

# Helping Exports Keep Their Cool

By Steven D. Beasley

As U.S. agricultural trade continues to expand with countries around the world, U.S. exports will encounter new challenges. USDA's Global Cold Chain Improvement Project is designed to overcome perhaps the single biggest physical constraint to U.S. agricultural exports—the world's limited cold chain.

The project can benefit many commodities, including fresh and frozen fruits, vegetables, meats, poultry, seafood, dairy products, and also cut flowers and ornamental plants. The cold chain project benefits mainly value-added and consumer-oriented products, where growth will be substantial for the foreseeable future.

## What Is a Cold Chain?

“Cold chain” is a shorthand term encompassing all the critical steps and processes that foods and other perishable products must pass through to ensure they reach the end-user in a safe, wholesome and high-quality state.

Like any chain, a cold chain is only as strong as its weakest link. The USDA Global Cold Chain Improvement Project is designed to address product loss and quality degradation as a result of improper refrigeration and other cold chain infrastructure problems in emerging markets.

## The Problem

Every year, billions of dollars are lost due to product spoilage and damage—losses that could be avoided through cold chain



USDA/FAS

improvements. Cold chain difficulties include: lack of, or limitations in, refrigeration; improper handling and storage procedures; and inadequate humidity control.

The problem exists among many commodities and across multiple sectors, such

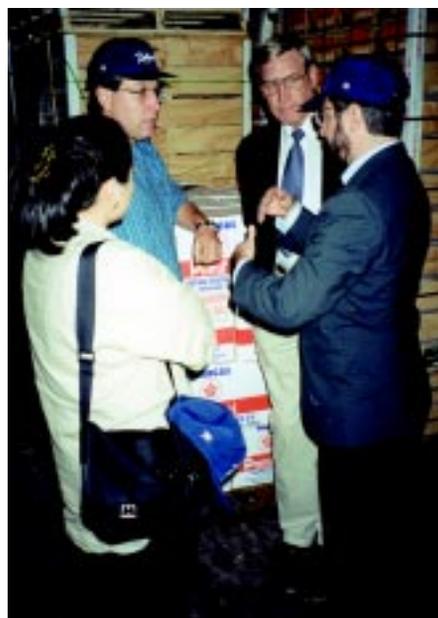
as farms, ports, cold storage and handling facilities, transportation, and wholesale and retail outlets. And the problem has widespread ramifications: it isn't restricted to a single sale. If the quality of U.S. products is compromised at the importer or consumer level, it can erode long-term, general product acceptance—and U.S. exports can lose their competitive advantage. At the same time, local firms in overseas markets incur product—and profit—losses.

## Project Basics: Phase I

Fundamental cold chain weaknesses can be addressed and overcome by better methods, operations and handling. Through technical training and expert assistance, simple, practical solutions can be developed at no cost or low cost.

The project receives support from the U.S. government, U.S. private sector firms, international trade and product associations and companies and others in countries in Asia, Africa, the Caribbean and Latin America.

In the initial phase of a project, FAS



USDA/FAS

## LIKE ANY CHAIN, A COLD CHAIN IS ONLY AS STRONG AS ITS WEAKEST LINK.



USDA/FAS

helps by assessing the problems, assembling the players and addressing the practical problems through seminars.

### Phase II

In the second phase, a few key companies in the target market work one-on-one with U.S. experts to develop a custom-tailored cold chain improvement plan for their specific situation and country. The U.S. experts spend at least two weeks working directly in the company to help it craft its own cold chain improvement plan. Facets of Phase II include:

- **Selectivity:** Only “cream-of-the-crop” companies are selected to participate in the cold chain improvement project. Applicants are subjected to a rigorous screening process. To be selected, applicants must be significant players in the local market; have some involvement with imports of U.S. products; and show a commitment to change at the most senior level of the company.
- **Self-interest/motivation:** An action plan is created and must be implemented within a specified timeframe.
- **Strategy:** The plan sets specific objectives and timeframes.

## How Companies Participate

**F**armers, port operators, cold storage companies, food processors and manufacturers, wholesalers and retailers in foreign countries are eligible to participate in the Global Cold Chain Improvement Project.

To apply, the foreign entity obtains the application from the FAS agricultural office in that country; fills it out and includes documentation of approval of top managers (e.g., the company president or chief executive officer); and submits the paperwork to the agricultural office by the application deadline.

USDA reviews applications and selects participants; U.S. experts conduct on-site cold chain audits of participants' facilities; and participants and experts craft, implement and evaluate plans for specific improvements.

The global cold chain project is operating in South Africa, China, Indonesia, Malaysia, the Philippines, Thailand, Vietnam, Mexico, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama, the Dominican Republic, Argentina, Brazil, Ecuador, Paraguay, Peru and Uruguay.

- **Sustainability:** It also develops long-term training goals and mechanisms to ensure continuity.
- **Accountability:** The plan's effectiveness is measured and evaluated for accomplishments and future improvements.

### A Two-Way Street

The Global Cold Chain Improvement Project benefits numerous commodities and industry sectors that may lack the incentives and/or resources to undertake such a multi-faceted project on their own.

Many organizations are contributing to the success of this project, including private firms, universities, several participants in the Foreign Market Development and Market Access Programs, state-regional trade groups and state departments of agriculture. But the key partners have been FAS overseas offices and the International Association of Refrigerated Warehouses and World Food Logistics Organization.

The companies in the participating countries also benefit. They get hands-on help with minimizing product losses and increasing profitability; have the opportunity to work with leading international companies and associations; and receive as-

sistance in meeting international food safety standards.

In return, the firms must demonstrate an openness to new ideas, have a management team that will support changes ensuing from the project and commit the necessary resources.

USDA's cold chain project is entering its third phase, in which U.S. experts return to the participating foreign companies to audit improvement activities. USDA and its partners are helping these companies establish their own domestic cold chain associations for problem solving, exchange of ideas and connection to other international cold chain groups.

Cold chain associations enable the companies to attain self-sufficiency and graduate from the program. These local groups provide the necessary support to maintain the cold chain and benefit U.S. and domestic food interests. ■

*The author is an agricultural economist with the Food Industries Division of FAS' International Cooperative Development area. Tel.: (202) 720-1347; Fax: (202) 690-3982; E-mail: steven.beasley@fas.usda.gov*