

**EMERGING MARKETS PROPOSAL – FY09**

**FULL TITLE OF PROPOSAL:**

FAS/OCBD EMP Cold Chain Improvement Initiative - FY 2009

**DATE OF PROPOSAL:** August 8, 2008

**NAME, ADDRESS, AND TAX ID NUMBER OF SUBMITTING ORGANIZATION:**

Agricultural Market Systems Development Branch  
Development Resources and Disaster Assistance Division  
Office of Capacity Building and Development  
Foreign Agricultural Service/USDA  
14<sup>th</sup> & Independence Avenue, S.W.  
Washington, D.C. 20250  
FAS Tax-ID: 47-16-00000

**PARTNERSHIPS:**

Trade Development Agency (TDA) has indicated a serious interest to partner with FAS on potential further cold chain project work in China. This is evident from several meetings with FAS staff in Washington, D.C. and in China to explore this partnership. In the event EMP approves further cold chain project activities for China, we anticipate TDA will partner with FAS on the project in FY09.

**Name of FAS Office submitting the Proposal:**

FAS/OCBD/DRDAD/AMSDB

**Name of Regional Cooperators supporting the Proposal:**

USA Poultry and Egg Export Council  
US Meat Export Federation (for China only)

**Name of Posts supporting the Proposal**

China (ATO Chengdu, ATO Guangzhou, and ATO Shanghai)  
Philippines (FAS Manila)  
Guatemala (FAS Guatemala City)  
South Africa (FAS Pretoria for Namibia, Mozambique and Mauritius)

## **PRIMARY CONTACT PERSON:**

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## **TARGET MARKETS:**

- China – Phase II Guangzhou and Chengdu, Phase I in Chongqing, Shanghai Conference
- Philippines - Phases I and II in the Mindanao region
- Guatemala – Phase I
- South Africa (Namibia, Mozambique and Mauritius) – Phase 1 seminar focusing on trade facilitation within the region.

## **DESCRIPTION OF PROBLEM:**

Exports of U.S. perishable products are subject to potentially damaging international transport, storage, and handling situations due to the low quality refrigeration, humidity control, handling, and sub-standard storage facilities and methodology of many developing countries. While discretionary income and consumer spending potential has grown rapidly in many of those countries, the cold chain has failed to develop at the same pace. This deficiency limits trade in high quality perishable foods. It is common in these markets to see imported U.S. perishable food items (produce, red meats, poultry, dairy products, etc.) which are characterized by excessive amounts of spoilage and shrinkage. This has serious direct impacts on U.S. suppliers and their importers. It also raises food safety concerns and erodes the typical quality advantage U.S. products enjoy over competitive products. Ultimately, it impedes demand and market growth for U.S. products. By improving the cold chain, we can improve the quality of U.S. perishable foods reaching consumers in these significant emerging markets, and expand demand for U.S. products.

## **PROJECT OBJECTIVES:**

In each of the country programs, the overarching goals are to enhance market access, facilitate the implementation of trade agreements, and improve the trading environment for the United States and its partners through trade capacity building in the target countries/regions.

Specific objectives include the following:

1. Help key trade partners build their overall internal capacity to effectively handle perishable foods, especially including U.S. imported food products.
2. Improve targeted companies' ability to handle perishable foods by providing training and other technical assistance on:

- a. Guidelines, regulations, and standards specific to storage, transportation and handling of perishable foods.
  - b. Facility design and development for optimum refrigeration, humidity control, product logistics, and operational efficiency
  - c. Retail merchandizing methods to maintain product quality and ensure food safety
3. Help targeted companies maintain food quality, reduce losses, spoilage and shrinkage, to enhance marketing expertise, and to ultimately increase bottom-line profits.
  4. Improve the potential to maximize the taste, appearance, and marketability of U.S. products, thus enhancing consumer demand.
  5. Reduce the possibility of food-borne disease, and potential future restrictions imposed on U.S. exports.
  6. Help FAS Posts develop key links with top import distributors, warehouses, and market retailers which carry or have potential to carry U.S products.
  7. Develop long-term sustainability through establishment of local cold chain associations.

### **DESCRIPTION OF ACTIVITIES:**

Four country/regional markets are targeted—China, Philippines, Guatemala and South Africa (regional for Namibia, Mozambique and Mauritius).

Proposed activities include three phases of USDA/FAS technical assistance, described below. Each phase is designed to benefit private sector entities, and at the same time to strengthen the public sector’s ability to ensure a stronger local cold chain compliant with modern global trade standards.

OCBD works in cooperation with FAS Posts and U.S. Cooperators to identify specific country needs to address within the cold-chain program. Once needs are assessed, OCBD works with top cold chain professionals in the industry and within USDA to establish a strategy for improving the cold chain system in each respective country. OCBD also collaborates with U.S. industry associations such as Produce Marketing Association (PMA) and the Global Cold Chain Alliance (GCCA), to strengthen public-private collaboration in implementing the program by soliciting well-regarded top technical experts affiliated with their associations.

### **The cold chain program consists of three phases-**

**Phase I** consists of in-country technical seminars targeted at key companies from **representing** various links of the cold chain that handle, or could potentially handle, U.S. perishable food products. Seminars establish a base line level of interest and enthusiasm for further work in the targeted market. Phase I will also include field visits to top local industry constituents which are identified and carefully selected by FAS-Post.

**Phase II.** Directly linked with many of the participants of Phase I, Phase II is a hands-on, company and organization-level intervention activity, wherein U.S. technical experts spend a concentrated period of time with key target market companies (usually 2-4 days each).

Interested companies complete detailed applications to participate in Phase II. Post, with help of OCBD, then assess the companies, including current and future throughput of U.S. products, and select the top companies. Once the Phase II companies are selected, and their needs clearly defined, the OCBD cold chain project team selects team members able to assess and report on the specific needs of each company.

Generally, a Phase II activity will include 8-12 target market companies and 4-5 U.S. experts. Each of the experts will be responsible for auditing specific companies and compiling an audit report. OCBD reviews and forwards these reports to Post to be translated and presented to the companies. The report findings and conclusions will summarize all the previous discussions with various managers of the company, including the major cold chain improvements recommended during the face-to-face meetings.

The U.S. experts are specialists in port handling and facilities, transportation and logistics, cold storage warehousing and product handling, food and meat processing, food retailing, HRI operations, food safety, and facility design and construction. Each expert can assist 1-3 companies, depending on the size and nature of their operations. During the Phase II activity, the U.S. experts are often requested to provide in-house training for company employees on various aspects of the cold chain, such as warehouse operations, food safety, retail operations and marketing, Serv-Safe (HRI hygiene management practices), and HACCP.

**Phase III** is the culminating activity in the target market. In this phase, experts follow up on the previous in-company assessment reports and conduct audits to review actions taken per earlier recommendations and to give additional guidance for current operations. The Phase III activity concludes with an industry seminar (including targeted company case study reviews) for other local firms involved in the cold chain, and assistance in forming a locally governed cold chain association. The new association helps to assure sustainability, often with follow-on assistance by the Global Cold Chain Alliance (GCCA).

In all three phases, the activities include topics, presentations and meetings that highlight the importance of engaging the local governments to foster and establish better industry standards, regulations and guidelines throughout the cold chain. For this reason, in many cases OCBD will include experts from other USDA agencies in the activities, especially Agricultural Marketing Service (AMS).

#### **PERFORMANCE MEASURES:**

Performance will be measured by monitoring and measuring positive changes in:

1. Reported increased imports of U.S. food products resulting from the technical assistance.
2. Improvements in product quality and reductions in spoilage/damage rates of U.S. perishable products
3. Establishment of new guidelines, regulations, and standards for the targeted market cold chain, and the role of local government agencies and industry associations.
4. Number of FAS Post contacts
5. Adoption of new practices by the target companies

6. Seminar attendance levels
7. Local private sector participation and cooperation
8. U.S. private sector cooperation and contributions to the activities

## **EVALUATION:**

The program impact is monitored by activity evaluation questionnaires, by soliciting feedback from stakeholders, and by regular communication with Posts about follow-up activities and reported success stories.

## **TIME LINE FOR ACTIVITIES:**

Timeframe: October, 2008 through September 2009

## **RATIONALE:**

### **1- China:**

- In 2006, China Customs reported total agriculture, fisheries and forest product imports of over \$40 billion. The U.S. continues to hold the top position in overall agricultural exports to China, despite setbacks in beef, pork and poultry trade.
- Since 2002, U.S. exports of agriculture, forestry, and fishery products to China have increased from \$2.3 billion to \$7.7 billion in 2006. It is forecast to approach \$8 billion in 2007. The addition of Hong Kong trade—a large share of which ends up in the mainland—increases the 2006 figure to almost \$9 billion. In 2008, China is projected to be the fifth largest U.S. overseas market.
- China's frozen storage facilities are outdated. For example, sixty-five percent of Shanghai's frozen storage units were built in the 1970's and 1980's.
- China's inadequate distribution system is undergoing tremendous development which indicates significant truck-transport opportunities to the interior of the country for the future, which is expected to boost demand for higher-valued foods.
- The Chinese government has placed special emphasis on improvement of the road network with the amount of paved roads up 30,000 km (17 percent) since 1996.
- Director of US Trade Development Agency (USTDA) Larry Walther, in extensive discussion about the importance of cold chain development while in Sichuan province in Central China last June 2008, committed to support a cold chain development program to enhance the capacity of perishable food trade between the coastal areas and the interior. TDA also anticipates that FAS would also commit its own funds to some of the activities, in the project to develop cold chain distribution pipelines from the Shanghai and Guangzhou areas.
- FAS China lists cold chain as a specific development objective in the China Country Strategy Statement under two goals:

**Goals:**

- 1) China's Modernization of its Food Safety System that is Transparent, Accountable, Science-Based, and Pro-Trade;
- 2) Speed Modernization of China's Agricultural Sector

**Objectives:**

For Goal 1: Improve cold chain/food handling, regulations, and marketing that assists the effective use of U.S. agricultural products.

For Goal 2: Improved distribution systems, regulations, and the cold chain so food safety and food quality are maintained throughout the food distribution system

**2- Philippines**

- The Philippines is a key market in Southeast Asia for U.S. agricultural, fish and forestry exports, with sales reaching over \$1.15 billion in 2007, the highest level ever. The top U.S. exports last year were wheat (\$351million), soybean & soybean meal (\$216 million), dairy products (\$152 million), processed fruits and vegetables (\$52 million) and snack foods (\$41 million).
- Total U.S. agricultural exports rose 25 percent in 2007 compared to 2006 due to rising commodity prices, strengthening of the Philippine peso and sustained efforts of Post to expand U.S. agricultural sales. The United States remains the top food and beverage supplier to the Philippines. However, competition has greatly intensified over time, with products from Australia, New Zealand, the EU, Canada, China, and the ASEAN accounting for a growing share of the market.
- Over the last ten years Manila has received many more shipments directly from the United States rather than having to transship through another country. Direct shipments into the Philippines rose from 8 percent in 1997 to 21 percent in 2007. Direct shipments almost always translate into lower shipping costs. Also, fewer containers are transshipped through Manila to other Philippine ports. Over the last ten years, Cebu, Davao, Cagayan, Mandue and other ports are being serviced directly, further lowering costs to these less-developed areas. Container rates from the United States to the Philippines are comparable to those to other nearby Asian countries such as Thailand, Singapore, Hong Kong, and Taiwan.
- As to future cold chain activities, participants in a June 2008 seminar sponsored by the Philippine Cold Chain Association and FAS/Manila expressed a need for some guidance from US experts on how they could improve their refrigerated trucking system. There was also a request from several of the cold chain association members for more in-country cold chain training. Finally, a project was proposed to begin measuring perishable food losses during distribution, which were between 40 to 60 percent, according to Philippine Department of Agriculture. This data might give U.S. exporters a better idea of losses for their

**POST STRATEGIC GOAL FOUR: Trade Capacity Building and International Economic Development** - Proactively seek and coordinate USDA's international assistance programs to help strengthen Philippine agricultural institutions and promote Philippine economic development. This effort will support the National Security Strategy while building trade capacity.

Objective: Support GRP's agricultural infrastructure development (i.e., cold-chain, storage and distribution facilities, aquaculture, bio-gas/methane capture technology, bio-fuels industry) programs through appropriate USDA and USG programs.

- particular perishable products and encourage their support for future cold chain activities.
- FAS Manila mentions the cold chain program specifically in the country strategy statement as follows:

### **3- Guatemala**

- In 2007, U.S. agricultural exports to Guatemala were \$693 million. The products with the most growth were: soybeans (77%); poultry (59%); red-meats (48%); coarse grains (25%); soybean meal (13%); wheat (8%).
- Cold Chain program is mentioned specifically in the country strategy statement as follows:
- Ag Counselor in Guatemala strongly supports Cold Chain activities in Guatemala as part of the CAFTA-DR strategy statement as follows:

**GOAL 2:** CAFTA-DR countries and the United States increase bilateral trade

**OBJECTIVE 1:** The United States exports more high value products (meat, poultry, and horticultural products) to the CAFTA-DR markets and develops ongoing trade.

Performance Measure: Increase MAP, TASC, EMP, QSP, and CSSF funds allocated to CAFTA-DR region.

### **4- South Africa plus three (Namibia, Mozambique, Mauritius)**

- U.S. exports of agricultural, fish and forestry products to South Africa in 2007 stood at \$318 million, more than double the value in 2006. The increase is due primarily to the increased volume and higher unit value of U.S. wheat exports, which reached \$147 million, up from only \$4 million the year before. Other major U.S. agricultural exports to South Africa include dairy products, distilled beverages, forest products, and a broad range of intermediate products.

- Ag Counselor in Pretoria supports the program, with the following guidance: “the real issue and the real benefit of the cold chain program are to look at the regional integration of these economies, and the important role the cold chain plays in this integration. A number of corridors are being established in southern Africa and a cold-chain will be a critical component of these transportation networks in the overall agricultural logistics. There are a number of business opportunities that go along with this infrastructure development and these developments fit in very well with the FAS overall capacity-building strategy in the region”.

#### **DEMONSTRATION OF BENEFITS BEYOND THE APPLICANT:**

The Cold Chain Improvement Initiative (CCII) provides benefits to a broad range of U.S. companies that export agricultural products, including; fresh and frozen fruits and vegetables, chilled and frozen meats, poultry, seafood, and a variety of other perishable food items such as dairy and egg products, nuts, and inputs for the HRI trade (e.g. McDonalds, Haagen Dazs).

#### **JUSTIFICATION FOR FEDERAL FUNDING:**

The CCII provides a service that has multiple benefits to a wide group of U.S. agriculture and technology-support industries. The program is a catalyst that accelerates the process of long-term U.S. agricultural/seafood product market penetration, while enabling complementary non-agricultural industries such as refrigeration equipment, warehouse design and construction, trucking, and other industries, to make greater market inroads for U.S. business. CCII also extends good will toward U.S. products and offers a valuable service to those companies that are best positioned to do business with U.S. suppliers. In addition, this technical assistance facilitates the FTA negotiations and helps FAS Posts identify new industry contacts and obtain valuable market information.

#### **SIMILAR ACTIVITIES FUNDED BY USDA IN TARGET MARKET(S):**

A few years ago, FAS approved certain Global Based Initiative (GBI) funds to be used for cold chain activities, including several USMEF activities, one each for Mexico and Central America for cold chain assessments and directories, and one that focuses on cold chain development in Beijing, China. All were contracted to IARW-WFLO to implement. In an effort not to duplicate the CCII, the GBI activities were funded to distinct market sectors that are separate from the OCBD targeted participants. Other than these limited GBI activities, no other program we are aware of approaches cold chain maintenance and improvement in a comprehensive, cross-sector, multi-commodity approach.

#### **QUALIFICATION OF APPLICANTS:**

The FAS Office of Capacity Building and Development (OCBD) promotes trade capacity building through coordination of a host of agricultural sector-focused technical assistance projects aimed at developing countries and emerging markets. Through our overseas offices, FAS has unique access to trade and regulatory officials, market intelligence and private sector networks that enable us to develop carefully targeted, results-oriented technical assistance. This allows us to leverage the resources of other government agencies related to the handling procedures and regulations for perishable food. FAS/OCBD is also uniquely positioned to help link cold chain improvement activities with other USDA/FAS market development programs such as the Foreign Market Development Program and Market Access Program.

**WHY THE PARTICIPATING ORGANIZATIONS ARE UNLIKELY TO CARRY OUT ACTIVITIES WITHOUT FEDERAL ASSISTANCE:**

The project entails putting together the efforts of various U.S. cooperators, private institutions and individuals. This will not happen without the involvement and leadership of FAS/OCBD and the EMP funding from FAS.

As a part of OCBD, the Agricultural Market Systems Development Branch (AMSDB) conducts projects throughout the world that improve agricultural market efficiencies, and which enhance food quality and safety. These efforts translate to increased trade and better bottom-line profitability for companies in the U.S. as well as the target countries/regions.

**BUDGET:**

Total proposed program budgets, including FAS/OCBD salary, sum to \$460,364. Attachment 1 contains detailed country budgets.

<b>Region</b>	<b>Country</b>	<b>Cost</b>
Asia:		
	China(Chengdu)	\$64,905
	China (Guangzhou)	\$77,800
	China (Shanghai)	\$40,260
	Philippines	\$47,120
Western Hemisphere:		
	Guatemala	\$37,700
Sub-Saharan Africa:		
	South Africa (Plus 3 )	\$59,450
	Sub Total	\$327,235
	FAS/OCBD Salaries	\$133,129
	TOTAL	\$460,364

## ATTACHMENT 1

### China (Chengdu)

Description	Amount
Travel (between Shanghai and Chengdu)	\$1,500
Lodging and M&IE	\$15,925
Local Transportation	\$1,000
Consultant Fees	\$30,080
Conference Costs	\$14,500
Miscellaneous	\$1,900
Subtotal	\$64,905
FAS/OCBD Salaries	\$33,822
Total	\$98,727

### China (Guangzhou)

Description	Amount
Travel	\$15,000
Lodging and M&IE	\$20,820
Local Transportation	\$1,000
Consultant Fees	\$30,080
Conference Costs	\$9,000
Miscellaneous	\$1,900
Subtotal	\$77,800
FAS/OCBD Salaries	\$29,174
Total	\$106,974

**ATTACHMENT 1 (CONTINUED)**

China (Shanghai)

<b>Description</b>	<b>Amount</b>
Travel	\$15,000
Lodging and M&IE	\$5,400
Local Transportation	\$200
Consultant Fees	\$3,760
Conference Costs	\$14,000
Miscellaneous	\$1,900
Subtotal	\$40,260
FAS/OCBD Salaries	\$21,471
Total	\$61,731

Philippines

<b>Description</b>	<b>Amount</b>
Travel	\$5,000
Lodging and M&IE	\$3,040
Local Transportation	\$300
Consultant Fees	\$11,280
Conference Costs	\$25,000
Miscellaneous	\$2,500
Subtotal	\$47,120
FAS/OCBD Salaries	\$10,433
Total	\$57,553

**ATTACHMENT 1 (CONTINUED)**

Guatemala

<b>Description</b>	<b>Amount</b>
Travel	\$6,000
Lodging and M&IE	\$3,260
Local Transportation	\$400
Consultant Fees	\$15,040
Conference Costs	\$11,500
Miscellaneous	\$1,500
Subtotal	\$37,700
FAS/OCBD Salaries	\$15,569
Total	\$53,269

South Africa Plus Three (Namibia, Mozambique, Mauritius)

<b>Description</b>	<b>Amount</b>
Travel	\$15,000
Lodging and M&IE	\$7,710
Local Transportation	\$1,200
Consultant Fees	\$15,040
Conference Costs	\$19,000
Miscellaneous	\$1,500
Subtotal	\$59,450
FAS/OCBD Salaries	\$22,660
Total	\$82,110