosanitary challenges facing the major horticultural subsectors for export to the EU and for domestic supply to supermarkets and the tourism industry.</p> <p>Achievements: Interviews were held from 20th of June until the 20th of July, with fruit and vegetable buyers primarily at the level of the supermarkets and wholesalers. A team of two persons was involved.</p>
<p>Country Diagnostic Report #6 D.Humpal, K.Jacques (Oct. 2003)</p>	<p>Report on Bumpers and Import Sensitivity Analysis for Moroccan Citrus</p> <p>Objectives: analysis of the Moroccan citrus export market, the USA citrus consumption and markets, and the sanitary and phytosanitary regulatory issues. Bumpers and US issue analysis for USAID. Specific recommendations are made.</p>
<p>Country Diagnostic Report #7 D.Humpal, K.Jacques (Nov. 2003)</p>	<p>Report on Bumpers and Import Sensitivity Analysis for Moroccan Tomatoes</p> <p>Objectives: Analysis of the Moroccan tomato production and marketing considerations, bumpers analysis, Canadian market analysis, and PD71 analysis of Moroccan exports to the US market. Specific recommendations are made.</p>
<p>Country Diagnostic Report #8 C. D. Clingman (oct. 2004)</p>	<p>The Role and Impact of the Private Sector on Sanitary and Phytosanitary Issues in Vietnam</p> <p>Objectives: defining the scope of eventual World Bank support to the Government of Vietnam in the preparation of their Food Safety Strategy and Action Plan; and providing support to the Ministry of Agriculture and Rural Development in their preparation to meet SPS requirements for the proposed WTO accession.</p> <p>Achievements: A one-week (October 2004) World Bank-led mission to Vietnam, including 2 persons during which meetings were held with the World Bank Vietnam staff; the Vietnam Government's Ministries of Agriculture and Rural Development, Science and Technology, Multilateral Trade Policy Assistance Programme, Health, and Fisheries; the French and New Zealand Embassies and the Danish International Development Agency. Interviews with a limited number of private sector participants were also conducted.</p>
<p>Country Diagnostic Report #9 G. Sullivan, Y. Aklilu, P. Hawkes, A. King (Feb. 2005)</p>	<p>Assessment of Sanitary and Phytosanitary Issues and Marketing Needs for the Livestock-Meat Sector of Ethiopia</p> <p>Objectives: 1) conducting a "needs assessment" mission with a focus on SPS-related challenges for Ethiopia's livestock and meat product export industries, 2) conducting a literature review of relevant publications on the challenges of the livestock/meat export industry, 3) identification of critical needs for SPS services and the formulation of an action plan, 4) describing the activities of relevant donor projects currently in place, 5) identifying significant gaps in SPS-related constraints that are not currently well-covered by public, donor, or private programs, and 6) design a capacity-building program that would be supported by USAID and other donors</p> <p>Achievements: A three-person team worked for two 6-day weeks in Ethiopia, conducting interviews with export abattoir managers, cooperative managers, producer and business association leaders, private veterinarians, NGO leaders, Ministries (Agriculture, Health, Trade & Industry, etc.), USAID/Addis Mission staff, GEM Project experts, experts from Ethiopian Universities and ILRI, port authorities, donor project experts (DFID, FAO, Danida, etc..). A "needs assessment" report was created that addresses the current state of affairs in SPS services to the livestock sector, focusing on competitiveness of Ethiopian livestock/meat</p>

Report Authors	Report Title, Objectives and Achievements
	products in regional and international markets; and documents the existing public and private efforts to alleviate SPS constraints. A GAP analysis focussing on critical areas was performed. A USAID-led capacity building program to alleviate the most important SPS constraints was designed.
Country Diagnostic Report #14 T. Deeb, P. Hanemann (Jan. 2006)	<p>An Assessment of Ethiopia’s Diagnostc Capacity in Sanitary and Phytosanitary Measures Related to Fresh Fruit and Vegetables</p> <p>Objectives: to conduct an in-depth assessment of Ethiopia’s overall diagnostic capacities related to SPS measures associated with fresh fruit and vegetables, and evaluate Ethiopia’s public, private, and academic capacity (facilities, equipment, and training) to detect, monitor, and control plant pests and pathogens, agro-chemical residues, toxins, and microbes that can cause food borne illness as well as the ability to meet private sector standards.</p> <p>Achievements: A three-step process of evaluation is used to determine the current state of the overall system, to identify areas for improvement, and to outlined a series of recommendations that will enable Ethiopia to have a sustainable plant quarantine and SPS diagnostic system. Evaluation of the specific laboratory conditions, the educational system, training, and commercial capabilities was performed. Interviews and site visits were conducted with: Ministry of Agriculture, Crop Protection, Regional Plant Quarantine laboratories, Ethiopian Agricultural Research Organization, Director of the Testing and Calibration Services at Quality and Standards Authority of Ethiopia, Ethiopian Horticulture Export Association, Alemaya University, Pasteur Institute, USDA APHIS, 2 wholesale fruit and vegetable Markets (Addis Mercato and Dire Dawa), and several commercial enterprises.</p>
Country Diagnostic Report #26 K. Kennedy (Mar. 2007)	<p>The Government of Vietnam’s Implementation of the WTO Agreement on the Application of Sanitary and Phytosanitary Measures</p> <p>Objectives: to meet with representatives of the Vietnamese ministries responsible for SPS regulation and to provide a legal analysis of Vietnam’s food safety and animal and plant health legislation vis-à-vis the WTO SPS Agreement.</p> <p>Achievements: From March 13-23, 2007, Professor Kevin Kennedy and an attorney from the STAR-Vietnam office, Ms. Do Hoang Anh, met with representatives of the six Ministries with primary or lead responsibility for food safety and hygiene and animal and plant health: the Ministry of Agriculture and Rural Development, the Ministry of Fisheries, the Ministry of Industry, the Ministry of Health, the Ministry of Trade, and the Ministry of Science and Technology. Approximately twenty core ordinances, decrees, and decisions across the spectrum of SPS subject areas (animal and plant health, food safety) were reviewed for consistency with the SPS Agreement.</p>
Country Diagnostic Report #33 J.E. Bowman (Sept. 2007)	<p>Design of a RAISE SPS Collaborative Project in Support of the Vietnam’s Dragon Fruit Sector</p> <p>Objectives: Helping the newly established VNCI fruit cluster define a high profile, lead project—with the additional objective of defining linkages to and possible co-funding from, the Bethesda-based RAISE SPS Project.</p> <p>Achievements: During two weeks in August 2004, many interviews were held with public and private sector stakeholders in the fruit industry in order to find out their priorities for a cluster- and export-oriented project that might receive funding from VNCI and RAISE SPS. It was decided to focus only on dragon fruit with the objective of obtaining actual EUREPGAP certification. The report proposes a draft scope of work for VNCI/RAISE SPS fruit cluster activity concerning the proposed core activity and the management of that activity. A proposal for the possible use of RAISE SPS (RSPS), VNCI, and other funds in support of the HortResearch GAP program is included.</p>
Country Diagnostic Report #31 E. Mitcham (Sept. 2007)	<p>Capacity Building in Post Harvest Handling and Packhouse Management for the Export of Vietnamese Dragon Fruit</p> <p>Objectives: Improve post harvest quality of export-oriented dragon fruit.</p> <p>Achievements: Multiple workshops held with small farmers and packhouse operators. Customized dragon fruit post harvest manual designed and distributed.</p>
Country Diagnostic Report #29 D. Husnik (Sept. 2007)	<p>Assessment of Vietnam’s SPS Management Capacity in the Area of Plant Health</p> <p>Objectives: This report describes the SPS management capacity of Vietnam in the area of plant health.</p>

Report Authors	Report Title, Objectives and Achievements
Country Diagnostic Report #32 S. Humphreys (Sept. 2007)	<p>Market Access Study of Selected EU Markets (UK, Netherlands, France and Germany) for Vietnamese Dragon Fruit</p> <p>Objectives: to conduct a market access study on four selected EU markets for Vietnamese dragon fruit.</p> <p>Achievements: Interviews with 32 different companies in the four countries (UK, Netherlands, France and Germany).</p>
Country Diagnostic Report # 36 J. E. Bowman, N. P. Thao, (Sept. 2007)	<p>Collaborative Project in Support of the Vietnam's Dragon Fruit Sector-Summary Report</p> <p>Objectives: In response to the need for an appropriate model for the implementation of GAP, several donors (USAID, AusAID) and dragon fruit supply chain stakeholders have joined forces and implemented a collaborative effort to address SPS and marketing constraints in order to improve small farmer linkage to export markets. The highest priority of the project is to help the dragon fruit sector meet internationally acceptable export requirements, with the specific objective of obtaining EUREPGAP group certification for a majority of the small farmers in the target area (over 300 farmers in two provinces). Key Partners for the project are: USAID/Vietnam's VNCI Project, HortResearch of New Zealand (funded by AusAID), MARD's Southern Fruit Research Institute (SOFRI), and USAID/W's RAISE SPS Project.</p> <p>Achievements: The major result of the project's effort is the increased awareness among farmers regarding the challenges of export. The project has organized more than ten workshops in urban and rural settings on GAP, EUREPGAP, SPS requirements, and international market requirements. Media and marketing materials have been distributed and proven to be effective. Concerning the EUREPGAP implementation, the project activities are generating results in two main areas, capacity building, and establishment of the building blocks leading to group certification. A series of workshops were conducted in the province of Binh Thuan in order to help stakeholders become familiar with the branding concept and process.</p>
Country Diagnostic Report # 30 J. Thaw (Sept. 2007)	<p>US Phytosanitary Requirements for the Importation of Vietnamese Dragon Fruit</p> <p>Objectives: To assist the RSPS/VNCI team in educating stakeholders in the Dragon Fruit Project about SPS-related entry requirements for fresh fruits into the United States, and to present lectures in several venues, in HCMC, two dragon fruit growing provinces, and Hanoi.</p> <p>Achievements: 4 workshops were organized, leading to specific recommendations for MARD on the implication of an SPS programs for dragon fruit and other major fruits with export potential</p>
Country Diagnostic Report #42 J.Bowman, N.P. Thao, J.Thaw, E.Mitcham, D. Husnik, S. Humphreys, K. Kennedy (Oct. 2007)	<p>RAISE SPS Collaborative Trade Capacity Building Project in Support of Vietnam's Fruit Sector: the Case of Dragon Fruit</p> <p>Objectives: Assist the Vietnamese dragon fruit sector in becoming more aware of SPS issues and international certification requirements through trade capacity building</p> <p>Achievements: Through multiple workshops, seminars, and field training sessions, the dragon fruit growers of southern Vietnam and related government officials were trained in SPS issues and good agricultural practices, resulting in EurepGAP certification for a pilot group of dragon fruit farmers in Binh Thuan Province. This report is a compilation of reports 26, 29, 30, 31, 32, 33, and 36 and tells the complete story of RAISE SPS support to the dragon fruit sector.</p>
Country Diagnostic Report #41 J. Kigamwa, M. Sichilima, J. Bowman (Feb. 2006)	<p>Kenya Study Tour for Zambia SPS Stakeholders</p> <p>Objectives: The main purpose of the tour was for Zambia to learn from Kenya on how it has managed to develop its horticulture and floriculture industry in the face of EU SPS entry requirements.</p> <p>Achievements: The tour took place from 5-11 March 2006 and included visits to government and quasi government institutions and site visits to commercial farms and a small holder association. Nine participants involved. The report—based on inputs from members of the delegation—summarized the lessons learnt and gives recommendations for the visited institutions.</p>
Country Diagnostic Report #37 D. Humpal (Sept. 2007)	<p>Final Report: Middle-East Partnership Initiative (MEPI): Moroccan Agribusiness Associations Support</p> <p>Objectives: This report provides a summary of activities undertaken since the start of the MEPI Moroccan Agribusiness Associations Support Activity under the RAISE/SPS Task</p>

Report Authors	Report Title, Objectives and Achievements
	<p>Order. Five tasks were to be performed from November 2003 until August 2005, namely a market analysis, providing an improved knowledge of US markets for the Moroccan fresh and processed fruit and vegetable industries, improving the organization and operations of professional associations, controlling Medfly, and producing reports and deliverables.</p> <p>Achievements: All five tasks were delivered according to the work plan - with the exception of the visit by Moroccan Fresh Produce operators to the USA. For the updated market understanding task, two workshops, three US operator visits to Morocco, and three Moroccan visits to the US were organized. For the organizational improving task, CDs with the Case Study report and the PowerPoint Presentation on alternative models for professional associations and cooperatives were delivered to USAID, as well as to EACCE for distribution to the Associations. Next to this, a series of workshops and training sessions were organized to improve raw materials supply. For the reports and deliverables task, five quarterly progress reports, five quarterly financial reports and one final report (this report) were provided.</p>
<p>Country Diagnostic Report #38 C. Thorn (Sept. 2007)</p>	<p>Biotech Trade Policy Education and Capacity Building: WTO Outreach and Kenya Case Study</p> <p>Objectives: Educate WTO representatives about the positive role of recent biotechnology advancements upon trade.</p> <p>Achievements: A series of seminars and consultations were held at WTO headquarters by legal and technical experts in biotechnology to educate WTO members involved in policy-making decisions. A series of special consultations in Kenya assisted the GOK in the re-drafting of it's biosafety legislation.</p>
<p>Country Diagnostic Report #34 B. Rabatsky (July 2004)</p>	<p>Morocco Food Processors Study Tour to New York City and the NASFT Fancy Food Show</p> <p>Objectives: A U.S. study tour was organized for stakeholders in the Moroccan food processing industry interested in exporting to the U.S. market.</p> <p>Achievements: Participants visited various government and private sector contacts in the New York City area and also attended the NASFT Fancy Food Show.</p>
<p>Collaborative Report with the World Bank K. van der Meer, D. Humpal, X. Qin (May 2007)</p>	<p>Moldova Managing Food Safety And Agricultural Health: An Action Plan</p> <p>Objectives: The direct objective of this action plan is to provide the Government of Moldova, donors, and international organizations a comprehensive framework for the analysis, design, and implementation of capacity-building efforts in the area of food safety and sanitary and phytosanitary (SPS) measures.</p> <p>Achievements: A team of three consultant conducted two missions to Moldova in early 2005 and n September-October 2005. During these missions, a comprehensive review of the country's SPS system was created; and various government agencies, private sector stakeholders, and a number of donor agencies were consulted. In December 2005, the draft Action Plan was presented at a stakeholder workshop in Moldova attended by representatives of the various ministries, the private sector, and donor and international agencies, after which it was revised to incorporate their feedback. The main findings and recommendations were also shared with participants of a workshop on Moldova's agriculture policy held in June 2006.</p>
<p>Collaborative Report with the World Bank S. Jaffee, T. Deeb, T. O'brien, Y. Strachan, R. Kiggundu (Sept. 2007)</p>	<p>Uganda, Standards and Trade: Experience, Capacities and Priorities</p> <p>Objectives: This paper provides an overview of the emerging challenges and opportunities which Uganda is facing in relation to food safety, agricultural health, and other standards impacting agro-food market development and trade. Primary attention is given to 'non-traditional' agricultural and food exports. The aim is to provide a strategic framework for Ugandan policy-makers, donors and other stakeholders to assist in better planning and prioritizing actions and capacity-building measures in this field.</p> <p>Achievements: The paper draws upon expert and stakeholder perspectives and builds upon existing analyses. It provides a conceptual framework on SPS management challenges and capacity needs and provides a 'birds-eye' perspective on existing Ugandan capacities and experiences in managing food safety, agricultural health and related challenges and opportunities. Strong recommendations fro SPS development are given. A team of five persons was involved.</p>
<p>Collaborative Report with the World Bank J. Gutman, I.</p>	<p>Vietnam Food Safety and Agricultural Health Action Plan</p> <p>Objectives: Improving food safety and agricultural health is in line with the main themes of Vietnam's Comprehensive Poverty Reduction and Growth Strategy (CPRGS). Within this</p>

Report Authors	Report Title, Objectives and Achievements
Johnson, M. Wilson, K. Cleaver, H. Kim, S. Ganguly, D. The Nguyen, C. de Haan (Sept. 2007)	<p>framework, the Government of Vietnam (GOVN) has requested World Bank assistance in the preparation of an Action Plan for Food Safety and Agricultural Health. The ultimate objective of this Action Plan for Food Safety and Agricultural Health is to improve living standards of people in and outside of Vietnam by improving their access to safe and healthy food and by minimizing the loss in human well-being caused by food-borne diseases</p> <p>Achievements: This Action Plan is the result of a close cooperation between the Government of Vietnam, local institutions, and international donor organizations. The main mission to prepare the Action Plan took place between March 2 and March 18, 2005. A major consultation to review the draft Action Plan was organized on August 1, 2005, with the participation of the main stakeholders involved in the perishable food chain. A team of six people was involved.</p>
Collaborative Report with the World Bank S. Jaffee, A. Sergeant, D. Cassidy, M. Abegaz, T. Deeb, and M. Sewadeh (July 2007)	<p>Zambia: SPS Management</p> <p>Objectives: This report provides a brief summary of the assessment and recommendations of a joint World Bank/USAID team that visited Zambia between May 15 and 30, 2006. The purpose is to lay out the very broad observations made by the Team and to highlight specific (and costed) recommendations to the GOZ and to the teams managing the ADSP, MATEP, and other projects.</p>
Country Diagnostic Report #38 C. Thorn (Sept. 2007)	<p>Biotech Trade Policy Education and Capacity-Building: WTO Outreach and Kenya Case Study</p> <p>Objectives: In the first phase of the project the goal was to use "awareness-raising" techniques at the WTO. The second phase focused on supporting Kenyan officials and private sector stakeholders in re-writing biosafety legislation with attention to effectiveness, trade-disruptiveness and WTO-compatibility.</p> <p>Achievements: The first phase consisted of organizing seminars on biotech-related trade issues in Geneva, mainly with trade ministry officials who understood WTO obligations and the importance of WTO disciplines, but who were unfamiliar with biotech trade issues. This has resulted in more familiarity with biotech issues. In the second phase they prepared detailed comments on the draft bill and traveled to Nairobi three times for meeting with key Kenyan officials and private sector stakeholders. They also worked between visits with stakeholders to help them develop a lobbying strategy.</p>
2. AVIAN INFLUENZA	
Country Diagnostic Report #10 J. Gingerich, H.L. Shivaprasad (July 2006)	<p>Highly-pathogenic Avian Influenza in India: A Situational Analysis</p> <p>Objectives: The task of this team was to recommend areas for USAID investments in future programming for Avian Influenza (AI). The principle objectives of this assignment were to assess the current situation of highly pathogenic AI (Bird Flu) in India; to review and evaluate the effectiveness of USAID/India's programming for HPAI; and advise USAID/India on future involvement in HPAI control.</p> <p>Achievements: The project focuses on identifying the requirements for developing a rapid, effective contribution to Indian and other donor efforts at controlling/containing further outbreaks of bird flu. Interviews were held with representatives of international organizations (DFID, WHO, FAO, etc.), government officials, and representatives from the poultry industry.</p>
Country Diagnostic Report #11 S. Goyal, I. Neu (Jan. 2006)	<p>An Assessment of the National Avian Influenza Prevention and Preparedness Plan of USAID/Philippines</p> <p>Objectives: 1) to assist USAID and partner stakeholders in the poultry sector to further refine and solicit support for an effective Avian Influenza Prevention and Preparedness Plan (AIPPP); 2) to ensure that the Philippines' existing AIPPP addresses and incorporates FAO/OIE guidelines for controlling HPAI; 3) to evaluate the plan against minimum standards for HPAI control and mitigation as defined by FAO/OIE guidelines; and 4) suggesting improvements and assisting the national agency in charge to prepare an investment, staffing and training plan, if needed.</p> <p>Achievements: The mission took place from January 29 to February 17, 2006. The methodology included a review of documents and reports; discussions with government agencies, task forces, and experts in Manila and in the field; field visits and facility assessments; discussions with non-governmental agencies; discussions with donor agencies; and some presentations.</p>

Report Authors	Report Title, Objectives and Achievements
Country Diagnostic Report #12 B. Krushinskie, J.Lambers (Mar. 2006)	<p>Avian Influenza Rapid Assessment: Ukraine</p> <p>Objectives: 1) to review existing assessment mission documents which have identified needs to resolve existing surveillance, testing and response deficiencies or shortfalls of the GOU; 2) to attend meetings organized by the WB to ground truth the needs; 3) to develop an initial outline of an operational plan to deal with containing HPAI and conduct meetings with all donors, international agencies and the GOU to obtain initial consensus on such plan; 4) to provide a set of priorities for donors, international agencies, and GOU to obtain consensus on the distribution of tasks; and 5) to follow up by developing a final operational plan with USAID and WB that will blueprint the actions of donors and to provide USAID and WB with a blueprint that they can confirm with the GOU and other international agencies and non-governmental organizations.</p> <p>Achievements: A mission was conducted from February 27-March 10, 2006, resulting in the above described objects to be fulfilled.</p>
Country Diagnostic Report #13 A. Mirande (Feb. 2006)	<p>Avian Influenza Virus in Azerbaijan: A Situational Analysis for USAID</p> <p>Objectives: 1) to assess and provide technical assistance to animal health laboratories in the Ministry of Agriculture with respect to their capabilities to provide rapid diagnostic testing; 2) to outline operational procedures for HPAI outbreak prevention, surveillance and control for the private sector and the public sector and their interaction; 3) to advise on the management of national emergency stockpiles for HPAI outbreak control; and 4) to assess and advise on communication strategies on best practices to prevent outbreaks and deal with sick birds; and to advise USAID and other USG agencies on coordination issues with the Government and other donors and on next steps for addressing AI in Azerbaijan.</p> <p>Achievements: The objectives were met during consultant missions from 10—19 February, 2006 in Azerbaijan.</p>
Country Diagnostic Report #15 R. Fulton, M. Busquets, A. Hiniker (June 2006)	<p>Assessment and Strengthening of the Government of Rwanda's National Action Plan Against HPAI</p> <p>Objectives: 1) to propose an addendum to the National Plan; 2) to simulate test of National Plan; 3) to advise USAID and other USG agencies on coordination issues with the Government of Rwanda and other donors; 4) to advise on management of national emergency stockpiles for HPAI; and 5) to develop a Behavior Change and Communication (BCC) strategy addressing consumers, backyard producers, and the general public, and advise on the use and dissemination of communications.</p> <p>Achievements: A table top exercise, a simulated outbreak, requiring the response of agencies to the occurrence was conducted on Friday, 26 May 2006. Rwandan personnel were trained on PPE and AI rapid test during three training sessions. A document listing a large number of recommendations for each of the five objectives was prepared.</p>
Country Diagnostic Report #16 L. Detwiler (July 2006)	<p>Needs Assessment Report: Avian Influenza for Bulgaria</p> <p>Achievements: A rapid, technical review of Bulgaria's avian influenza (AI) surveillance, prevention and preparedness program was conducted during the week of June 11, 2006. The main purpose of this review was to assess the needs of the veterinary and first responder sectors in Bulgaria with regards to training. This assessment was conducted to determine what type of training would be most beneficial, the subject matter needed and the best venue to conduct this training. The assessment was carried out by conducting interviews and site visits. They met with officials at the National Veterinary Office, the national diagnostic laboratory, the Poultry Union, USDA and USAID. They visited 6 of the 28 regions in Bulgaria during which they met with the different levels of the veterinary infrastructure, the extension personnel and poultry producers. The poultry operations that we consulted with ranged from backyard operations (15-20 chickens) to some of the largest commercial entities (300,000-500,000 birds).</p>
Country Diagnostic Report #17 D. Neven, L. Detwiler, E. Krushinskie, J. Westergaard, T. Wilson, H. Kiezebrink, E. Lindner, A. Hiniker	<p>Avian Influenza Surveillance, Monitoring and Training Project for Bulgaria: Final Report for USAID Bulgaria</p> <p>Objectives: In order to assure that the training would address real needs, an initial needs assessment was deemed necessary. The objectives were: (1) to conduct a technical review of the current AI monitoring and surveillance program being conducted in Bulgaria; and (2) to prepare a scope of work and work plan for the actual training sessions to be done in Phase II for surveillance programs with veterinary doctors and first/emergency response with veterinary assistants. A training program was designed targeting around 300 public and 180 private participants via in-depth 2-day training seminars. The first day consisted of theoretic</p>

Report Authors	Report Title, Objectives and Achievements
(Dec. 2006)	lectures, the second day of hands-on practical sessions. Achievements: A total of 432 veterinarians (officially registered) attended the training in the period September 18-30. These included 283 federal veterinarians and 149 private sector veterinarians. The report also discusses the key success factors of the training and the lessons learned.
Regional Report #18 R. Graham, J. Bowman, A. Miles, M. Busquets, A. Hiniker, W. Smiley, N. Kennedy, C. Brown, M. Palmer (Dec. 2006)	Two Day Training Workshops for USAID Avian Influenza Commodities (Ukraine, Romania, Moldova, Azerbaijan, Georgia, Bulgaria, Pakistan) Achievements: This report provides a rapid, after-action summary to USAID of the major events, findings and recommendations from the three RAISE SPS Training Teams. The major training topics concerned the use of Personal Protection Equipment (PPE), the use of rapid sampling and diagnostic kits, the use of IATA shipping kits, skill development for future cascade training and the use of Personal Protection Equipment (PPE). During the timeframe of December 1-15 2006, three Teams were organized and deployed by RAISE SPS to conduct high priority trainings in 7 countries involving commodities to be used in the fight against outbreaks of avian Influenza (AI). Team 1 covered Ukraine, Romania and Moldova. Team 2 covered Azerbaijan, Georgia and Bulgaria. Team 3 covered Pakistan. The report also discusses some recommendations and lessons learned from these training workshops.
Regional Report #28 A. Hiniker, C. Brown, A. Miles, P. Marchot, G. Mullins, N. Kennedy (Sept. 2007)	Training Workshops for USAID Avian Influenza Commodities: Ethiopia, Ghana, Mali, Uganda Achievements: Trainings as described in report #18 were held in four African countries.
Regional Report #35 J. Bowman, A. Hiniker, A. Miles, J. Jagne, D. Shaul, H. Kiezebrink (Sept. 2007)	Training Workshops for USAID Avian Influenza Commodities: Afghanistan, Laos, Vietnam Achievements: Trainings as described in report #18 were held in three Asia Near East countries. For the training in Laos, a new module was added on poultry culling and disposal.
3. CERTIFICATION AND ACCREDITATION [“The Relationship of Third-Party Certification to SPS Measures and the International Agri-Food Trade”]	
Global Analytical Report # 1 C. Bain, D. Thiagarajan, L. Busch (Nov. 2002)	Case-study Ghana Objectives: The focus of the project is to ascertain 1) to what extent third-party certification (TPC) was an issue in Ghana, 2) which producers were affected by TPC, 3) what the major concerns and challenges facing stakeholders, especially smallholders, were in implementing TPC, 4) how they viewed the relative costs and benefits of TPC, 5) what was the specific role of their organization/institution in dealing with TPC, and 6) what were the priorities for assistance. Achievements: Between June 14 and 25, 2004, 18 interviews were conducted with Ghanaian stakeholders involved in the production of fresh fruits and vegetables for export including small, medium and large-sized growers, growers’ associations, exporters, marketers, processors, NGOs, and government agencies involved in the promulgation or inspection of food safety standards. The insights lead to specific recommendations for priority investments.
Global Analytical Report # 2 M. Hatanaka, D. Thiagarajan, L. Busch (Nov. 2004)	Case-study Indonesia Objectives: The goals of the study are fourfold: 1) to identify to what extent TPC is being implemented in Indonesia, 2) to assess potential benefits and challenges of TPC, 3) to identify concerns and critiques of TPC, and 4) to recommend the kinds of assistance and aid necessary for successful implementation of TPC. Achievements: The study was conducted primarily in West Java, but also in Sidoarjo in East Java, between August 1st and August 16th 2004. A total of sixteen interviews were conducted with various stakeholders involved in organic TPC (including governmental officials, local and international certification bodies, farmers, distributors, exporters, and NGOs). From these interviews, the opportunities, challenges, and concerns regarding organic third-party certification were analysed and specific recommendations formulated.
Global Analytical Report # 3	Case-study Guatemala Objectives: The general objective of this project is to improve farmers’ and exporters’ ability

Report Authors	Report Title, Objectives and Achievements
L. Flores, D.Thiagarajan, L.Busch (Aug. 2005)	to build a stronger, more reputable produce industry through high quality and affordable food safety third party certification. Specific objectives include: 1) identifying and classifying the major third party certification (TPC) schemes and their accreditors currently performing third party food safety certification on fresh fruits and vegetables in Guatemala; 2) identifying the governance structures within TPC schemes; 3) defining the role of the government in the process of accrediting TPC bodies and 4) describing the impacts of TPC on farmers and exporters. Achievements: Interviews were conducted with third party certifiers currently operating in Guatemala, exporters, farmers, industry consultants, and government stakeholders.
Global Analytical Report # 4 M.Hatanaka, D.Thiagarajan, L.Busch (Mar. 2005)	Internet Profile Report Objectives: This paper seeks to provide a preliminary analysis of TPC and the power relations embedded within it. Achievements: This is an internet-focused research. First, they sketch out the general mechanism of TPC, namely the work of CBs and their accreditors, the organizational structures of TPC, and the surveillance mechanism in the TPC industry. Then, they examine the power relations embedded within the TPC mechanism by focusing on four areas: 1) participation in development of TPC standards, 2) enforcement of the TPC scheme, 3) costs of TPC, and 4) assignment of particular CBs for TPC.
Global Analytical Report # 5 C. Bain, D.Thiagarajan, L.Busch (Oct. 2005)	Global Supermarket Profile Report Objectives: The goal was to describe the extent to which retailers publicly identify their requirements for agrifood standards and Third Party Certification (TPC) Achievements: a report that summarizes the key findings from their profile of the 50 largest global supermarkets' websites and company reports, and gives recommendations for development agencies and donors.
Global Analytical Report # 6 M.Hatanaka, D.Thiagarajan, L.Busch (aug. 2005)	Report of Interviews with Third-Party Certification Firms Objectives: This paper examines the potential benefits of TPC as well as some of the challenges it must overcome to ensure its continued expansion and effectiveness. Achievements: This study is based on nine phone interviews with CBs and one interview with a third-party auditing consulting company.
Global Analytical Report # 7 D.Thiagarajan, L.Busch, M. Frahm (Dec. 2005)	Case-study EurepGAP Objectives: This study was conducted to understand how EurepGAP standards were created, what costs are involved in the certification process, and where the demand is greatest for EurepGAP certification. Achievements: Interviews were conducted in several European countries with well-known certification agencies, inspection bodies, importers, retailers, non-governmental organizations (NGOs) and regulatory bodies. A review of the current literature was also performed.
Global Analytical Report # 8 M.Hatanaka, D.Thiagarajan, L.Busch (Aug. 2005)	The Relationship Between U.S. Food Retailers and Third Party Certification Objectives: The overall objective of this study was to examine the role of TPC in ensuring food safety in the production and sale of agrifood products from developing countries, to understand the relationship between private retailer standards and TPC, to clarify how supermarket chains identify and procure TPC services, and to develop strategies and make recommendations to resolve issues currently raised by TPC. Achievements: Telephone interviews were conducted with representatives of 10 major food retailers and 3 wholesale distributors of fresh produce in the United States between November, 2004 and February, 2005.
Global Analytical Report # 9 L. Busch, D.Thiagarajan, M.Hatanaka, C. Bain, L. Flores (Dec. 2005)	Final Report Objectives: This report summarizes the eight preceding reports concerning the relationship of Third-party certification to SPS measures and the international agri-food trade. Achievements: In this report the authors review the literature on TPC, and provide additional data gleaned from websites of and interviews with retailers and certifiers, as well as three brief field studies in Ghana, Guatemala, and Indonesia. A detailed list of conclusions and recommendations is included.
4. SUPERMARKETS IN DEVELOPING COUNTRIES	
Regional Report # 2 T.Reardon, J.Berdegue,	The Rise of Supermarkets in Central America: Implications for Private Standards for Quality and Safety of Fruits and Vegetables Objectives: to describe how supermarkets in Central America organize their procurement

Report Authors	Report Title, Objectives and Achievements
F.Balsevich, L.Flores (Nov. 2003)	system for fruit and vegetables—including the change in food standards. Achievements: Field-research was conducted by a team of four researchers in the period November 2002 - May 2003 in five case-study countries (Costa Rica, Guatemala, El Salvador, Honduras, and Nicaragua) based on rapid reconnaissance surveys of supermarket chains, wholesalers, and suppliers. The report includes a detailed description of the evolution of the retail sector in Central America; and the organizational & institutional changes in the procurement system of supermarkets.
Regional Report # 3 D.Weatherspoon, R.Fotsin, H.Katjiuongua, D.Neven, T.Reardon (Dec. 2003)	The Rise of Supermarkets in Africa, Private Standards for Quality and Safety of Fruits and Vegetables, and Implications for Producers Objectives: to describe the diffusion of supermarkets in Africa and how the retail transformation has been accompanied by changes in the procurement system of supermarkets—with a focus on organizational & institutional changes. Achievements: Field-research was conducted, by a team of five researchers in the period May-July of 2003 in four countries (South Africa, Kenya, Zambia, and Uganda) based on rapid reconnaissance fieldwork including supermarket chains, independent retailers, wholesalers, processors, small traders, and consumers. The report describes how the new supermarket-market is emerging in Africa and the type of assistance that is needed to ensure that small farmers can access these new markets.
Country Diagnostic Report #19 D. Neven, T. Reardon (Dec. 2006)	The Rise of Kenyan Supermarkets and the Evolution of their Fruit and Vegetable Supply Systems Objectives: 1) to describe the (endogenous & indigenous) development of the supermarket sector in Kenya; 2) to compare these developments with supermarket trends in Asia and Latin-America; and 3) to analyze how changes in supermarket procurement systems affect farmers. Achievements: Field-research was conducted by a team of two researchers in the period March - November 2003 and in April 2004 based on 1) in-depth interviews with the executive managers of the top five supermarket chains; 2) a short survey of supermarket stores in 79 of the 87 urban areas; 3) a similar survey of 250 non-supermarket retailers; 4) a survey of 450 households in Nairobi; and 5) interviews with other stakeholders (government officials, industry experts, NGOs, etc.). A very detailed report tackling the identified research question is presented.
Country Diagnostic Report #20 D. Neven, T. Reardon, J. Chege, H. Wang (Dec. 2006)	Supermarkets and Consumers in Africa: The Case of Nairobi Objectives: This study aims at shedding light, from the consumer perspective, on the positive feedback loop between consumers giving their dollar vote to supermarkets and supermarkets using it to create more value for consumers. This research analyses which attributes of retail outlets and the products they sell are important to consumers when deciding where to buy their food, and which socio-economic and demographic factors affect retail outlet choice and shopping frequency. Achievements: This consumer study is part of a broader study on the rise of supermarkets in Kenya which included primary data collection by a team of four researchers during the period March to November 2003 and in April 2004. The field-research included consumer focus group research and a survey of 445 consumers.
Country Diagnostic Report #25 P. Tam, T. Reardon (Apr. 2007)	Urban Consumer Preferences for Poultry from Supermarkets versus Traditional Retailers in the Era of Avian Influenza in Ho Chi Minh City, Vietnam Objectives: to analyze the consumption of poultry products before and after AI outbreaks—with specific attention to the role of supermarkets. Achievements: Field-surveys were conducted by a team of two researchers in November 2006, including 704 urban consumers. In addition, rapid appraisals of retailers and processors were done in June 2006. The report describes a general reduction in poultry consumption after the AI outbreak in 2003, and the increasing importance of supermarkets in the retail of poultry products.
5. SMALL FARMERS IN MODERN SUPPLY CHAINS	
Regional Report # 4 F. Balsevich, P. Schuetz, E. Perez (Dec. 2006)	Cattle Producers' Participation in Market Channels in Central America: Supermarkets, Processors, and Auctions Objectives: This paper focuses on the determinants and effects of the participation of cattle producers in the supermarket channel, export processor channel, and traditional auction channel.

Report Authors	Report Title, Objectives and Achievements
	<p>Achievements: The authors begin with the analysis of the market channels using qualitative data from 50 interviews of retailers, processors, auction market managers, and other key informants in Costa Rica and Nicaragua, two widely differing cases. Then they analyze patterns and supplies of producers by channel using farm level data from 300 farms in the two countries.</p>
<p>Country Diagnostic Report #21 F. Balsevic, T. Reardon, J. Berdegue (Dec. 2006)</p>	<p>Supermarkets, New-generation Wholesalers, Tomato Farmers and NGOs in Nicaragua Objectives: This paper examines the determinants and effects of farmers' participation in supermarket channels, with and without assistance from NGOs in "business linkage" programs. Achievements: The report is based on a survey of 145 tomato farmers, and interviews with supermarket chains, NGOs, wholesalers, and farmer organizations in 2004. The authors find that without assistance, the farmers that work with supermarket chains tend to be the "upper tier" of small farmers, better capitalized with various assets. The smaller and less-capitalized farmers that work with supermarkets tend to do so in association with NGO assistance.</p>
<p>Country Diagnostic Report #22 R. Hernandez, T. Reardon, J. Berdegue (Dec. 2006)</p>	<p>Tomato Farmer Participation in Supermarket Market Channels in Guatemala Objectives: The analysis focuses on the determinants of market channel choice, and the associated changes in practices and net incomes for tomato farmers in Guatemala. Achievements: The analysis is based on field interviews with supermarkets and wholesalers, and a representative survey of farmers. The fieldwork took place in June-August 2004. The analysis shows that farmers selling to supermarkets tend to be in the upper-end of the "small farmer" category.</p>
<p>Country Diagnostic Report #23 D.Neven, M.Odera, T.Reardon (Dec. 2006)</p>	<p>Horticulture Farmers and Domestic Supermarkets in Kenya Objectives: The authors analyze the farm-level impact of supermarket growth in Kenya. Achievements: Two different farmer surveys were conducted, including in total 63 farmers supplying to supermarkets and 103 farmers operating in traditional-marketing channels. The main findings are: 1) small, rain-fed farms are most constrained to enter the supermarket channel, and 2) the supermarket-channel helps to alleviate poverty through labour market effects.</p>
<p>Country Diagnostic Report #24 D.Neven, H.Katjiuongua, I.Ardjosoediro, T.Reardon, P.Chuza, G.Tembo, M.Ndiyoi (Dec. 2006)</p>	<p>Food Sector Transformation and Standards in Zambia: Smallholder Farmer Participation and Growth in the Dairy Sector Objectives: This study focuses on the determinants of smallholder farmer participation in modern supply chains, and the impact of this participation on growth for smallholder farmers. Achievements: The analysis is based primarily on interviews with key informants in the private, public and non-governmental sectors and on unique data from a survey of 182 smallholder dairy producers. The results suggest 1) that mainly larger, higher-income and technologically more advanced farmers have entered the modern dairy channel; and 2) that farmers in the modern dairy channel have grown faster relative to farmers in the traditional dairy channel.</p>

DISCUSSION OF THE FIVE MAJOR TOPICAL AREAS UNDERLYING THE RAISE SPS REPORTS

SPS CAPACITY IN DEVELOPING COUNTRIES

The main reason behind SPS measures being classified as a potential barrier to trade (especially in the case of developing country exports) is the limited SPS capacity typically found in resource-poor countries. There is a standards divergence between country-specific norms and regulation on the one hand and international standards and the other hand, which is larger for developing countries. This makes the formulation and enforcement of internationally accepted standards to be essential. However, developing countries often face difficulties to put such regulations into practice.

Faced with budgetary, organizational, infrastructure and institutional constraints, developing countries have difficulties in bridging the standards divergence and establishing SPS capacity according to internationally accepted rules.

Thus, the RAISE SPS studies have focused in great detail on describing developing country SPS capacity in general and for some specific cases (including Nicaragua, Guatemala, Vietnam, Armenia, Croatia, Ethiopia, Moldova, Zambia, Uganda and Vietnam). These studies detect the specific strengths and weaknesses in SPS systems and make strong recommendation for improving developing country SPS capacity and donor assistance in this area.

SPS CAPACITY OF THE PUBLIC SECTOR

Public sector SPS capacity differs among developing countries and regions. From the RAISE SPS country specific studies, it is clear that:

- most developing countries have some basic laws and public regulations for animal and plant health and food safety
- SPS inspection and certification systems are present in most countries

There are, however, important differences among developing countries in the following issues concerning public SPS capacity:

- the degree to which public SPS capacity and specific SPS strategies are developed
- the degree to which SPS regulations and certification schemes are aligned with international standards and recommendations
- the degree to which SPS laws and regulations are implemented and enforced
- the way governments are organized and cooperate for addressing SPS

In some cases—e.g. in the Latin-American case-study countries Guatemala and Nicaragua—the legal framework is based on regulations issued by international organizations—most importantly the OIE, IPPCC and Codex and in line with WTO regulations. In other cases basic regulations are in place but are not yet (completely) aligned with international and WTO rules. For example, in the case of Vietnam it is reported that important discrepancies still exist between national and international standards in major areas of food safety and agricultural health. Also in Moldova, there is a legal, regulatory, and institutional framework for food safety and SPS but it is still tied to the GOST standards¹ of the former Soviet Union. Actions are needed to shift from this GOST-based system to one based on international standards appropriate to a market economy and more effective in protecting human and agricultural health.

For some countries it is reported that there is a lack of sound SPS strategies and crisis management as the dominant approach to address emergent food safety risks and SPS issues. Notably in Zambia and Uganda, most efforts to upgrade regulatory capacities have been in reaction to food safety events or external pressures, rather than part of concerted strategies to protect human, plant and animal health, and enhance international competitiveness on a sustainable basis.

In most developing countries, whether or not they have well-established SPS regulations and sound SPS strategies, governments are very limited in the implementation and enforcement of these regulations. The main reasons for this lack in implementation and enforcement are:

- lack of laboratory and veterinary infrastructure and capacity
- lack of well-trained personnel
- underlying budgetary limitations

Often numerous public agencies are involved in management of SPS and food safety capacity. In some countries—e.g. Moldova, and Uganda - responsibilities are not well-defined and there is no clear delineation of tasks between different agencies. Such situations might lead to overlapping responsibilities, repetitive inspections and high costs, and may allow scope for rent seeking behaviour. Other country studies—e.g. Vietnam, Nicaragua, and Guatemala—report a good cooperation among different public authorities—often at different levels. In some countries, most notably Armenia and Croatia, the SPS system appears to be particularly weak with very limited SPS regulations that are enforceable.

SPS CAPACITY OF THE PRIVATE SECTOR

Although food safety and consumer protection was traditionally a public responsibility, with the rapidly increased importance of SPS measures, the private sector has also become involved in SPS issues and is an important player in increasing SPS capacity.

The important role of the private sector in the development and sustainability of SPS capacity is very well recognized in the RAISE SPS studies. Some reports argue that improving SPS capacity needs to involve the entire food industry from farm to consumer, and hence also private sector agents. Food safety and SPS capacity entail actions to be taken by the private sector, which is often more dynamic in addressing rapidly changing SPS issues than the public sector.

¹ GOST standards were originally developed by the government of the [Soviet Union](#) as part of its national standardization strategy and now refers to a set of technical [standards](#) maintained by the Euro-Asian Council for Standardization, Metrology and Certification (EASC), a regional [standards organization](#) operating under the auspices of the [Commonwealth of Independent States \(CIS\)](#).

Multinational companies have a potentially important role to play in upgrading developing country's SPS capacity. Multinationals, because of their better access to finance and ties with their home-economies, might be considered as trendsetters in increasing SPS capacity. This issue is not explicitly analyzed in the RAISE SPS studies but is apparent from a number of specific examples given in the country studies. For example, in the case of Nicaragua, it is mentioned that Parmalat—a multinational milk processing company—sets its own SPS standards and supports farmers in SPS capacity through investment in local milk storage tanks. In the case of Vietnam, numerous medium-large scale fruit exporters were found to have geared up their standards in their own way to be able to selectively export to the E.U.—this in advance of any concerted, formal in-house programs to meet EurepGAP standards.

In countries with a relatively well-developed public and private SPS capacity—such as in Central America—there is a tendency to focus on compliance with the strictest norms, especially by private agents. This seems to be a strategy to safeguard against SPS trade barriers. For example, in Nicaragua, agri-food companies find it very important to comply with the US standards—which are stricter than the standards in other countries in the region—despite the fact that not only the US but also neighboring countries are potentially important trading partners as well.

Some cases related to the private sector

The RAISE SPS studies provide many examples of specific cases of insufficient SPS capacity, of which we mention a few. For example, in **Vietnam** there are clear deficiencies in food processing and packaging—caused mainly by a lack of access to finance by private companies. Also, facilities for storage and transportation of fresh and processed food need upgrading—cold chain infrastructure is only beginning to emerge.

Ethiopia does not have the status required to safely export animals and meat products because it does not come close to meeting the required, internationally accepted OIE standards. It can therefore only export live animals to countries with similar disease status. The requirements for trade in live animals are very strict and require highly sophisticated veterinary services. It is unlikely that a poor country such as Ethiopia can invest in such infrastructure and attain the international requirements. However, the requirements on the export of fresh meat are much less stringent and are based on the health of the specific animal which is the source of the meat, the sanitary conditions in the abattoir, and the way fresh meat is processed and handled prior to export. It will be much easier for Ethiopia to attain the requirements for fresh meat export than for live animal export.

The export of live animals requires international guidelines which mandate disease free zones, strict control of animal movement, vaccination programs, quarantines, animal identification, disease surveillance, etc. Ethiopia lacks basic veterinary services, has a poor and inadequate disease surveillance program, has only one systematic animal disease control program, vaccination programs are limited to large ranches and for high-value animals, and does not have an animal movement control system or export quality quarantine station.

Nicaragua is making a lot of efforts to enter the US market with dairy products, mainly cheese (the development of the cheese export sector is a very high national priority). But a lot of constraints remain: lack of transport infrastructure, SPS problems, lack of capacity to invest in processing and marketing quality; and general weakness in public sector capacity to control diseases of quarantine significance, etc

Croatia appears to be the case-study country most lagging behind in building up private SPS capacity. Interviews with supermarkets in this country revealed that food safety is not a major priority for them and

that they are not making specific investments to address food safety issues or increase SPS capacity. Other problems such as 1) lack of consistent volume in supplies, 2) failure of suppliers to meet minimum package requirements, 3) lack of quality and consistent grading methods, and 4) the high costs of local production—are perceived as more urgent supply chain problems than those of food safety. However, most private sector agents agree that SPS issues will become increasingly important in the near future, and several USAID field projects are geared up to help them.

INTERNATIONAL COOPERATION IN BUILDING SPS CAPACITY

As SPS issues are a global concern, international cooperation is tremendously important in this field. The need for international cooperation identified in the RAISE SPS studies is twofold: 1) developing countries need to participate more actively in international SPS negotiations and the establishment of international rules and regulations; and 2) developing countries are in the need of international assistance to increase their SPS capacity.

Most developing countries in the studies are member of international organizations concerned with SPS and international food safety committee's—such as the IPPC, OIE, CODEX and the WTO. However, most resource-poor countries do not participate actively in these organizations. For example, Guatemala is a member of the IPPC, OIE and CODEX but only participates actively in the OIE; Nicaragua—although a member of all three organizations - does not participate actively in any of them. The main constraints countries face for participation in international food safety committees and negotiations or a lack of funding to pay international travels and a lack of trained personnel and experienced negotiators.

Some developing countries receive assistance from international donors and NGOs to increase their SPS capacity. The RAISE SPS studies argue that such aid is much needed. For example, Guatemala is starting a project for a post-graduate program on how to conduct Pest Risk Assessments, in cooperation with the Inter-American Development Bank, OIRSA, MAGA and the USDA. In the case of livestock in Ethiopia, FAO is implementing a program for monitoring and certifying livestock moving into international markets; USAID funds projects to establish a quarantine station at the port for disease inspection of livestock; and several international NGO are working together to install disease surveillance mechanisms in high priority rural areas. Zambia has received recent assistance from the FAO in order to update and revise its phytosanitary legislation as well as on-going assistance by the Dutch Government to minimize plant health risks associated with floricultural/horticultural exports to Europe.

CRITICAL ELEMENTS FOR DEVELOPING COUNTRY SPS CAPACITY

Despite relatively well-developed SPS regulations, enforcement mechanisms, and SPS capacity in some countries, throughout the RAISE SPS studies elements can be identified that are critical for developing country SPS capacity in general. These elements include: laboratory analysis and veterinary services; education, training and increased awareness; general infrastructure; and control, validation and certification.

Laboratory Analysis and Veterinary Service

One of the basic fundamentals in food science and food protection is the reliance upon scientifically based laboratory analysis. A critical component of food safety and quality systems is testing, which requires well-equipped and modern laboratories. This is problematic in most of the countries that were surveyed. In many countries there is a need for higher laboratory capacity. This need is confirmed by public agencies as well stakeholders from the private sector and international donors active in this area. Delays

in laboratory test add additional costs to the private sector. Therefore, in some countries, private companies have started their own in-house laboratory units (e.g., Amanda Foods in Vietnam).

Critical to increasing that scientific laboratory capacity is the modernization of laboratory infrastructure, improved access to supplies, modernizing and bringing up-to-date laboratory techniques and testing methodologies², certifying these methodologies, and improving the availability of specially-trained laboratory staff.

In addition, in the case of livestock and the export of live animals, the international guidelines require disease free zones, strict control of animal movement, vaccination programs, quarantines, animal identification, disease surveillance, etc. All this requires highly developed veterinary services and laboratory analysis, which are lacking in many developing countries (especially poor African countries such as Ethiopia—where many livestock diseases cannot even be diagnosed).

Education, Training, and Increasing Awareness

There is a need for education and training in SPS related issues and for increased awareness of food safety risks at many different levels. First, in some countries, public health and agricultural officials need be made aware of and/or better informed on SPS issues in order to develop effective SPS strategies, design appropriate policies and assign priorities for investment in SPS capacity.

Second there is a need for educated and experienced people to participate in international SPS negotiations.

Third, as mentioned above there is a lack of educated laboratory personnel and specifically-trained veterinarians to perform controls and testing. There is a large role for governments in cooperation with national universities to fill the gap in educated and specifically-trained personnel. For example, in Ethiopia, new veterinary schools have started to fill the need for specifically trained veterinarians. Also international donors and NGOs can play an important role in improving education and training in food safety and SPS issues.

Finally, farmers and rural households also need to be aware of food safety, and plant and animal health. These are critical elements in improving food safety and agricultural health as a large number of producers and farm workers handle agricultural raw materials on a day-to-day basis. Education and training of farmers on SPS issues is crucial but might be very difficult. Public hygiene education and the promotion of better agricultural health practices should be put in place in many countries. Many NGOs and international donors are involved in this. For example, in Ethiopia, CARE international is training local villagers to perform basic veterinary services and supports them with a veterinary kit and a donkey.

Some of the RAISE SPS studies particularly focused on increasing farmer's awareness of SPS issues. In the case of Vietnam it is mentioned that convincing farmers to actually change their traditional agricultural practices was probably the most difficult challenge. The typical strategy used to invoke change is to first convince select "farmer leaders" who have earned the respect of the entire production community, create "demo farms" on their properties, and invite skeptical neighbors in to observe the results.

² For example, in Armenia the SPS testing methodologies used are still based on the old Soviet system and are completely outdated.

Infrastructure

Apart from laboratory infrastructure, also other infrastructural problems and shortcoming were identified in many of the country cases under study. Most importantly these include: a lack of road transport infrastructure, and limited capacity in the processing industry (cold storage, infrastructure in abattoirs, vacuum packing, etc.)

Control, Validation, and Certification

Control, through inspections or audits, are key elements of food safety and agricultural health systems. Controls are necessary to confirm or verify that products, processes, and/or procedures comply with SPS requirements. Audits can be organized through public sector institutions as well as through the private sector (see further).

Based on the specific strengths and weaknesses of individual countries and sectors, and on the specific situation with respect to government organization, trade relations and structure etc., the RAISE SPS studies make **specific recommendations** for better addressing SPS issues and strengthening a country's capacity to overcome SPS trade barriers. As these recommendations are very country and case-specific, there is no need to discuss them here in detail.

THE CASE OF AVIAN INFLUENZA

One of the major food safety risks of the past years has been the outbreak and spread of Avian Influenza—or the H5N1 virus—from Southeast Asia. This has been a major issue as it concerns a highly pathogenic virus that has threatened to spread and affect animal as well as human health worldwide.

The threat from Avian Influenza (AI) is specifically important for low income countries as in many of these countries poultry products are important sources of proteins for the human diet. In addition, in many low-income countries the poultry sector is quite important in the economy, contributing significantly to GDP and agricultural growth. Small-scale poultry-farming or backyard poultry is often an important source of income and contributes to food security for the poorest people in those countries.

Several RAISE SPS studies (see list in Table 1) pay specific attention to the issue of Avian Influenza and analyze the situation in depth in several case-study countries, including India, Philippines, Azerbaijan, Ukraine, Rwanda, and Bulgaria.

GOVERNMENT ACTION (PLANS) FOR PREVENTION AND PREPARATION

Among the studied countries, there is some variation in the degree to which governments have taken action on prevention and preparedness for AI. Most countries do have some form of a national action plan for AI prevention and preparedness formulated by the government—often developed in collaboration with international agencies such as FAO and WHO. Such national AI prevention and preparedness plans are a recent development—mostly dating from 2005/2006—and were in different stages of progress in the specific countries at the time (March 2006) when RAISE SPS received funding to work on the global AI crisis. In Ukraine, the authorities were still in the process of developing a National Program while in Rwanda there was already a National Emergency Plan (but it was not yet approved by the Cabinet and the President). In Bulgaria, India and Philippines the government AI prevention and preparedness plans had already been drafted.

The RAISE SPS country reports generally evaluate these government AI plans as sound, comprehensive and effective. Such plans outline the institutional setup and the activities to be undertaken by various stakeholders to prevent, contain and respond to AI outbreaks—including integrated bird surveillance systems, testing, stamping out, etc. In the case of Rwanda, the report indicates some very specific recommendations to change and improve the National Emergency Plan³.

The exception is Azerbaijan where there seems to have been very little government action for prevention and preparedness for AI. At the time of the RAISE SPS visitation, there was no government AI action plan or program. There is no systematic bird surveillance even though there was considerable evidence of abnormally high mortality rates among backyard poultry. Thus a geographical H5N1 prevalence study was deemed to be a highly urgent priority for this country. USAID and other donor projects started to provide capacity building in this area in 2007.

CAPACITY FOR EFFECTIVE IMPLEMENTATION

However, despite well formulated action plans, common to all the low-income countries under study is the lack of capacity to effectively implement such action plans. This lack of capacity involves financial, technical and human resource capacity building as described below.

First, in general these studies reveal a pervasive lack of laboratory infrastructure to effectively perform microbiological and chemical testing. This is identified as a major constraint for surveillance, early detection and rapid response in India, Philippines, Ukraine, and Bulgaria.

Second, there is a lack of equipment such as protective clothing, sterile needles, AI test kits, and internationally-approved shipping materials for the transport of samples.

Third, to effectively protect human health against AI outbreaks, there is a lack of equipment, technology and infrastructure in hospitals. The technology to detect the virus in humans is even completely lacking in some of the countries.

Fourth, there is a lack of specifically trained staff, especially among rural veterinarians and health post workers. Often veterinarians do not have correct knowledge on sampling techniques, proper implementation of biosecurity on farms, proper use of protective clothing, stamping out procedures, etc. Also health workers are often unaware of the correct methods to deal with highly infectious patients.

In summary, in all of the study countries there is a need for technical assistance, training, improved infrastructure and equipment in order to be able to effectively implement a national AI prevention and preparedness plan. The Bulgarian study specifically examines the need for training and makes very detailed recommendations for implementation of training programs. The RAISE SPS Project has carried out training programs in 14 countries related to the proper use of donated USAID AI commodities (personal protective equipment, human and animal viral test kits, decontamination equipment, shipping sample equipment). In a “training of trainers approach”, hundreds of veterinarians and human health workers were trained in common sessions. These trainings were deemed by Mission staff and host country counterparts to be highly effective and sorely needed as a critical component needed to enable countries to respond efficiently to sudden AI outbreaks

³ The most important recommendation for change to the Rwanda National Emergency Plan for the Prevention and Response Against Possible Avian Influenza is to enlarge the “stamping out” zones.

INFORMATION AND COMMUNICATION STRATEGY

A major issue with respect to AI that was identified in several of the country-specific reports is the need for correct and adequate information provision and communication at all stakeholder levels involved. The lack of systematic communication and reporting strategies are identified as another vital component which needs strengthening in order to prevent, contain, and respond to AI outbreaks.

A lack of adequate information and spread of that information can have important—and diverse—consequences. The Azerbaijan study reports that the government was slow to acknowledge the importance of AI and the severity of the threats caused by the virus. This led to delayed government action in the development of a strategic response plan, and increased exposure to health risks in the general populace. In the case of India, small outbreaks of AI have been disastrous to the poultry sector because of failure to accurately communicate the health risk to consumers. After airlines, railways and important public institutions inappropriately eliminated all poultry products, poultry prices undeservedly fell by over 80% because of a lack of consumer confidence.

In general, the AI reports identify that in order to improve knowledge and communication, a multi-sectoral approach is needed, including health workers as well as agricultural extension workers and veterinarians. Improving information and communication may include attention to the education system, specific training, correct use of mass media, distribution of leaflets, etc. Spread of information is crucial for realizing small changes in the behavior of people that could greatly improve the prevention and control of AI. For example, in the case of Rwanda it was found that two simple procedures (night caging of poultry outside the house and increased hand-washing after handling poultry) could greatly reduce disease spread. However, bringing about these changes in society as a whole is difficult, and mass media can play an important role in ensuring success.

COOPERATION AND PUBLIC-PRIVATE PARTNERSHIPS

Cooperation at different levels, including public-private partnerships, is mentioned to be crucial for improving the AI prevention and preparedness in low-income countries but also for rebuilding the poultry sector after AI outbreaks. However, as a result of budget and time constraints, this was not analyzed in depth in the country-studies. Only in one country—India—the private sector was specifically—and only to a minor extent - involved in the interviews and discussions. Potential public-private cooperation is impeded by the fact that in most countries the majority of poultry is kept on small-scale, family-type farms or even in backyards. The poultry marketing chain also includes a large number of small intermediaries and traders. However, as was previously mentioned, the RAISE SPS visitation schedules were highly regulated by USAID Mission personnel, and private sector visitations were kept to a minimum.

INDEMNIFICATION AND COMPENSATION

A final AI related issue that was identified to be particularly important in low income countries is indemnification—paying farmers to destroy their birds. The appropriate compensation of farmers after an actual AI outbreak and “stamping out” actions is mentioned to be essential for obtaining farmers cooperation in affected areas and hence for controlling outbreaks. And in order to sustain growth and investment in the poultry sector, correct—based on real costs—compensation of farmers is crucial. It is suggested that donors have a potentially important role to play in designing indemnification strategies and providing fund-generating mechanisms for compensation programs.

VACCINATION

Related to the discussion on indemnification is the discussion on whether or not to use vaccination. It is argued in several reports (e.g. India, Azerbaijan) that slaughter of infected animals might not always be the best option in poor areas of low-income countries as the economic consequences can be devastating. The RAISE SPS reports are generally in favor of encouraging the use of vaccination in combination with “limited” stamping out in affected areas. However, there are potential constraints in terms of lack of vaccination supplies, good quality vaccines, presence of rural cold chain infrastructure to preserve vaccine quality, etc.

CERTIFICATION AND ACCREDITATION

As mentioned before, it is not only important for developing countries to comply with SPS measures; it is also crucial to document such compliance. A particularly important way for such validation is certification.

Certification for compliance with SPS measures is increasingly done through third-party certification (TPC)—rather than first (the suppliers) or second-party (the buyers) certification. The RAISE SPS studies have presented a large number of reports that specifically deal with certification in general and third-party certification in particular. A number of specific case-studies of TPC in developing countries (FFV in Ghana, organic products in Indonesia, FFV in Guatemala) and some general studies of certification bodies identify the main benefits and challenges from TPC.

THIRD PARTY CERTIFICATION (TPC)

Third Party Certification (TPC) is defined as the verification of compliance with a given standards when such verification is not performed by a seller’s self audit (first party) or the buyer (second party). Third Party Certification differs from first (the suppliers/sellers) or second (the buyers / retailers) party certification in that it is provided by an independent body.

TPC institutions are most common in industrial countries⁴, mainly the EU, UK and the US. These institutions accredit⁵ certification bodies all around the world to perform auditing and certification. Certification bodies exist in many different forms; they may be a public agency, and NGO, or a private firm. Different TPC bodies are mentioned and described throughout the RAISE SPS studies: EurepGAP in the EU; British Retail Consortium in the UK; Davis Fresh Technologies and PrimusLAB in the US; the National Association for Sustainable Agriculture in Australia, etc. A detailed description of these agencies is summarized in the “Internet Profile Report” using information from the agencies’ websites.

While most certification bodies are located in industrial countries, some developing countries already have their own certification bodies accredited by EU or US institutions. From the three country case-studies it is clear that some developing countries (e.g. Ghana) do not have any national certification bodies accredited by industrial country TPC while in other countries (e.g. Indonesia and Guatemala) accredited certification bodies are present in the country. This has important consequences for the cost of certification in the country.

⁴ Japan heavily relies on second party certification.

⁵ Accreditation is the process by which an authoritative organization gives formal recognition that a particular certification body is competent to carry out specific tasks such as audits.

Most certification bodies set their own standards. They use national or international standards such as Codex Alimentarius and ISO norms as a baseline and expand on this to formulate their own standards. These TPC standards are often more stringent than public standards.

GROWING IMPORTANCE OF TPC

Third-party certification has become particularly important in the past couple of years. Although TPC is not legally enforced, TPC is becoming de facto mandatory as many traders and retailers demand TPC from their suppliers. A number of key elements that have contributed to the increasing importance of TPC are identified in the studies.

First, the increasing importance of food standards and SPS measures itself has created a need for certifying compliance with the standards.

Second, governments have shifted their position with respect to food standards from command and control systems to auditing systems. Public regulation is said to be increasingly inadequate and not able to keep pace with the globalization of the agrifood chain. This has induced the development of private standards by retailers. These private standards can be built on state standards, defined by a single firm, an industry group (e.g. EurepGAP) or by a third party (e.g. ISO).

Third, the oligopolistic structure of food retail has induced new features in the agrifood sector. Competition among large retailers has become fierce and supermarkets are concerned with reputation and customer loyalty. New strategies for non-price competition have emerged including market segmentation, new products and services, and the use of private labels and own brands.

BENEFITS OF TPC

It is argued in the reports that TPC is potentially beneficial for all agents in the chain, the consumers, the retailers and producers.

First, TPC may lead to higher food quality and safety. It may also lead to increased consumer confidence in this quality and safety as TPC is objective⁶ (carried out by a third party), transparent⁷ and consistent (based on documentation and standardized methods rather than on personal relations, reputation and trust).

Second, certification improves access to international markets and therefore increases the prices farmers can get for their produce (as international market prices are usually higher than domestic prices). Suppliers can gain visibility, distinguish themselves from other non-certified suppliers and better position themselves in international markets. In addition, improved trust of buyers for certified produce from a specific origin might increase the demand for those products.

⁶ In principle, TPC should be objective but questions arise as to which extent TPC institutes are really independent and objective bodies. For example, in the case of EurepGAP, a certification procedure laid down by the Euro-Retailer Produce Working Group (Eurep), one could wonder to what extent the certification procedure is independent and objective as it is tailored to meet the needs of its members (EU supermarkets).

⁷ The case-study from Indonesia reports a lack of transparency in the case of certification for organic production. They report a lack of information and understanding on international standards and how the certification and accreditation processes occur.

Third, TPC might decrease the potential of international buyers (often large supermarket chains) to exploit suppliers (often small farmers) from developing countries. The quality of produce is documented and cannot strategically be used by buyers to refuse produce or pay low prices.

Fourth, audits performed in the procedure of certification might be an education process for farmers in developing countries. Such audits could lead to better management practices and efficiency gains. Good agricultural practice (GAP) may also lead to better chemical management (leading to better health of farmers), reduced post-harvest losses and increased shelf-life of produce, etc.

Fifth, labor standards—e.g. part of EurepGAP certification—benefits farmers and workers through establishment of minimum wages, providing mandatory medical checkups for workers etc.

DISTRIBUTION OF BENEFITS FROM TPC

However, it is argued that TPC might create benefits but that these benefits are not equally distributed along the supply chain. TPC is said to enable retailers to shift costs associated with food quality and safety to the suppliers. TPC decreases the work and costs for retailers as they don't need to do audits anymore. But it increases the workload and operating costs for the suppliers who need to pay for third party audits.

The RAISE SPS studies indicate that actors involved in TPC disproportionately come from industrial countries while developing country actors are generally excluded. TPC is very expensive and an important issue is whether or not small and poor farmers can become certified. There is a risk that small businesses and poor farmers are excluded. These studies also stress that it is very important yet very difficult for small and resource-poor farmers to become certified

A main part of the high cost of certification in developing countries comes from transport, accommodation and interpreter costs for international certifiers. The reports stress the importance for governments in developing countries to set up their own national third party certification programs and accreditation mechanisms. For, example in the case of certification for organic production in Indonesia, it is estimated that the establishment of national certification bodies could reduce the cost of certification by half. National certification bodies could therefore improve smallholders participation in certification schemes.

The reports conclude that there is an important role to play for NGOs and donors in assisting small farmers to become certified. Such assistance programs could include training of farmers, financial assistance, investment in infrastructure, etc. For example, the case-study from the FFV sector in Ghana concludes that it is possible for small and resource-poor farmers to attain standards as stringent as EurepGAP and become certified if they get the right amount of assistance.

MODERN SUPPLY CHAINS: THE SPREAD OF SUPERMARKETS IN DEVELOPING COUNTRIES

As mentioned before, the ongoing consolidation in food retail and the increased importance of large super- and hypermarket chains has started in industrial countries and has contributed to the prevalence of SPS standards and the privatization of standardization, validation and certification. However, also within developing countries, supermarkets have started to emerge and have captured increased shares in food retail at a very rapid pace. The RAISE SPS studies have analyzed the importance and diffusion of supermarkets in developing countries and their specific procurement system in great detail, with a

geographical focus on Central-America (Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua) and Africa (South Africa, Kenya, Zambia, and Uganda).

The growth of supermarkets and their changing procurement system has led to the development of what could be called “modern supply chains”. Also, foreign direct investment (FDI) in food-processing and distribution in developing countries has contributed to the emergence of these modern supply chains. Characteristic for these modern supply chains are the high food quality and safety standards and the system of vertical coordination in the chains. The emergence of modern supply chains has important implications for suppliers in developing countries. A number of RAISE SPS studies have focused on the implications for local farmers in modern supply chains.

THE SPREAD OF SUPERMARKETS IN DEVELOPING COUNTRIES

The studies very well document the spread of supermarkets in developing countries. In Central America supermarkets have spread rapidly and have captured an increased share of food retail. From 1997 to 2002 the population-weighted average of the share of supermarkets in food retailing has increased from 28% to 36% in Central America. In Africa, supermarkets started to appear more recently. In Southern and Eastern Africa supermarkets have spread rapidly in the past 5-10 years. South-Africa is the leading country with 50-60% of food retail captures by supermarkets. Kenya is next with 20-30% of food retailed through supermarkets. In West and Central Africa supermarkets are just starting to emerge.

In different regions of the world, supermarkets have a similar pattern of diffusion. Supermarkets tend to start in upper income niches in large cities and then spread into middle class and then poorer consumer markets, and from large cities to secondary cities to towns, and from richer/more urbanized zones or countries to poorer and less urbanized. Thus the chains tend to spread well beyond the middle class into the food markets of the poor⁸. This pattern of diffusion is mirrored in “waves” of supermarket spread that one can observe when comparing countries.

Crucial factors for the inflow of supermarkets in developing countries are the liberalization of FDI in retail and—to some extent—income growth. First, rising incomes, urbanisation and relative political stability have encouraged the diffusion of supermarkets in developing countries⁹. Second, FDI is a crucial element in the rapid rise of supermarkets. In Central America, there was a tiny base of domestic supermarket chains at the beginning of the 1990s, but the lion’s share of growth occurred with the influx of FDI from the mid 1990s onwards. In Kenya and South-Africa the supermarket sector emerged without FDI which may reflect an early stage of domestic capital investment before a critical size is reached where FDI flows in. Yet, FDI from South-Africa and Kenya is driving the growth of supermarkets in other African countries. South-African and Kenyan supermarket have spread already into 14 other African countries that have opened up markets for foreign investment. In some countries, governments have given direct incentives for FDI in the supermarket sector. For example, in Zambia, the government provided a strong incentive for Shoprite (from South Africa) to invest, with a tax exoneration of ten years.

⁸ A study in Kenya has specifically investigated the reasons why supermarkets can penetrate the market of the poor. This study finds that poor consumers buy food from supermarkets because they perceive it as being cheaper than traditional retail outlets. Also in Kenya, another study estimates that processed food is indeed on average 5% cheaper in supermarkets compared to traditional retail stores.

⁹ In the case of Vietnam, it is mentioned that the outbreak of Avian Influenza has directly had an impact on supermarket share of retail in poultry products. After this major zoonotic crisis consumers now seem to have much more confidence in poultry products bought in supermarkets.

CHANGES IN PROCUREMENT SYSTEMS AND STANDARDS INTRODUCED BY SUPERMARKETS

Another crucial element in the diffusion of supermarkets is the changing procurement system of the supermarkets themselves. Major changes in procurement systems of supermarkets drove down costs and facilitated the leap from the traditional upper-income niche markets to the food markets of the middle class and the poor. Supermarkets are shifting away from the old procurement model based on sourcing store by store from the traditional wholesale market through spot market arrangements, toward the use of four key pillars of a new kind of procurement system: (1) using specialized procurement agents (specialized wholesalers) as opposed to traditional wholesalers; (2) centralized procurement; (3) assured and consistent supply through “preferred suppliers”; and (4) high quality and increasingly safe product through private standards imposed on suppliers.

Supermarkets in developing countries increasingly apply stringent food standards. Competition among supermarkets poses strong incentives to apply such stringent food standards so as to make sure that produce is of better quality and safety than that of the competitors. Also the demand from middle-income class consumers in developing countries for higher quality and safety plays a role. The specific procurement system of supermarkets—centralized procurement with preferred suppliers and specialized wholesalers—facilitates supermarkets to demand high quality and safety standards from their suppliers. The rise of supermarkets in developing countries over the past decade has made compliance with stringent food standards—an issue previously at stake only in international markets—also a prerequisite for supplying domestic markets¹⁰.

MODERN SUPPLY CHAINS: SMALL FARMERS IN MODERN SUPPLY CHAINS

Rising SPS standards, supermarket development and the emergence of modern supply chains might have distribution consequences and affect the way the gains from trade are shared long the supply chain—with important consequences for local small farmers in developing countries (World Bank, 2005). Although the RAISE SPS Task Order was not mandated to carefully analyze the implications for local smallholders, the impact of changes in the supply chains for small enterprise and poor farmers is a common element in the RAISE SPS studies. Some studies even specifically deal with the issue of smallholder marginalization in modern—often supermarket driven—supply chains.

DESCRIPTIVE EVIDENCE

A common conclusion, which is repeatedly argued throughout the studies, is that increasing food standards—imposed by international traders as well as local supermarkets—may lead to the marginalization of poor farmers. Also in the studies on “Third Party Certification (TPC)”, the concern about certification resulting in small farmer marginalization and exclusion is mentioned repeatedly. Some examples:

1. “TPC is a strong trend that threatens to exclude small and medium scale entrepreneurs from market opportunities in their own backyard.” (L. Flores, D.Thiagarajan, L.Busch)

¹⁰ In addition, the rise in supermarkets is as important as the development of export markets. For example, in the case of Kenya, it is assessed that the volume of FFV handled by supermarkets is already approaching the volume FFV exported.

2. “Small-scale growers will have certainly lost their export marketing position after January 2004 when EurepGAP members, distributors and retailers are required to deliver certified fresh produce exclusively with EurepGAP.” (D.Thiagarajan, L.Busch, M. Frahm)
3. “Some NGOs argue that TPC will not help small- or medium-sized farmers. TPC increases the amount of work and responsibilities of small farmers. Rather, it will reproduce and further deepen inequalities between larger farms and smaller farmers.” (M.Hatanaka, D.Thiagarajan, L.Busch)

The studies on “Supermarket Diffusion in Developing Countries” also address the consequences of this diffusion for local suppliers using descriptive evidence. It is argued that as supermarkets increasingly dominate food markets in developing countries, they also determine the conditions and the potential of farmers to sell to urban markets. The rise in supermarkets and their specific and changing procurement systems has important implications for local producers. First, as supermarkets are rapidly diffusing and consolidating their procurement system to gain economies of scale, producers need to supply larger volumes as was common in traditional retail markets. Second, the application of quality and safety standards by supermarkets poses challenges to producers. For producers, the same issues are at stake in supplying local supermarkets as in supplying highly-demanding export markets.

Information from *interviews* with supermarkets and other retail stores in different Central American and African countries revealed that supermarkets tend to source directly from larger producers who have a better capacity to meet strict quality and safety requirements. However, large supermarket chains also procure from small suppliers, especially for fruits and vegetables and where a government, donor, and/or projects have been put in place to ‘upgrade’ the small producers to meet the needs of supermarkets.

These studies come to similar conclusions but no systematic evidence is actually presented (with the exception of the few econometric studies focusing on small farmers in modern supply chains—discussed below).

ECONOMETRIC ANALYSES

For some countries (Nicaragua, Costa Rica, Guatemala, Kenya, Zambia) and sectors (cattle, dairy, FFV) *econometric analyses* are presented on the issue of small farmers and modern supply chains. These studies analyse the farm-level impact of changes in the supply chain using household survey data and comprehensive econometric techniques.

For all these cases analysed, the studies conclude that it is rather larger and better-off producers who can participate in supermarket or export-oriented supply chains. Farm size, access to irrigation and capital assets—and to a minor extent education—are especially important determinants of participation in modern supply chains. In addition, they find that farmers who are supplying to supermarkets or multinational export-oriented processing companies use more inputs, a more capital-intensive technology, have higher yields and reach higher farm efficiency. Those suppliers have better access to credit and receive technical assistance from the buyers through vertical coordination linkages. (Note: The econometric studies on Kenya produce reinforce this finding about preferential sourcing from a newly emergent class of well organized “medium” scale farmers. However, the studies involving Zambia dairy and tomatoes from Nicaragua/Guatemala indicate more supermarket sourcing from high numbers of “upper tier” small farmers).

However, the studies also show that farm profits are higher for farmers in modern supply chains, except for Guatemala. Horticulture farmers supplying Kenyan supermarkets have grown ten times as fast as the

traditional-channel farmers. Survey findings for Zambia suggest that farmers in the modern dairy channel have grown faster relative to farmers in the traditional dairy channel in terms of milk output volume and in terms of upgrading with respect to improved breeds, tools and operational management practices. Tomato farmers in Nicaragua that supply to supermarkets reach considerably higher incomes than farmers supplying to traditional channels. Yet, profits for traditional and supermarket-oriented tomato farmers in Guatemala were found to be similar.

CONCLUSIONS

RAISE SPS was an extremely productive project, which managed to acquire considerable interest from Missions and Regional Bureaus within USAID, and therefore through buy-ins, was able to keep itself sustained for a 5-year period (despite the announcement shortly after start up that complete funding for core activities would fall short of the stated ceiling of \$5.7 million). On its limited budget over a five-year period, RAISE SPS provided technical assistance and analysis in over 30 countries and produced over 50 technical reports.

KEY CONTRIBUTIONS

RAISE SPS made significant global contributions in the following key areas:

- Analysis of SPS capacity in developing countries
- Avian Influenza: emergency response to the crisis through training on the use of AI outbreak commodities, and assessments of national preparedness
- Third party certification and accreditation
- Modern supply chains: evolution of supermarkets in developing countries
- Modern supply chains: how small farmers are impacted by modern supply chains

The following activities under RAISE SPS can be considered as especially successful, and are not presented in any particular order of priority:

- Sustained trade capacity building support for the Vietnamese dragon fruit sector was done in collaboration with a Mission-based field project and another international donor. The support resulted in the formation of a cutting edge cooperative with dedicated members willing to invest private funds in an upgraded export oriented packhouse facility, EurepGAP group certification for the coop and their packhouse, and highly increased potential for more lucrative sales to both the EU and USA.
- Development of a close collaboration with SPS interests at the World Bank, resulting in joint analytical SPS assessments in 4 countries, cooperation on a ground-breaking E-Learning Course for SPS, and stimulation of the formation of a DC-based network of interested parties in agricultural standards (the Trade and Standards Practitioners Network = TSPN).
- A comprehensive look at the recent evolution of supermarket chains in 5 Central American countries and 4 Sub-Saharan African countries, focusing on recent changes in supermarket procurement systems which may or may not accommodate small, resource-poor farmers in modern supply chains.
- Development of a cutting edge analysis on the global state of play for supply chain accreditation practitioners known as “third party certifiers”. A summation of the global evolution of TPC was enhanced by in-depth case studies of TPC systems in Ghana, Guatemala, and Indonesia.
- A comprehensive analysis of Armenia’s infrastructural and laboratory capacity to meet international food safety norms.

- Technical SPS assistance to Ethiopia’s livestock and horticulture sectors, including advanced laboratory training at Texas A&M University.
- Technical assistance to the Government of Kenya, providing for a significant revision and modernization of its National Biosafety Law.
- Design of a detailed training manual for USAID Avian Influenza Commodities, including the execution of training workshops in 12 countries in Africa, Asia, and Eastern Europe.
- Assessment of national AI preparedness and planning in Philippines, India, and Jordan.
- Global assessment of the efficacy of national vaccine programs to control AI.

SHORTCOMINGS AND NEED FOR FURTHER WORK

USAID is extremely concerned about the ability of its projects to effectively and sustainably link small farmers to markets. Although RAISE SPS conducted a significant amount of work documenting the evolution of modern supply chains in developing countries during the project period, lack of funds and time prevented deeper analysis of some small farmer-related issues that are key to development practitioners. RAISE SPS presented many cases of how small farmers were confronted with the challenges of emerging agri-food standards, and documented key public and private interventions designed to provide capacity building which would facilitate better small farmer “fit” into the modernizing chains. However, despite this body of work, the RAISE SPS studies still do not clearly answer the question, **“To what extent are small farmers really excluded or marginalized or to what extent they can profit from the opportunities in modern supply chains?”** In fact, this question emerged as a hotly debated topic during their final discussion session of the RAISE SPS closure workshop.

In the academic literature on standards there is considerable debate on the validity of the arguments about small farmers’ exclusion from high-standards trade (e.g. Swinnen, 2006; Maertens and Swinnen, 2007). Some empirical studies found that even very small and resource-poor farmers can participate in (and gain from) international trade and supermarket supply chains—despite high and increasing standards (For example, Minten et al., 2006 for Africa; Gulati et al., 2006 and Rozelle et al., 2006 for Asia and Dries and Swinnen, 2004 for Eastern Europe).

Moreover, even if small farmers are not excluded, poor households may be included through the labor market and benefit in this way from participation in modern supply chains (see Maertens and Swinnen 2007 for evidence on this). Such labor market effects are confirmed to be important in some of the RAISE SPS studies (e.g. in the study on horticulture farmers in modern supply chains in Kenya) but are not analyzed in detail.

A further shortcoming is that these RAISE SPS studies were not explicitly designed to describe and document the mechanisms through which smallholders would be marginalized in high-standards supply chains. Are small farmers who previously had access the foreign markets increasingly excluded from these markets because of increasing standards? Or does it become increasingly difficult for small farmers to gain market access because of increasing requirements and the need to be certified? Is compliance with SPS standards or certification of that compliance the main constraint for farmers? Answers to these questions are not given as no systematic analysis is performed to fully analyze the exact sources of

smallholder exclusion. Yet, insights into these mechanisms might be important in order to develop projects tailored to meet the needs of these small producers.

For example, one of the main arguments throughout the studies is that the cost of compliance with standards and the cost of certification are too high for small and resource-poor farmers. However, the scarce available evidence in the literature suggest that cost of compliance with quality and safety standards is much lower than generally assumed (Aloui and Kenny, 2005; Cato et al., 2005). An attempt to really calculate and quantify these costs could contribute to balancing this debate. However, this might not have been feasible in the scope of the RAISE SPS Task Order because of budgetary and time constraints.

In addition, there are two distinct issues in the marginalization of small farmers. The first (“exclusion”) concerns the participation (or exclusion) of small and poor farmers. The second (“rent distribution”) concerns the distribution of the gains in high-standards agricultural supply chains. These issues are not fully clarified in the studies—although this might be important for understanding smallholder marginalization.

Key elements to the empirical studies providing evidence of smallholders participating in and benefiting from high-standards trade are the insights into the vertical linkages between small producers on the one hand and exporters, traders, processors, and supermarkets on the other hand. Vertical coordination in the supply chain is key to understating how small producers can participate in and gain from high-standards trade (Dries and Swinnen, 2004; Gulati et al., 2006; Maertens and Swinnen, 2007; Minten et al., 2006; Rozelle et al., 2006). Unfortunately, vertical coordination linkages are hardly addressed in the studies while they are potentially very important for understanding and circumventing smallholder marginalization—a main objective of the RAISE SPS studies. **Thus it is a clear recommendation from the RAISE SPS project experience that future donor projects provide adequate funding to more deeply analyze these issues of small farmer exclusion and marginalization in modern supply chains.**

However, addressing the vertical coordination linkages in modern supply chains would entail a detailed analysis of the private sector—which was not the main focus of most of the RAISE Mission projects (with the exception of the econometric studies discussed below). Instead they very much focus on the role of the public sector and development projects in increasing farmers’ access to high-standards supply chains are given and discussed. Some examples include:

“It is widely recognized that even large farmers, let alone small- or medium-sized farmers in Ghana do not have the resources to meet EUREPGAP requirements. Importantly, however, these interviews demonstrated that *with the appropriate assistance* farmers, including very small farmers, can successfully meet standards as stringent as those of EUREPGAP, maintain the standards, and gain certification” (C.Bain, D.Thiagarajan, L.Busch)

“Future USDA and USAID technical assistance, marketing, and infrastructure investments are needed to keep SPS compliance costs from excluding small farmers and processors, leaving only large ones to benefit from free trade agreements.” (P.Bash, R.Lopez-Garcia).

Because of this focus, the role of the private sector in including more poor and small producers in modern supply chains became largely neglected in the RAISE SPS body of work. Yet, from the literature, it

appears that the private sector could (and does) play an important role in this process as many changes are driven by the private sector. A more balanced emphasis on public and private sector stakeholders could have improved the identification of opportunities to link a large number of small farmers to high-standards markets. **Thus it is also clear recommendation from the RAISE SPS project experience that future donor projects provide adequate funding to more deeply analyze the role of the private sector and vertical integration as they affect small farmer participation in modern supply chains.**

In summary, given the increasing importance of agricultural health and food safety issues in both developed and developing countries, it would seem that USAID investments in SPS-related areas should continue to play a valuable role in stimulating economic growth in resource-poor countries. A key question for USAID is how to deliver quality assistance in such a highly technical area as SPS in the future – through well managed, centralized projects with deep pools of “on-tap” technical expertise that are available throughout project duration, or through dependence upon more limited SPS components that can be built into Mission (i.e. “field”) projects from the start. RAISE SPS was a centrally managed and funded project that clearly had to compromise between some central EGAT-driven agendas and field-driven needs. In a few technical areas, RAISE SPS made concrete decisions to take a leadership role and provide analytical contributions it felt was important and strategic for USAID economic growth initiatives in general. At the same time, the expertise pool of the project had to wait patiently for a significant number of field-driven buy-ins, which did eventually come, but which never could have been predicted during the design or start-up phase (AI funding for example).

Given the importance of agricultural health and food safety issues to the success of modern, export related supply chains, as long as USAID chooses to invest in value chain-driven projects for developing countries, centrally-funded SPS projects such as RAISE SPS should continue to be a worthwhile investment for USAID in the future. Another important consideration would be whether or not USAID wants to maintain any kind of global leadership position in SPS-related areas such as agricultural health and food safety. Should USAID choose to invest in SPS primarily through built-in work in field projects, it will lose some international prestige in these areas to entities such as the World Bank, WHO, and WTO who are making significant efforts to bolster their centralized sources of SPS expertise and assume leadership roles. No matter how USAID chooses to make its investments in SPS, both developing and developed economies can expect to experience significant loss of life and lose billions of dollars in commerce as problems such as avian influenza, bovine tuberculosis, hoof and mouth disease, bovine spongiform encephalopathy, E. coli, and Salmonella outbreaks continue to cause sickness, death, and significant economic losses in the years ahead.

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ANNEX A

RAISE SPS WORKSHOP/TRAINING RECORD (2002–2007)

Country	#Workshops	# Trainees	Training Topics	Type of Trainee
Vietnam (Hanoi, Ho Chi Minh City: Jan. 2005)	4	100	Principles of SPS; Vietnam SPS status	Public/Private stakeholders from the dragon fruit sector (farmers, exporters, MARD officials)
Vietnam (Ho Chi Minh City, Binh Tuan: July 2005))	2	60	Marketing of dragon fruit in the EU	Public/Private stakeholders from the dragon fruit sector (farmers, exporters, MARD officials)
Vietnam (Binh Tuan: June 2005)	2	60	Post harvest handling of dragon fruit	Dragon fruit farmers, exporters, provincial govt officials, DF association members
Vietnam (Saigon, Binh Tuan: June 2005)	2	60	EU/U.S entry requirements for dragon fruit	Dragon fruit farmers, exporters, provincial govt officials, DF association members
USA (Raleigh, NC: June 2005)		2 Vietnamese	Month long customized training on Pest Risk Assessment at USDA/APHIS – North Carolina	MARD plant quarantine officials
USA (College Station, TX: Sept./Oct. 2005)		3 Ethiopians	Laboratory identification of livestock diseases of SPS importance	Ethiopian govt scientists at national analytical lab
Morocco (Agadir: Jan. 2004))	1	80	Export competitiveness of Moroccan fresh products	Farmers, exporters association officials, govt agribusiness officials,
Morocco (Casablanca: Jan. 2004)	1	80	Export competitiveness of Moroccan processed food products	Farmers, exporters association officials, govt agribusiness officials,
USA (New York City: June 2004)	1 study tour	10	Discuss business opportunities with US importers	Moroccan fresh/processed food exporters
Switzerland (Geneva: May/Nov. 2004)	2	50	Importance of biotechnology, biosafety, & IPR in developing countries	WTO delegates
Kenya (Nairobi: April/Sept. 2006)	2	20	How to reform the existing Kenya legislation on biosafety	Kenyan govt officials

Country	#Workshops	# Trainees	Training Topics	Type of Trainee
Indonesia (Central Java: July 2007)	1 study tour	10	Visit USAID CBAIC Project sites and learn techniques for community-based avian influenza control	National AI Task Force members from the Philippines, animal and human health practitioners
Philippines (Pampanga, General Santos City: Aug. 2007)	2	60	Community-based AI control techniques; development of AI "Early Warning System" for provinces	Provincial govt. rural health workers, animal and human health
Bulgaria (Vratsa, Stara Zagora, Varna: Sept. 2006)	5	430	National preparedness, surveillance, vaccination, compensation, euthanasia, culling, public awareness, sample collection, necropsy, shipping	Public/Private vets and paravets from select regions
Rwanda (Kigali: April 2006)	1	10	Tabletop training for simulated outbreak response; behavioral change and communication	Sr. level MOH/MOA policy-makers
Azerbaijan (Baku: Dec. 2006)	1	16	USAID AI Commodities Usage (Training of Trainers)	Vets, animal and human health workers from ag and health ministries, mainly provincial level
Bulgaria (Sofia: Dec. 2006)	1	10	USAID AI Commodities Usage (Training of Trainers)	Vets, animal and human health workers from ag and health ministries, mainly provincial level
Georgia (Tbilisi: Dec. 2006)	1	10	USAID AI Commodities Usage (Training of Trainers)	Vets, animal and human health workers from ag and health ministries, mainly provincial level
Moldova (Chisinau: Dec. 2006)	1	15	USAID AI Commodities Usage (Training of Trainers)	Vets, animal and human health workers from ag and health ministries, mainly provincial level
Romania (Bucharest: Dec. 2006)	1	11	USAID AI Commodities Usage (Training of Trainers)	Vets, animal and human health workers from ag and health ministries, mainly provincial level
Ukraine (Yalta: Dec. 2006)	1	13	USAID AI Commodities Usage (Training of Trainers)	Vets, animal and human health workers from ag and health ministries, mainly provincial level
Afghanistan (Kabul: Jan. 2007)	1	21	USAID AI Commodities Usage (Training of Trainers)	Vets, animal and human health workers from ag and health ministries, mainly provincial level
Pakistan (Islamabad: Dec. 2006)	1	8	USAID AI Commodities Usage (Training of Trainers)	Vets, animal and human health workers from ag and health ministries, mainly provincial level
Vietnam (Hanoi, Ho Chi Minh City: April 2007)	2	62	USAID AI Commodities Usage (Training of Trainers)	Vets, animal and human health workers from ag and health ministries, mainly provincial level

Country	#Workshops	# Trainees	Training Topics	Type of Trainee
Laos (Vientianne: Aug. 2007)	1	25	USAID AI Commodities Usage (Training of Trainers)	Vets, animal and human health workers from ag and health ministries, mainly provincial level
Ghana (Accra, Tamale, Kumasi, Sunyani: June 2007)	4	85	USAID AI Commodities Usage (Training of Trainers)	Vets, animal and human health workers from ag and health ministries, mainly provincial level
Ethiopia (Addis Ababa: June 2007)	1	30	USAID AI Commodities Usage (Training of Trainers)	Vets, animal and human health workers from ag and health ministries, mainly provincial level
Mali (Katibougou: June 2007)	1	21	USAID AI Commodities Usage (Training of Trainers)	Vets, animal and human health workers from ag and health ministries, mainly provincial level
Uganda (Kampala: June 2007)	1	20	USAID AI Commodities Usage (Training of Trainers)	Vets, animal and human health workers from ag and health ministries, mainly provincial level
TOTAL = 21 countries	45	1382		

ANNEX B

MASTER LIST OF RAISE SPS PUBLICATIONS

(Note: ALL THESE PUBLICATIONS ARE AVAILABLE ON THE RAISE SPS FINAL PROJECT CD)

GLOBAL ANALYTICAL REPORTS

- 1 The Relationship of Third-Party Certification to Sanitary/Phytosanitary (SPS) Measures and the International Agri-Food Trade. Case Study: Ghana (C. Bain, D. Thiagarajan, L. Busch. November 2002)
- 2 The Relationship of Third-Party Certification to Sanitary/Phytosanitary (SPS) Measures and the International Agri-Food Trade. Case Study: Indonesia (M. Hatanaka, D. Thiagarajan, L. Busch. November 2004)
- 3 The Relationship of Third-Party Certification to Sanitary/Phytosanitary (SPS) Measures and the International Agri-Food Trade. Case Study: Guatemala – with Emphasis on Food Safety Standards (L. Flores, D. Thiagarajan, L. Busch. August 2005)
- 4 The Relationship of Third-Party Certification (TPC) to Sanitary/Phytosanitary (SPS) Measures and the International Agri-Food Trade. Internet Profile Report (M. Hatanaka, D. Thiagarajan, L. Busch. March 2005)
- 5 The Relationship of Third-Party Certification (TPC) to Sanitary/ Phytosanitary (SPS) Measures and the International Agri-Food Trade: Global Supermarket Profile Report (C. Bain, D. Thiagarajan, L. Busch. October 2005)
- 6 The Relationship of Third-Party Certification (TPC) to Sanitary/ Phytosanitary (SPS) Measures and the International Agri-Food Trade: Report of Interviews with Third Party Certification Firms (M. Hatanaka, D. Thiagarajan, L. Busch. August 2005)
- 7 The Relationship of Third-Party Certification (TPC) to Sanitary/ Phytosanitary (SPS) Measures and the International Agri-Food Trade: Case Study - EUREPGAP (D. Thiagarajan, L. Busch, M. Frahm. December 2005)
- 8 The Relationship of Third-Party Certification (TPC) to Sanitary/ Phytosanitary (SPS) Measures and the International Agri-Food Trade: The Relationship Between U.S. Food Retailers and Third Party Certification (M. Hatanaka, D. Thiagarajan, L. Busch. August 2005)
- 9 The Relationship of Third-Party Certification (TPC) to Sanitary/ Phytosanitary (SPS) Measures and the International Agri-Food Trade: Final Report (L. Busch, D. Thiagarajan, M. Hatanaka, C. Bain, L. Flores, L. Busch. December 2005)

- 38 Biotech Trade Policy Education and Capacity-Building: WTO Outreach and Kenya Case Study (C. Thorn. September 2007)
- 44 Avian Influenza Vaccines: Focusing on H5N1 High Pathogenicity Avian Influenza – HPAI (K. Grogan, D. Halvorson, R. Slemons. October 2007)

REGIONAL REPORTS

- 1 Benchmarking of SPS Management Capacity in Five Central American Countries (Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua) (T. Bernardo, C. Aguilar, L. Flores, J. Lamb, J. Karpati, J. Velez. November 2003)
- 2 The Rise of Supermarkets in Central America: Implications for Private Standards for Quality and Safety of Fruits and Vegetables (T. Reardon, J. Berdegue, F. Balsevich, L. Flores. November 2003)
- 3 The Rise of Supermarkets in Africa, Private Standards for Quality and Safety of Fruits and Vegetables, and Implications for Producers (D. Weatherspoon, R. Fotsin, H. Katjuongua, D. Neven, T. Reardon. December 2003)
- 4 Cattle Producers' Participation in Market Channels in Central America: Supermarkets, Processors, and Auctions (F. Balsevich, P. Schuetz, E. Perez. December 2006)
- 18 Two Day Training Workshops for USAID Avian Influenza Commodities (R. Graham, J. Bowman, A. Miles, M. Busquets, A. Hiniker, W. Smiley, N. Kennedy, C. Brown, M. Palmer. December 2006)
- 28 Training Workshops for USAID Avian Influenza Commodities: Ethiopia, Ghana, Mali, Uganda (A. Hiniker, C. Brown, A. Miles, P. Marchot, G. Mullins, N. Kennedy. September 2007)
- 35 Training Workshops for USAID Avian Influenza Commodities: Afghanistan, Laos, Vietnam (J. Bowman, A. Hiniker, A. Miles, J. Jagne, D. Shaul, H. Kiezebrink. September 2007)

EVALUATION REPORTS

- 1 Evaluation of Recent SPS-Related Programs in Central America (P. Bash, R. Lopez-Garcia. May 2003)
- 2 Linking Producers to Markets: The Challenge of Emerging Standards - A Final Summary and Evaluation Report of USAID's RAISE SPS Task Order (M. Maertens, J. Swinnen. September 2007)

COUNTRY-SPECIFIC DIAGNOSTIC REPORTS

- 1 Benchmarking and Diagnostic SPS Mission to Nicaragua (J. Velez, J. Karpati, L. Flores. May 2003)
- 2 Benchmarking and Diagnostic SPS Mission to Guatemala (J. Velez, J. Karpati, L. Flores. July 2003)
- 3 Zoonotic Testing Laboratory Assessment for Armenia (T. Deeb, E. Graf. April 2007)
- 4 Design of an SPS-Focused Food Safety Project for Armenia (T. Deeb, E. Graf. April 2004)

- 5 SPS Assessment of the Horticulture Sector in Croatia (H. Winogron, D. Georgievski. July 2004)
- 6 Report on Bumpers and Import Sensitivity Analysis for Moroccan Citrus (D. Humpal, K. Jacques. October 2003)
- 7 Report on Bumpers and Import Sensitivity Analysis for Moroccan Tomatoes (D. Humpal, K. Jacques. November 2003)
- 8 The Role and Impact of the Private Sector on Sanitary and Phyto-Sanitary (SPS) issues in Vietnam (C. Clingman. October 2004)
- 9 Assessment of Sanitary and Phytosanitary (SPS) Issues and Marketing Needs for the Livestock – Meat Sector of Ethiopia (Author: Greg Sullivan et al. February 2005)
- 10 Highly Pathogenic Avian Influenza in India: A Situational Analysis (J. Gingerich, H.L. Shivaprasad. July 2006)
- 11 An Assessment of the National Avian Influenza Prevention and Preparedness Plan for USAID/Philippines (S. Goyal, I. Neu. January 2006)
- 12 Avian Influenza Rapid Assessment: Ukraine (B. Krushinskie, J.Lambers. March 2006)
- 13 Avian Influenza Virus in Azerbaijan: A Situational Analysis for USAID (A. Mirande. February 2006)
- 14 An Assessment of Ethiopia's Diagnostic Capacity in Sanitary and Phytosanitary Measures Related to Fresh Fruit and Vegetables (T. Deeb, P. Hanemann. January 2006)
- 15 Assessment and Strengthening of the Government of Rwanda's National Action Plan Against High Pathogenicity Influenza (R. Fulton, M. Busquets, A. Hiniker. June 2006)
- 16 Needs Assessment Report: Avian Influenza Training for Bulgaria (L. Detwiler. July 2006)
- 17 Avian Influenza Surveillance, Monitoring and Training Project for Bulgaria: Final Report for USAID/Bulgaria (D. Neven, L. Detwiler, E. Krushinskie, J. Westergaard, T. Wilson, H. Kiezebrink, E. Lindner, A. Hiniker. December 2006)
- 19 The Rise of Kenyan Supermarkets and the Evolution of their Fruit and Vegetable Supply Systems (D. Neven, T. Reardon. December 2006)
- 20 Supermarkets and Consumers in Africa: The Case of Nairobi (D. Neven, T. Reardon, J. Chege, H. Wang. December 2006)
- 21 Supermarkets, New-Generation Wholesalers, Tomato Farmers, and NGOs in Nicaragua (F. Balsevic, T. Reardon, J. Berdegue. December 2006)
- 22 Tomato Farmer Participation in Supermarket Market Channels in Guatemala: Determinants and Technology and Income Effects (R. Hernandez, T. Reardon, J. Berdegue. December 2006)
- 23 Horticulture Farmers and Domestic Supermarkets in Kenya (D. Neven, M. Odera, T. Reardon. December 2006)
- 24 Food Sector Transformation and Standards in Zambia: Smallholder Farmer Participation and Growth in the Dairy Sector (D. Neven, H. Katjuongua, I. Ardjosoediro, T. Reardon, P. Chuza, G. Tembo, M. Ndiyoi. December 2006)
- 25 Urban Consumer Preferences for Poultry from Supermarkets versus Traditional Retailers in the Era of Avian Influenza in Ho Chi Minh City, Vietnam (P. Tam, T. Reardon. April 2007)

- 26 The Government of Vietnam's Implementation of the WTO Agreement on the Application of Sanitary and Phytosanitary Measures (K. Kennedy. March 2007)
- 27 National Assessment of Avian and Pandemic Influenza Preparedness – Kingdom of Jordan. (M. Sanchez, J Schaeffer. January 2007)
- 34 Morocco Food Processors Study Tour to New York City and the NASFT Fancy Food Show (B. Rabatsky. July 2004)
- 37 Middle-East Partnership Initiative (MEPI): Moroccan Agribusiness Associations Support (D. Humpal. September 2007)
- 39 Strengthening National Avian Influenza Preparedness through Public Information and Community-Based Early Warning Systems in the Philippines (L. Detwiler, H. Go, J. Bowman. , K. Hartigan-Go, A. Faroan, J. Dulawan, R. Teredasai. September 2007)
- 40 Food Sector Transformation and Standards in Zambia: Smallholder Farmer Participation and Growth in the Tomato Sector (D.Neven, H. Katjuongua, I. Ardjosoediro, T. Reardon, P. Chuza, G. Tembo, M. Ndiyoi. February 2008)
- 41 Kenya Study Tour for Zambian SPS Stakeholders (J. Kigamwa, Mi Sichilima, J. Bowman. February 2006)
- 42 RAISE SPS Collaborative Trade Capacity Building Project in Support of Vietnam's Fruit Sector: The Case of Dragon Fruit (Bowman, Thao, et al. August 2007)
- 43 Final Report: Expert Services to Assist National Avian Influenza Prevention and Preparedness Planning in Kazakhstan (J. Dale. September 2007)

REPORTS DONE IN COLLABORATION WITH THE WORLD BANK (PUBLISHED BY THE WORLD BANK)

- 1 Collaborative Report with the World Bank - Moldova: Managing Food Safety and Agricultural Health: An Action Plan (K. van der Meer, D. Humpal, X. Qin. May 2007)
- 2 Collaborative Report with the World Bank - Uganda, Standards and Trade: Experience, Capacities, and Priorities (S. Jaffee, T. Deeb, T. Obrien, Y. Strachan, R. Kiggundu. September 2007)
- 3 Collaborative Report with the World Bank - Zambia: SPS Management (S. Jaffee, A. Sergeant, D. Cassidy, M. Abegaz, T. Deeb, M. Sewadeh. July 2007)
- 4 Collaborative Report with the World Bank - Vietnam Food Safety and Agricultural Health Plan (J. Gutman, I. Johnson, M. Wilson, K. Cleaver, H. Kim, S. Ganguly, D. T. Nguyen, C. de Haan. September 2007)

ANNEX C BACKGROUND AND AGENDA FOR RAISE SPS CLOSEOUT WORKSHOP

LINKING PRODUCERS IN DEVELOPING COUNTRIES TO DYNAMIC MARKETS: THE CHALLENGE OF EMERGING STANDARDS

USAID - RAISE SPS Project Closure Workshop

September 14, 2007

Renaissance Hotel, Washington DC

1. BACKGROUND

The gradual accession of more and more countries to WTO, as well as the proliferation of free trade agreements, has increased the role and importance of sanitary and phytosanitary (SPS) and other standards as the foundation of rules-based trading and of market access. As food industry consolidation continues, changes in procurement and marketing practices have increased the importance of standards as a competitive necessity. Dealing effectively with emerging standards—both public and private—has become indispensable to sustainable participation of all suppliers in integrated value chains and supply chains.

Although in the early 1990s this was true mainly for chains that moved food and agricultural products into the most developed markets, over the past decade the ascendancy of supermarkets in emerging and developing country markets has also made compliance with private standards a prerequisite to supplying the fastest growing and most dynamic channels of distribution in many of the countries in which the US Agency for International Development (USAID) works. USAID's strategy for agriculture focuses on linking producers to markets, which remains a challenge for all suppliers, but especially for smallholders. In this context, it makes sense to summarize lessons learned and, forward looking, identify action implications for all potential shareholders.

USAID's world-wide RAISE SPS project, which has focused on the above issues, is coming to an end in September of this year. Over the past four plus years, RAISE SPS has conducted research and provided technical assistance that not only helped clarify the nature of the challenge but also points to appropriate development responses. The project's final activity will be to organize a workshop to present its legacy in a broader context and to explore collaborative, multi-stakeholder strategies for addressing the challenge of emerging standards.

The workshop, for which the agenda is below, has two components. First, the workshop will briefly present the body of work developed under the RAISE SPS project and launch an analytical meta-report

that will highlight key findings and achievements. The report which includes a CD-ROM with all of the projects 50+ publications will be distributed to participants at the workshop.

Second, four panels with speakers from both the public and the private sector will present various perspectives related to the workshop's overall theme. These leading experts will summarize lessons learned in understanding the challenge of emerging standards in food and agricultural trade. They will present examples of successes and failures in dealing with them. Finally, they will point the way toward to more effective development interventions that will raise the competitiveness of developing country suppliers while mitigating the risks of exclusion of the rural poor (smallholder farmers and farm workers) in the dynamic supply chains of transforming food sectors.

The workshop will end with a discussion around the overall theme of the workshop: Are current donor programs answering the challenges? If not, what needs to change? What recommendations can be made as to where it is most efficient for USAID and other donors to put their future program funding in the world of SPS? What are the best donor entry points for making value chains successful in LDCs and getting larger numbers of small farmers successfully linked to stable markets with higher standards, whether domestic or foreign? Should the focus be on smallholder producers, or rather on jobs and ownership in large commercial farms? Is it about inclusion (of many) or income growth (for a selected group) or both (log improvement)? Should the donor make key selection decisions on which farmers to focus on, thereby ensuring that high numbers of neighboring farmers will be left out since they won't cut the mustard? What should the donor do about all those left behind? Or should donors let private sector competition auto-select the best available suppliers, and then donor-run programs build the capacities of those who have been left out? Where is the better bang for the buck - capacity building of Ministries, sector-specific supply chain support, public-private partnership type arrangements with the food processors and/or distributors, other?

2. PROGRAM

8.00-8.45:	Breakfast & Registration of Participants
8.45-9.00:	Welcome Statement Jim Yazman, USAID
9.00-9.30:	Introduction – Project Review, Legacy Report and Workshop John Bowman, DAI
9.30-10.00:	Legacy Presentation on the RAISE SPS Project – Jo Swinnen, Catholic University of Leuven, Belgium
10.00-10.15:	Coffee-break
10.15-11.30:	<i>Panel 1: Aspects of Standards and Compliance Verification</i> Moderator: Daniele Giovanucci
(15 minutes)	1. Networks of Conformity Assessment: Challenges and Opportunities for Development. Larry Busch and Allison Loconto, Michigan State University
(15 minutes)	2. SPS Standards and Stakeholders: Outcomes and Trade-Offs. Don Humpal, DAI

- (15 minutes) 3. Completing the Standards Transition in the CIS: The Policy Dilemmas Posed in Moving from GOST to International Standards.
Kees van der Meer, World Bank Consultant
- (15 minutes) 4. The State of Social and Environmental Standards: Overview of New Impact Measurements for Organic, Fair Trade, Private Standards, Etc.
Daniele Giovanucci, Committee on Sustainability Assessment (COSA)
- (15 minutes) Discussion
- 11.30-12.45:** ***Panel 2: Aspects of Standards and Transition – Country Case Studies***
Moderator: Bob Rabatsky, FINTRAC
- (15 minutes) 1. Food Sector Transformation and Standards: Smallholder Farmer Participation and Growth in the Zambian Dairy Sector.
David Neven, DAI
- (15 minutes) 2. Integrating Environment and Social Standards into Food Safety Management Systems: The Case of Morocco.
Dave Gibson, Chemonics
- (15 minutes) 3. Pesticide Regulation in a Rapidly Expanding Export-Orientated Agricultural Sector: How Ethiopia is Facing up to the Challenges.
Richard Pluke, FINTRAC
- (15 minutes) Discussion
- 12.45-1.45:** ***Working Lunch Break***
- 1:00 -1:15 DFID DVD on African Livestock Standards
- 1:15 – 1:30 Informal Discussion
- 1.45-3.15:** ***Panel 3: Standards and the Private Sector***
Moderator: Kristi Ragan, DAI
- (15 minutes) 1. Developing Standards to Address Complex Problems: The Ongoing Pursuit of Cocoa Sustainability
Mars Incorporated
- (25 minutes) 2. Experiences with Fairtrade, Co-ownership and Public Private Partnerships: AgroFair and South Africa Farm Management (SAFM)
Dave Boselie, AgroFair Assistance & Development Foundation and Charles Boyes, SAFM
- (15 minutes) 3. Linking Small Holder Farmers to the Agro-Industrial Supply Chain – The Case of Heineken in Africa
Henk Knipscheer, Winrock International
- (20 minutes) Discussion
- 3.15-3.30:** Coffee-break

- 3.30-5.30:** ***Discussion Panel: The Donor’s Challenge***
- (15 minutes) Introduction: USAID’s Perspective on Standards
Tom Hobgood, USAID
Moderated discussion around the workshop’s overall theme
Moderator: Jo Swinnen
Panel: John Lamb, Mars Inc., Joyce Cacho, Dan Clay
- (15 minutes) 1. Supermarket Chains and Food Safety in the Domestic Markets of Developing Countries - Implications for Donors
Tom Reardon, Michigan State University
- (15 minutes) 2. Shaping Verification Schemes to Meet Smallholders’ Needs: GTZ’s Policy Approach.
Jenni Heise, GTZ
- (15 minutes) 3. DFID’s Engagement with Agricultural Standards – The Way Forward
Tim Leyland, DFID
- (15 minutes) 4. USDA’s Approach to Standards
Joe Hain, USDA/FAS
- (45 minutes) Group Discussion
- 5.30-5.50:** ***Wrap-up presentation*** on the main conclusions of the workshop
Steve Jaffee, World Bank
- 5.50-6.00:** Concluding Remarks
Jerry Martin and John Bowman, DAI
- 6.00-7.00:** Concluding Reception