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**Agro-Processing and  
Trade Linkages Promotion  
(APTLINK)**

*A Cooperative Initiatives Grant*

**Final Report**

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## Executive Summary

This is the final report for the Agro-Processing and Trade Links project (APTLINK) which was funded as an innovative grant in June of 1991 by PVO/FHA. APTLINK was designed to foster trade ties and promote the image of Latin America as an accessible and reliable source of processed fruits and vegetables, creating benefits at many levels:

- giving farmers an option beyond the traditional, volatile fresh markets,
- creating employment (particularly for women) at the food processing facilities, and
- ultimately, generating significant foreign exchange from increased and diversified exports.

APTLINK's pilot exporters experienced many changes over the life of the project. Working with at least two exporters in each of the three pilot countries (El Salvador, Ecuador and Peru), the project contributed to over \$12 million in foreign exchange earnings from exports and secured significant employment increases. Farm jobs increased by 3,884 (from 5,388 in 1992 to 9,272 in 1993), and employment for agro-processing plant workers grew by 250 (from 492 in 1992 to 742 in 1993).

Impact was achieved with a modest budget. APTLINK nearly matched its \$285,000 budget with various contributions amounting to \$264,000. Technical assistance, market intelligence, links to the U.S. food industry, guidance and advice was provided by ACDI member cooperatives. ACDI's sister cooperative development organization, VOCA, also provided technical assistance which was free to APTLINK's pilot exporters.

To further leverage the limited budget, key in-country support and resources were successfully obtained through agreements with existing in-country development projects. APTLINK collaborated with the Salvadoran foundation for Economic and Social Development (FUSADES) and the El Salvador Non-Traditional Agricultural Export Production and Marketing Project (NTAE) in El Salvador, with the Promotion of Non-Traditional Agriculture Exports project (PROEXANT) in Ecuador, and with the Foundation for Agriculture Development (FUNDEAGRO) and the Association of Exporters (ADEX) in Peru.

A rewarding synergism resulted from these collaborations. ACDI member cooperatives entered into international activities which may not have otherwise been feasible. For example, Calavo indicated that to source Peruvian mangoes without APTLINK resources would have required additional staff. APTLINK's counterpart in-country organizations benefitted from the market links provided. Most importantly, every participating exporter was linked with a U.S. market partner.

APTLINK supported the pilot exporters and built capabilities for export and trade promotions using four important tools:

1. **Technical Assistance** - APTLink delivered technical assistance at the farm level with diversified crop variety trials in all three countries; at the agro-processing level, sending experts to help with agro-processing quality and efficiency controls in both El Salvador and Ecuador; and, at the international level, helping all project participants through the labyrinth of compliance with FDA and USDA/APHIS requirements as they introduced their processed agricultural products into the U.S. market.

2. **Information Services** - A very strong network of communication between APTLink, ACIDI's counterpart organizations, USAID missions, and the project beneficiaries was established. From its Washington, D.C. headquarters, ACIDI responded to specific information needs of the APTLink participants. Pertinent materials were methodically compiled in subjects ranging from agricultural practices and uses of EPA permitted chemicals, to agro-processing techniques and quality control measures, to key market reporting publications and services. The gathering of information was demand-driven and routinely shared with project partners. From inquiries generated through aggressive project publicity, ACIDI learned which products were in demand, best windows of opportunity, quality standards and specifications, packaging requirements, favored ports of entry, and other crucial trade intelligence. This intelligence allowed for truly *demand driven* export promotions.

3. **Import Regulations** - Compliance with USDA/APHIS and FDA regulations proved to be extremely challenging for LAC exporters. APTLink assisted TropiFrutas, a banana puree processor in Ecuador gain FDA plant registration necessary to export to the U.S.; worked with Ecuavegetal, an Ecuadorean exporter of pigeon peas to challenge protectionist import policies in Puerto Rico and gain entry into that important high demand market; and provided guidance to Agroindustrial San Lorenzo, the Peruvian mango growers, as they lobbied APHIS for approval of a hot water treatment facility in their area.

4. **Advisory Committee** - Sunkist Growers, Calavo Growers, TriValley Growers and NORPAC comprised APTLink's Advisory Committee. Input from the steering committee was very valuable in shaping evaluation criteria for country and pilot exporter selection. Support from the committee persisted throughout the project's life, serving as a link to the U.S. processed food industry. Two members of the Committee, Calavo and NORPAC, became trading partners with APTLink project participants.

APTLink worked with diverse exporters and gained experience with a wide variety of export products and marketing networks in the U.S. In El Salvador the pilot exporters were ACOPAI and Del Tropic.

- ACOPAI is a 40 year old federated cooperative representing approximately 800 sesame farmers. The cooperative manages harvest, post-harvest handling, processing, packaging, sales and shipping for its grower members. With APTLink's help, ACOPAI signed a marketing contract for their entire 1992/93 sesame seed crop, greatly mitigating risk for their member farmers.

- Del Tropic is a processor of frozen vegetables; their products include whole okra, black-eyed peas, and broccoli. Due to improved markets for their exports, Del Tropic increased their freezing plant utilization by over 30%, plant employment by over 60%, and almost doubled the number of growers delivering raw material. NORPAC certified Del Tropic as a qualified supplier, gaining an alternative source for frozen okra.

APTLINK's pilot exporters in Ecuador included TropiFrutas and Ecuavegetal.

- TropiFrutas is a processor of tropical fruit juice concentrates. TropiFrutas diversified their product line and U.S. sales of acidified aseptic banana puree grew from zero to \$400,000 in 1993. Based on the market's acceptance of their new products, TropiFrutas will add another new product, generating even more employment and foreign exchange.

- Ecuavegetal is a processor of vegetables and fruits. Most of their products are canned. Ecuavegetal produces over 45 products but the main export products are green pigeon peas and tomato paste. After breaking trade barriers, Ecuavegetal plans to enter the lucrative Puerto Rican market for pigeon peas. Potential exists for exports of 500,000 cases per year amounting to over \$9 million in foreign exchange earnings.

In Peru, the pilot exporters were Agroindustrial San Lorenzo, Indalsa and *Centro de Investigación Huaral Progreso* (CIHUP).

- AgroIndustrial San Lorenzo (ASL) is an association of mango exporters in Peru's key mango production area, Piura. The Association was formed in 1991 with two goals: consolidating their fruit, and marketing directly. With APTLINK support, ASL negotiated with processor/exporters for the first time as a group. The result: more than 10 cents per kilo increase in field price to the growers. Also, ASL is currently in negotiations with two U.S. investors interested in helping the Association purchase their own hot water treatment facility.

- Indalsa is an integrated agribusiness group with regional interests throughout Peru. APTLINK helped Indalsa form initial relationships with McCormick and other important buyers in the U.S.

- CIHUP is an association of growers in the Huaral Valley. The valley is located within two hours of Lima with an unusual micro-climate along Peru's Pacific coast offering rich potential for agriculture diversification. ACDI member, Agripac and CIHUP are discussing the potential for forming a new cooperative where CIHUP will grow and freeze products based on market-driven direction from Agripac. Agripac will market and distribute the products in the U.S. They are also discussing the possibility of a joint venture investment in a new freezing facility for CIHUP's use.

The needs and interests of exporters in developing countries and marketers in importing countries are clearly complimentary; each can benefit through trade links with the other. However, one of the key lessons learned in APTLINK is that common interest is frequently not enough to bring them together. Suppliers lack the confidence, resources and know-how

to access and compete in new markets. Similarly, many marketing cooperatives and other businesses do not know where to begin in cultivating trade relationships overseas. The APTLink project showed how a facilitating entity can foster these mutually beneficial trade links.

APTLink's key philosophy was to bring the marketing partner into the trade equation at the earliest possible moment. The prevailing objective was to ensure that all activities were market driven to help the exporter offer products for sale that were sure to meet or exceed target market standards.

Lessons gained through experience make APTLink's market driven concept the ideal way to help small producers. Exports may not be the only or the best marketing option for growers or processors. While APTLink focused on exports it became evident that growers universally needed marketing support, and frequently for crops that for one reason or another are not exportable. A rational approach is to determine which market is best for the growers to target. It could be the domestic market, it could be neighboring countries, or it could be first world markets.

After two and one-half years working to facilitate trade links, APTLink can recommend a model with a logical sequence of steps and recommendations to deliver effective marketing assistance to growers, agro-processors and exporters.

## INTRODUCTION

An innovative grant and pilot project, Agro-Processing and Trade Links (APTLink), was funded in June of 1991 by PVO/FHA to foster trade ties and promote the image of Latin America as an accessible and reliable source of processed fruits and vegetables. APTLink was designed to create benefits at many levels:

- giving farmers an option beyond the traditional, volatile fresh markets,
- creating employment (particularly for women) at the food processing facilities, and
- ultimately, generating significant foreign exchange from increased and diversified exports.

The project was originally scheduled to end in May of 1993, but was extended through December, 1993. Total funding was \$285,000.

APTLink's pilot exporters experienced many changes over the life of the project. Working with at least two exporters in each of the three pilot countries (El Salvador, Ecuador and Peru), the project contributed to over \$12 million in foreign exchange earnings from exports. Operations behind these exports generated and secured significant employment. Farm jobs increased by 3,884 (from 5,388 in 1992 to 9,272 in 1993), and employment for agro-processing plant workers grew by 250 (from 492 in 1992 to 742 in 1993). Every participating exporter was linked with a U.S. market partner.

Market links facilitated by APTLink will provide on-going benefits to the pilot exporters, their network of farmers and employees and their importing counterparts in the U.S. Here are a few success stories to which APTLink contributed:

### El Salvador

- ACOPAI signed a marketing contract for their entire 1992/93 sesame seed crop. The contract specified volume and price, greatly mitigating risk for the farmer/exporters.
- Due to improved markets for their exports, Del Tropic increased their freezing plant utilization by over 30%, plant employment by over 60%, and almost doubled the number of growers delivering raw material.
- NORPAC certified Del Tropic as a qualified supplier, gaining an alternative source for frozen okra.

### Ecuador

- TropiFrutas diversified their product line and U.S. sales of acidified aseptic banana puree grew from zero to \$400,000 in 1993. Based on the market's acceptance of their new products, TropiFrutas will add another new product, generating even more employment and foreign exchange.

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- After breaking trade barriers, Ecuavegetal plans to enter the lucrative Puerto Rican market for pigeon peas. Potential exists for exports of 500,000 cases per year amounting to over \$9 million in foreign exchange earnings.

**Peru**

- Agroindustrial San Lorenzo (ASL) negotiated with processor/exporters for the first time as a group. The result: more than 10 cents per kilo increase in field price to the growers.
- ASL is currently in negotiations with two U.S. investors interested in helping the association purchase their own hot water treatment facility.
- Calavo's Director of International Operations reported that they would have had to add extra staff to source Peruvian mangoes if it were not for the help of APTLink.
- Agripac and CIHUP are discussing potential for forming a new cooperative where CIHUP will grow and freeze products based on market-driven direction from Agripac. Agripac will market and distribute the products in the U.S. They are also discussing the possibility of a joint venture investment in a new freezing facility for CIHUP's use.

Impact was achieved with an extremely modest budget, in part by successfully securing counterpart contributions. Resources and in-country support were also obtained through agreements with existing in-country development projects. APTLink nearly matched its \$285,000 budget with various contributions amounting to \$264,000.<sup>1</sup>

ACDI's membership, which is made up of U.S. cooperatives also contributed to APTLink's impact. The cooperative community's expertise and interests were actively considered and engaged in every aspect of APTLink. Four ACDI member cooperatives -- TriValley, Calavo, Sunkist and NORPAC -- formed the steering committee, which served as a link to the U.S. processed food industry. The committee was instrumental in shaping evaluation criteria, developing short lists of high demand imports, and providing on-going market information and advice. APTLink activities attracted two new members to ACDI, Calavo Growers of California and Agripac. Technical assistance was provided by Calavo, NORPAC and Agripac; all three of these cooperatives are currently involved in trade activities with the APTLink project participants they assisted.

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<sup>1</sup> As indicated in Appendix I, this figure includes \$134,000 in counterpart contributions from ACDI members, VOCA and the other collaborating institutions, and part of a \$285,000 sub-contract with ADEX in Peru. \$130,000 of this sub-contract was dedicated to APTLink participants, while the remaining funds were used to expand ACDI's export promotion activities in Peru.

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Clearly, ACIDI's membership reinforced the innovative aspect of APTLink and its deliberate focus on marketing. Selection of participating countries and exporters was based on the ability to produce and export significant quantities of high quality products -- products with recognized market demand. Ideally, marketing partners were identified beforehand to insure truly demand driven activities. APTLink worked with the exporters to identify constraints and then provided very targeted technical assistance, frequently rendered by the market partner.

APTLink worked with a wide variety of non-traditional products including sesame seed, frozen fruits and vegetables, tropical fruit concentrates, spices, herbs, "ethnic" products such as hearts of palm and pigeon peas, asparagus and mangoes. An extensive network was established with importers, buyers, brokers, government regulatory offices (USDA and FDA), credit assessment firms, and relevant trade associations. Whether the constraint was a raw material quality issue, a bottleneck in the agro-processing line affecting plant efficiency, compliance with U.S. government regulations such as labeling, or poor access to markets, APTLink helped the exporter find solutions.

APTLink was able to attract the interest of trade journals that published articles about the project. This was helpful in locating potential partners and reflected well on both ACIDI and AID. Examples are presented in Appendix II.

ACIDI is pleased with the accomplishments of this pilot project. APTLink's primary goals were to increase the incomes of small and medium-sized farmers in LAC and to enhance the involvement of U.S. cooperatives in international trade and cooperative development. Through export promotions of non-traditional agriculture products, the innovative grant achieved these basic goals as well as the additional purposes and outputs articulated in the original proposal.

## **GOALS, PURPOSES AND OUTPUTS**

As mentioned, APTLink's primary goals were to increase the incomes of small and medium-sized farmers in LAC and to enhance the involvement of U.S. cooperatives in international trade and cooperative development. These goals were augmented with clearly articulated purpose statements and programmed outputs. (See Appendices III, IV and V).

### **Purposes**

APTLink's designated "purposes" were to facilitate trade ties, to promote the image of Latin America and to mobilize technical and financial resources. The following end of project status targets were proposed and APTLink successfully addressed each target:

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1. *Target:* Negotiation of at least four trade agreements, two in each of the demonstration countries, that allow for the U.S. marketing of fruits or vegetables processed in LAC.

*APLink Accomplishments:* All seven exporting participants have current trade links with U.S. buyers. Processed products exported included sesame seed; frozen broccoli, okra and black-eyed peas; frozen tropical fruit concentrates and aseptic banana puree; canned "ethnic" products such as pigeon peas; paprika, mangoes and other tropical fruits.

2. *Target:* At least one party in each agreement will be a farmer-owned organization.

*APLink Accomplishments:* Three U.S. importing market partners (NORPAC, Calavo and Agripac) are cooperatives. Three of the pilot exporters were farmer associations (ACOPAI, Agroindustrial San Lorenzo and CIHUP) and all other exporting participants sourced a significant percentage of their raw material from farmer-owned organizations.

3. *Target:* The use of at least three ACIDI member cooperatives in technical assistance and/or training components of the program.

*APLink Accomplishments:* Extremely targeted and market-oriented technical assistance was enlisted from ACIDI member cooperatives.

- NORPAC's quality control manager traveled to El Salvador to inspect the Del Tropic processing facility. A few modifications were recommended and the Del Tropic plant was approved as a qualified NORPAC supplier.
- Calavo provided technical assistance to AgroIndustrial San Lorenzo in Peru by arranging a tour of Mexican mango processing and exporting operations. Calavo also provided extensive information on packaging standards and preferences for mangoes.
- NORPAC and Agripac both provided product lists, quality specifications and technical advice for vegetables to be grown for the frozen food market by CIHUP in Peru.

4. *Target:* The involvement of at least one member cooperative in a joint venture with a LAC producer/processor.

*APLink Accomplishments:* New ACIDI member, Agripac is currently discussing a joint venture with CIHUP, a farmer cooperative in Peru. The proposed agreement would create a new cooperative with CIHUP and Agripac as members. CIHUP will grow and freeze the products based on market driven direction from Agripac. Agripac will handle marketing and distribution. Agripac is considering a capital investment for a freezing facility in Huaral, CIHUP's growing area.

## **Outputs**

Six outputs were stipulated in the original proposal:

1. *Target:* Rapid appraisal of and prioritization of five or six countries in LAC.

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*APTLink Accomplishments:* Due to local mission interest, ten LAC countries were appraised for project participation. Within each country, consideration was given to individual exporters, the availability of non-program support and the macro-policy framework. A final criterion for selection was the number of viable exporters with a strong likelihood of establishing a trade link.

2. *Target:* Selection of two "demonstration" countries.

*APTLink Accomplishments:* Following a rigorous ranking process, El Salvador, and Ecuador were selected as pilot countries. Based on quantitative ranking, Ecuador and Peru were almost tied for selection and permission was granted by FHA/PVC to work in all three countries.

3. *Target:* Continued flow of information between potential processors and buyers; constant networking and negotiating with these parties.

*APTLink Accomplishments:* APTLink manager maintained excellent communication with pilot exporters and their potential market partners. To publicize the project and attract participants, APTLink designed, published and distributed a professional brochure to U.S. cooperatives, food manufacturers, brokers supplying products to U.S. food manufacturers, retail outlet buyers, and other distributors (See Appendix VI).

Articles promoting the project were published in at least twelve trade journals and periodicals with national and international distribution. Through the dialogue that grew out of these promotional efforts, APTLink was able to determine which products were in demand, best windows of opportunity, quality standards and product specifications, packaging requirements, favored ports of entry and other crucial trade intelligence. This intelligence allowed for truly demand driven export promotions.

4. *Target:* Technical assistance in areas of training, feasibility studies, production and handling, processing, transportation and/or farmer organization.

*APTLink Accomplishments:* Four market studies were commissioned for sesame, garlic, tropical fruit concentrates and canned "ethnic" products such as hominy, hearts of palm and pigeon peas. All seven exporters participating received technical assistance. Twelve consultancies provided technical assistance for agriculture variety trials, processing plant technology, equipment and procedures, packaging, and marketing.

5. *Target:* Mobilization of matching resources through parallel projects, mission buy-ins, potential processors or buyers, or national export promotion groups.

*APTLink Accomplishments:* The twelve technical consultancies were all funded by non-program sources. Other support and in-country resources were also mobilized through agreements with existing in-country development projects, VOCA, local missions, U.S. trade organizations, counterpart government agencies and the APTLink steering committee.

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APTLink leveraged almost 100% of its \$285,000 budget by securing \$264,000 in counterpart contributions.

6. *Target:* Raised interest of ACDI member cooperatives in actively participating in overseas cooperative development activities.

*APTLink Accomplishments:* APTLink's steering committee (composed of Sunkist, TriValley, Calavo and NORPAC) provided guidance and input for all project activities. Two new ACDI members (Calavo and Agripac) joined ACDI as a result of APTLink activities. Technical assistance was enlisted from ACDI member cooperatives with multiple benefits. The pilot exporters received extremely market-oriented assistance, and the U.S. cooperatives had international exposure they may not otherwise have experienced.

## **METHODOLOGY**

APTLink focused on market and demand-driven activities. Selection of pilot countries and exporters was based on the ability to produce significant volumes of high quality products with a known market demand. The project proceeded in phases: market analysis, country selection, selection of pilot exporters, and building relationships with counterpart organizations, followed by on-going promotional activities and delivery of technical assistance. All APTLink activities were driven by the market orientation philosophy.

### **Market Analysis**

The first step was to analyze market opportunities for processed non-traditional LAC exports. Coincidentally, the project manager had just completed a comprehensive study entitled Fruit and Vegetable Processing Options for the Latin American and Caribbean Region. Completed in May, 1991, the study was conducted for USAID/LAC/DR/RD by ATMA International, Inc.

The market study focused on fresh pre-cut fruits and vegetables; individually quick frozen (IQF) fruits and vegetables; juices, pulps, and concentrates of tropical fruit; processed tomatoes; dried tropical fruit; and pickles. Criteria for selecting products to be included in the study included:

- strong market potential,
- growing, open markets,
- competitive advantages in LAC countries,
- high degree of interest in LAC countries,
- complementarily with production of fresh products, and
- production processes appropriate for additional products.

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Armed with current market intelligence and extensive contacts in the U.S. buyers network, the APTLink project manager inventoried the LAC region with a solid feel for what products were in demand and therefore which exporters had the best chance for success.

### **Country Selection**

APTLink's first contact point in each country was the USAID mission. Invitations were received from each of the countries appraised for participation. The original proposal envisioned trips to five countries to determine agro-processing capacity within region. However, due to the high degree of interest expressed by the missions, ten countries were visited: Guatemala, Nicaragua, Honduras, El Salvador, Panama, Costa Rica, Ecuador, Peru, Bolivia and Jamaica.

Following the appraisal trips a rigorous formal country selection procedure was developed. Every effort was made to insure objectivity in the ranking. There were two phases in the selection process: country elimination, and then quantitative ranking for the remaining candidates (See Appendix VII for more detail).

Countries were eliminated:

- if they exhibited inadequate infrastructure and/or appropriate agro-processing activities to attract a marketing partner,
- if severe security concerns existed which would inhibit providing on-site technical support and/or interrupt delivery of raw materials to the processing facility or finished product movement to market,
- if a local USAID mission refused to allow APTLink activities in that country, or
- if the constraints to growth in the country's agro-processing sector were not market related. The APTLink project was designed to provide market support rather than address constraints such as insufficient raw material.

Those countries not eliminated were evaluated for APTLink participation by first appraising individual agro-processing companies or "projects" observed during the country visits. Final ranking was based on a matrix analysis which considered these "project" scores, the availability of non-program support and macro-policy framework. A final criterion estimated, by country, the number of viable projects with a strong likelihood of establishing trade links.

El Salvador, Ecuador and Peru were the countries selected to participate in APTLink activities.

### **Selection of Pilot Exporters**

APTLink's counterpart organizations were very instrumental in the selection of pilot exporters. Every effort was made to make the selection as objective as possible. Criteria used to rank candidates included market potential, finished products, readiness to export, constraints to growth and producer base.

Successful links required export products with good market potential -- products with a high probability of establishing a trade link. Priority was given to exporters of products identified in the market analysis discussed above, especially if the products were in demand by U.S. cooperatives.

The U.S. market for imports is very demanding. "Marketable" products must be of high quality and in suitable volumes. Supply and deliveries must be reliable. The product's market should have high volume potential and favorable dynamics in terms of growing demand, stable prices, and profitable margins. To address these market requirements, exporters were ranked on:

- their ability to produce a suitable volume to attract a viable market partner,
- their growth potential,
- flexibility to adjust in response to the market,
- the finished product's quality, and
- efficiency, measured in terms of a plant's capacity utilization. It was assumed that the more efficient agro-processors would have the best prospects for competitive pricing.

The "readiness to export" category ranked agro-processors with the highest score if they were already exporting; next highest if they had appropriate products, volume, etc. but no export experience; and a relatively low value if they were only in the planning stage.

Many constraints to growth existed for agro-processors in LAC. For some, the problem was finding appropriate marketing links; others had a combination of poor marketing options, inefficient processing technology and/or limited supply of raw materials. While APTLink had some resources for technical assistance, its primary focus and strength was market facilitation. Exporters were therefore ranked higher if APTLink had appropriate resources to address their constraints.

APTLink was designed to work with producer groups, and aspired to reach as many producers as possible. Exporters were favored for project participation if they were grower-owned or if they received a significant percentage of their raw materials from grower associations.

## **Counterpart Organizations and Contributions**

APTLINK was able to multiply the project's impact by enlisting and mobilizing resources and funding from VOCA, existing in-country export promotion projects and local missions, U.S. trade organizations, counterpart government agencies and the APTLINK Steering Committee. Their combined contributions added over \$260,000 to project resources (See Appendix I for a summary of counterpart contributions.)

Counterpart Organizations -- One criterion for country selection was the existence of a strong in-country export promotion project. The objective was to compliment the activities of an on-going effort working with potential exporters. In each pilot country there was such a project and even if they had a marketing component, APTLINK's role was to provide additional marketing support.

In El Salvador there were two on-going projects, both funded by USAID. The first was administered by FUSADES and the second by the Non-Traditional Agriculture Export project (NTAE). FUSADES worked more with the larger exporters, while NTAE tended to work with the smaller cooperatives. APTLINK signed separate agreements with each organization because both projects indicated a reluctance to have a three-way agreement.

FUSADES is the acronym for the Salvadoran Foundation for Economic and Social Development, a private, non-profit and non-partisan organization that functions as a research center. FUSADES' mission is to promote economic and social development that will benefit the physical, intellectual, social and economic well-being of the people of El Salvador within a framework of freedom. APTLINK's agreement was with DIVAGRO, the agribusiness component of FUSADES. DIVAGRO provided the following resources in support of Del Tropic, a vegetable processing company:

- technical assistance for broccoli trials, contributing 3.75 person months,
- funds to cover part of the travel to El Salvador by the APTLINK project manager,
- shared expenses for NORPAC's quality control delegate, and
- the services of FUSADES Miami office to help with logistics and some marketing information.

The El Salvador Non-Traditional Agricultural Export Production and Marketing Project (NTAE), administered by the National Cooperative Business Association, works to strengthen agricultural cooperatives. The project's goal is to increase the production of non-traditional agricultural exports by cooperatives and other participant farmers, and improve the linkages of these producers with processors and international buyers. Under the APTLINK agreement, ACOPAI received considerable support from the NTAE project, including:

- a quality control campaign providing analysis on salmonella, excreta and purity for sesame samples, and

- assistance with test plots for organic sesame.<sup>2</sup>

In Ecuador, APTLink worked with PROEXANT, a USAID/Ecuador-funded project to promote non-traditional agriculture exports. Administered by Development Alternatives International (DAI), PROEXANT's goals include increasing the number and value of sustainable export products and market diversification, increased foreign exchange earnings, generation of new rural employment, institutional strengthening and financial self-sustainability.

The APTLink/PROEXANT collaboration was very constructive. PROEXANT staff arranged and paid for most of the project manager travel and lodging, to and within Ecuador. they also covered the expenses for a New York sales trip with TropiFrutas. Indirect support was provided to the processor/exporters through technical assistance to growers providing raw materials to the processing facilities.

One of PROEXANT's notable accomplishments was the development and implementation of a Quality Seal for Ecuador. For an exporter to earn the right to display the Seal on export packages, stringent quality control standards from cultivation through post-harvest handling and packaging must be followed. It was planned that PROEXANT would inaugurate the Seal and quality program at the 1993 Produce Marketer's Association (PMA) Convention. Because PROEXANT project resources were unavailable for the PROEXANT representative to attend the convention, APTLink sponsored the travel and helped introduce the concept to key importers at the November show in Washington D.C. This cooperation is an example of the excellent synergy developed in the APTLink/counterpart agreements.

In Peru, the USAID mission advised APTLink to work with FUNDEAGRO, an AID funded technology transfer project. FUNDEAGRO allocated \$50,000 for APTLink activities. The money was used to fund project manager travel to and in Peru, as well as one U.S. trip and one trip to Mexico with Peruvian mango growers. FUNDEAGRO funded three consultancies. The consultants worked with citrus growers and helped initiate variety trials for vegetables.

When the FUNDEAGRO project was discontinued in 1993 APTLink began work with ADEX, the association of Peruvian exporters. USAID/Peru supported ADEX activities through the Export Trade Development (ETD) project. Based on APTLink's experience and

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<sup>2</sup> Organics are a beneficial alternative to growers because the potential exists for higher returns, organics are more environmentally sound and safer for the farmers, and in El Salvador there are unique opportunities to cultivate in pre-conflictive areas, which because they were not farmed for the 12 years of civil war are easily certified as chemical-free.

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success in promoting Peruvian exports, ADEX awarded ACIDI a Subagreement for \$285,000. Three APTLINK pilot exporters continue as recipients of this assistance.

Other Counterpart Contributions -- Additional resources were donated by other groups as well.

VOCA -- ACIDI's sister cooperative development organization, Volunteers in Overseas Cooperative Assistance (VOCA) sends highly qualified professionals abroad as volunteer technicians to assist developing world cooperatives and private sector agricultural enterprises. In accordance with prior agreement, VOCA fielded 5 volunteer technicians throughout the life of the project. The volunteers helped with crop trials, processing plant technology, refrigeration, and storage facilities. This valuable technical assistance was free to APTLINK's pilot exporters.

LACTECH, a project funded by USAID with support from USDA and administered by Chemonics, produced four market studies at no cost to APTLINK or the pilot exporters (estimated value, \$5,000). The USDA/OICD Information Center responded to numerous requests for information on non-traditional crops. They provided extensive materials on cultivation, handling, marketing, international supply/demand, and lists of buyers, again at no cost to APTLINK or the exporters.

The APTLINK project manager was given complimentary registration to several trade shows over the project's two and one-half years including the conventions of Produce Marketer's Association and United Fresh Fruit and Vegetable Association (estimated value \$2,500).

Additional and very important counterpart contributions were donated by APTLINK's Steering Committee. The committee was comprised of top management from Sunkist, NORPAC, TriValley and Calavo Growers of California. Committee members not only paid for all their own expenses to attend meetings (estimated value \$5,000), they consistently made themselves available for questions, referrals and advice. NORPAC, Calavo and Agripac provided staff members for technical assistance to APTLINK pilot exporters.

### **Activities and Interventions**

APTLINK supported the pilot exporters and built capabilities for export and trade promotions using four important tools: technical assistance, information services, advice concerning compliance with governmental regulations and the advisory committee.

Technical Assistance - APTLINK delivered technical assistance at the farm level with diversified crop variety trials in all three countries; at the agro-processing level, sending experts to help with agro-processing quality and efficiency control in both El Salvador and

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Ecuador; and, at the international level, helping all project participants through the labyrinth of compliance with FDA and USDA/APHIS requirements as they introduced their processed agricultural products into the U.S. market. Details on specific technical assistance delivered to each participant are presented in the Participants and Activities section of this report.

Information Services - A very strong network of communication between APTLINK, ACIDI's counterpart organizations (including FUSADES and NTAE in El Salvador, PROEXANT in Ecuador, and FUNDEAGRO in Peru), USAID Agriculture and Trade and Investment divisions, and the project beneficiaries was established. From the Washington, D.C. headquarters ACIDI responded to specific information needs of the APTLINK participants. Pertinent materials were methodically compiled in subjects ranging from agricultural practices and uses of EPA permitted chemicals, to agro-processing techniques and quality control measures, to key market reporting publications and services. The gathering of information was demand-driven and routinely shared with project partners.

Through the APTLINK project ACIDI actively publicized its ability to help U.S. marketers with their international sourcing requirements. These efforts paid off and ACIDI was frequently contacted to provide information to companies starting to "test the international waters". ACIDI has been identified as the vanguard as U.S. marketers look, frequently for the first time, to Latin America for specific agro-processed imports. From these inquiries ACIDI learned which products are in demand, best windows of opportunity, quality standards and specifications, packaging requirements, favored ports of entry, and other crucial trade intelligence. This intelligence allowed for truly *demand driven* export promotions (See Appendix V for APTLINK's promotional brochure).

Import Regulations - Compliance with USDA/APHIS and FDA regulations proved to be extremely challenging for LAC exporters. Some examples of APTLINK's assistance in this area included:

- helping Tropifrutas, a banana puree processor in Ecuador gain FDA plant registration necessary to export to the U.S. (TropiFrutas can now ship acidified product into the U.S. and ACIDI continued to assist them in their application process for approval of low acid shipments.);
- working with Ecuavegetal, an Ecuadorean exporter of pigeon peas to challenge protectionist import policies in Puerto Rico and gain entry into that important high demand market; and
- providing guidance to Agroindustrial San Lorenzo, the Peruvian mango growers, as they lobbied APHIS for approval of a hot water treatment facility in their area.

Advisory Committee - Sunkist Growers, Calavo Growers, TriValley Growers and NORPAC comprised APTLINK's Advisory Committee. Input from the steering committee was very valuable in shaping evaluation criteria for country and pilot exporter selection. Early in the project, committee members helped to generate a short list of products with high

demand in the U.S. market -- products currently imported, and therefore not competitive to U.S. farming interests. As representatives of farmer cooperatives, the steering committee insured that APTLink was sensitive to U.S. interests.

Support from the committee persisted throughout the project's life, serving as a link to the U.S. processed food industry. Members made resources available from their own companies and increased their impact on the project even more by providing names and helpful tips that provided APTLink access to a vastly expanded network of buyers, importers and distributors. This network was made available to APTLink for market information, current price trends, technical advice, packaging, product specifications, etc.

Two members of the Committee, Calavo and NORPAC, became trading partners with APTLink project participants. Calavo has sourced fresh mangoes from Peru and NORPAC has purchased frozen okra from El Salvador.

## **PARTICIPANTS AND ACTIVITIES**

### **El Salvador**

ACOPAI -- ACOPAI is a 40 year old federated cooperative representing approximately 800 sesame farmers. The cooperative manages harvest, post-harvest handling, processing, packaging, sales and shipping for its grower members. The seed is cleaned, processed and packaged on a maquila basis by one of three existing processor/exporters. As a non-irrigated crop, sesame is grown by the poorest farmers. The farmers plant sesame after their subsistence crops are harvested, in an attempt to re-coup some production costs. Historically, growers believed their marketing options were very limited. They felt themselves "at the mercy" of the exporters, because the exporters were the only buyers.

In 1991 the cooperative was offered a credit line to purchase seed from its members and market the sesame under the ACOPAI label. Technical assistance was provided by the NTAE project. Finally, the growers had the opportunity to capitalize on independently selling their seed.

ACOPAI's objective was to establish a long-term relationship with a buyer involving significant volume. They hoped to find a direct buyer (bakery or other food manufacturer), anticipating higher returns by eliminating brokers and other middlemen.

APTLINK helped ACOPAI in several ways. A market study was commissioned which provided an overview of the U.S. market and explained the trading network for sesame. The study made clear to the cooperative that trying to find a direct buyer was futile because sesame is simply not traded that way -- virtually all product is handled by brokers. This intelligence and other very important recommendations enabled the cooperative to avoid

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serious losses which would have resulted from trying to store their 1991/92 crop too long. In an exit interview, officers of ACOPI said that the study has helped them form all subsequent short and long term marketing strategies because it gave them a clear understanding of how sesame is traded in the U.S.

The study also listed key buyers, importers and brokers of sesame in the U.S. market. APTLink made preliminary "cold calls" to the most promising buyers, arranged for samples to be provided and performed credit checks on buyers before any product was shipped.

With the help of APTLink and the NTAE project, ACOPAI has developed an exclusive marketing relationship with a major trader in San Francisco. A significant percentage of the 1991/92 crop and all of the 1992/93 crop was sold to this trading partner. As a contractual arrangement, price and volume were established prior to the season, greatly mitigating farmers' risk and allowing for better planning. The APTLink manager accompanied ACOPAI's president on a trip to meet the buyer in California and collect payment for the first shipment.

Due to adverse climatic conditions, the 1993/94 crop was only about 40% of normal volume. This is a typical 4 year cycle with sesame, and many of ACOPAI's growers did not even plant sesame this season. Due to lighter supply, the domestic price was higher than the export price and therefore no product was contracted for export. However, because of intelligence and market contacts ACOPAI gained with the help of APTLink and NTAE, they will be in a good position to provide better returns to their sesame grower members in the future.

Del Tropic -- Del tropic is a processor of frozen vegetables. Their products include whole okra and black-eyed peas, and a small volume of broccoli. Until 1992 broccoli was processed from raw material imported from Guatemala.

Diversification from traditional crops was important to Del Tropic because: 1) extension of the processing season would allow for more efficient plant operations, bringing down the per unit production costs for all products processed, 2) an extended product line would give them access to more buyers and more profitable markets, and 3) diversification would mitigate risks.

The NTAE project and FUSADES had both been working with Del Tropic; NTAE with cooperative producers to supply high quality raw material, and FUSADES in test plots for diversified products. NTAE continued to work with producer cooperatives, but FUSADES was the institutional organization indicated in the APTLink/Del Tropic agreement. It was planned that FUSADES would work with Del Tropic to develop validation commercial trials for the most promising diversified products (broccoli, red peppers, French green beans, baby vegetables, baby corn and ethnics).

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APTLink's goal for Del Tropic was to create a link with U.S. frozen food marketers in order to develop the diversification process with a market demand orientation. APTLink coordinated a meeting in Washington D.C. between Del Tropic manager, Pedro Urquilla and NORPAC president, Art Christiansen. Based on agreements reached at that meeting, NORPAC sent their quality control representative to El Salvador. The APTLink project manager accompanied him. The Del Tropic plant was inspected and ultimately approved as a qualified NORPAC supplier, and NORPAC purchased its first container of frozen okra in 1993.

APTLink provided three technical consultantancies to Del Tropic, one to initiate the broccoli trials, one for a processing plant efficiency study and one to address a problem with freezing capacity. FUSADES provided credit for farmers and 3.75 person-months of technical assistance to supervise the broccoli trials. Del Tropic guaranteed all farmer loans, and all loans were repaid in full.

Broccoli was the only diversified trial to be expanded for two reasons. FUSADES changed their policy regarding support for agriculture production projects, and their resources were therefore not available. Furthermore, it was determined that attempting to develop more than one crop at a time would be too complicated and distracting for Del Tropic management.

The broccoli trials were successful in that all the growers profited from participating. Unfortunately, the international market has recently been characterized by extreme competition and low prices. For this reason, Del Tropic has decided to focus on just the okra and black-eyed peas. Even without the broccoli, Del Tropic has increased their plant utilization by over 30% and employment by over 60%.

#### **Ecuador**

TropiFrutas -- TropiFrutas is a processor of tropical fruit juice concentrates. Their processing facility was originally designed to exclusively process maracuya (passion fruit) concentrate. However, raw material supplies are frequently insufficient, which can result in the plant operating at only about 30% of installed capacity. Also, international passion fruit markets are notorious for extreme fluctuations in supply and price; the last three years have seen some of the lowest prices in history. For these reasons, TropiFrutas expanded their processing facility, adding equipment to produce aseptic banana puree.

Since TropiFrutas already sold all of their processed maracuya to U.S. and European markets, APTLink focused initially on helping them through the regulatory process required to obtain FDA approval for the aseptic banana puree. Approval for acidified product (with a Ph value greater than 4.6) was fairly straightforward. APTLink helped prepare and submitted the required FDA paperwork, and TropiFrutas began shipping that product to the U.S. in 1993. However, the requirements for low acid product proved to be much more

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complicated. A "process authority" must "challenge" the equipment to statistically establish the safety of the final product. This is done by inoculating the product with live bacterium and testing the finished product to insure the equipment has killed the dangerous organisms. It is a very costly and time consuming procedure.

APTLink helped TropiFrutas by becoming familiar with the key offices and individuals at FDA with oversight for registration and compliance. Several "process authority" firms were interviewed and proposals were solicited from the most promising. A meeting between the selected firm and TropiFrutas manager, German Lopez, was arranged in Washington D.C. to finalize negotiations for the procedures. The process has taken over a year, but is 95% complete at the writing of this report.

In addition, APTLink helped TropiFrutas to establish extended market links, primarily for the banana puree. Sales calls were scheduled and APTLink project manager accompanied German Lopez on preliminary meetings with the industry's leading firms in New York and New Jersey. The purpose of the meetings was to inform the buyers of TropiFrutas' new product availability (aseptic banana puree) and to ascertain the level of interest of the buyers. In some cases very preliminary negotiations on price and volume were begun.

The outcome of the trip was a greater understanding of supply and demand conditions for aseptic banana puree in the U.S. market. Details on packaging, warehousing, pricing, competition, etc. were discussed. All buyers visited indicated a strong interest in representing TropiFrutas as marketing agents. The face-to-face meetings allowed formation of strong impressions. In an exit interview, Mr. Lopez said that the meetings arranged by APTLink greatly facilitated link with a U.S. market partner.

Two VOCA volunteers delivered technical assistance to TropiFrutas. They helped with the lay-out of the receiving area, sorting and peeling lines, and banana ripening rooms for the aseptic banana puree processing line.

Sales in the U.S. of acidified aseptic banana puree went from zero to \$400,000 in 1993. Demand for the low acid product is approximately three times greater. Based on the successful addition of these new products, TropiFrutas plans to launch a new enterprise in 1994, frozen banana concentrate. There is only one other supplier of this product in the world. With the banana activities having already created almost 250 jobs, the new endeavor will certainly generate even more new employment, at both the processing and farming levels.

Ecuavegetal -- Ecuavegetal is a processor of vegetables and fruits. Most of their products are canned. Ecuavegetal produces over 45 products but the main export products are green pigeon peas and tomato paste. Ecuavegetal had three critical constraints to

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increasing exports: insufficient raw material supply, limited market exposure and prohibitive trade barriers in Puerto Rico.

In the PROEXANT/Ecuavegetal/APTLink agreement, PROEXANT pledged support to help increase the diversity and volume of raw material supply. Trials were developed for pineapple and baby corn. Ecuavegetal made the largest impact with their own aggressive recruitment of new growers for processing tomatoes and pigeon peas. Posters were developed to encourage growers to try these crops. Field prices were increased. Contracts were negotiated which designated volume and set minimum prices. Grower returns have potential to go even higher based on final selling prices. These promotions have been very successful and beneficial both to the growers involved and Ecuavegetal. Ecuavegetal's grower base increased from 1,100 to 2,000 over the APTLink project life.

Ecuavegetal's primary export market is the East coast of the U.S. They were very interested in expanding to other "ethnic" markets such as Texas and southern California. To help them, APTLink commissioned a market study for products such as hominy, hearts of palm and baby corn. Buyers were identified and product specifications provided. Due to transportation costs (canned products are very costly to ship), Ecuavegetal has not been able to produce competitively priced products for these markets. In the exit interview we were told that the market study was very valuable in determining their competitive position.

Puerto Rico is a huge consumer of pigeon peas. Ecuavegetal estimates that the market holds potential for exports of 500,000 cases per year. At the current price of \$18/case this amounts to \$9 million in foreign exchange for Ecuavegetal. However, there has been a prohibitive trade barrier for imports of pigeon peas into Puerto Rico. Puerto Rico requires FDA inspections of any processing facility importing canned products. The problem is, FDA does not do this type of international inspection. APTLink and PROEXANT worked diligently to help solve this problem. The FDA and Ministry of Agriculture, Puerto Rico were visited on numerous occasions, letters were written, and telephone calls made on almost a weekly basis. The current situation is improved, and in the exit interview Ecuavegetal credited APTLink with the improvement. They hope to begin shipping pigeon peas to Puerto Rico in 1994.

### **Peru**

AgroIndustrial San Lorenzo (ASL) -- ASL is an association of mango exporters with 17 members. They are the largest and most experienced mango growers in Peru's key mango production area, Piura. The Association was formed in 1991 with the goal of consolidating their fruit and marketing directly as a group. The export varieties produced are 90% Hayden and 10% Kent. Peruvian exporters enjoy a high priced market window because their fruit is ready for harvest in mid-November and runs through mid-February. They do not compete with Mexico.

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Mangoes destined for the U.S. are required to undergo hot water treatment for phytosanitary purposes. There are four hot water treatment facilities, and historically the owners of the facilities have purchased fruit from the growers and assumed the role of exporter. The problems with this arrangement were that the growers had no direct access to market links or information, and the impression prevailed that the owners of the treatment facilities collusively determined and depressed grower returns. The result was accumulated distrust and ill will. Growers were certain that their returns could be much higher if they could export more directly.

APTLink's goal was to find a U.S. buyer who would import directly from ASL. APTLink also tried to help ASL purchase their own treatment facility; a great deal of research was done and USDA was lobbied to permit construction of a fifth facility in the Piura area. Financing was never located, but at the time of this report, ASL is in negotiations with at least two potential joint venture partners in the U.S.

Calavo Growers of California was identified as an ideal market partner for ASL. Calavo had been sourcing Mexican mangoes for two seasons and was searching for a supplier for the November through February months in order to offer mangoes to their buyers on a year-round basis. The first important ASL/Calavo encounter was in Ecuador when APTLink made arrangements for a meeting between the two. There were three main objectives for the trip:

- To inspect mango plantations in Ecuador to compare cultural practices such as irrigation techniques, pest control, pruning, post-harvest handling, etc. and to determine Ecuador's potential export volume.
- To inspect Ecuador's hot water treatment facilities to compare processing techniques and packaging and handling procedures.
- To begin negotiations for the 1993/94 season.

The trip allowed for an extensive evaluation of Ecuador as potential Peruvian competitors in the international mango market in terms of export volume (both current and projected), and an analysis of Ecuador's producers and customer base.

The preliminary ASL/Calavo discussions were very positive and as follow-up, APTLink and Calavo arranged for representatives of ASL to visit mango plantations and processing/handling operations in Mexico. From Mexico, the Peruvian group then traveled to Calavo headquarters in California to continue marketing contract negotiations. They visited Calavo's packing and shipping operations and had meetings with Calavo's key executives.

Due to the requirement for hot water treatment, a three-way agreement was attempted between the growers, the processor and the buyer. Calavo and ASL were very enthusiastic about working together and optimistic that a long-term relationship was beginning.

However, the processor never agreed to proposed terms, and the three-way arrangement was not completed for the 1993/94 season.

In an exit interview, ASL members said that the fact they had negotiated as a group (for the first time) resulted in an increase from 30 to 40 cents per kilo field price. The tangibility of a marketing alternative and their solidarity gave them a much better bargaining position with the processor/exporter. They are continuing negotiations with other potential U.S. partners and assert their marketing options have greatly improved.

ASL also benefitted from an ADEX program to support the mango industry. ADEX contracted ACIDI to organize a seminar, bringing in eight expert speakers on topics including cultural practices, varieties, flower manipulation, harvest and post-harvest handling, options for processing, international competition and fresh marketing (see Appendix VIII for the Seminar Outline). As a follow-up, a three year plan was developed and implemented to conduct research trials on flower induction. The goal is to advance flowering and harvest dates to better capitalize on Peru's lucrative market window. Several ASL members are participating in the trials.

Indalsa -- Indalsa is an integrated agribusiness group with regional interests throughout Peru. The group is composed of growers, processors and distributors of tropical fruit products. Sales are about 70% to the domestic Peruvian market and about 30% exports to Europe and the United States. Their products include tropical fruit juices, pulps and concentrates (passion fruit, mango, papaya, sour sop, etc.) essential lime oil, paprika and beans.

APTLink's goal was to help Indalsa seek joint venture and long term contractual marketing partners to finance specific crops and to establish marketing distribution channels. Extensive telephone contact was made with key U.S. importers and buyers. In particular, Ocean Spray (a cooperative) was targeted as a potential buyer. APTLink project manager visited Ocean Spray's headquarters to further negotiations.

Ocean Spray did order 70 containers of frozen sour sop concentrate from Indalsa. Unfortunately, the product had serious quality problems and the sale was not finalized.

APTLink also targeted McCormick as a potential Indalsa trading partner for products such as turmeric, annatto and paprika. McCormick issued Letters of Credit for three container loads of paprika, but Indalsa was not able to meet their quality requirements (the problem was excessive humidity).

These recurring quality problems were indicative of Indalsa's chronically poor financial position. Credit has been almost impossible to obtain in Peru and Indalsa has been desperately short of working capital. For these reasons, few negotiations were realized.

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Indalsa just did not have the financial resources to buy raw materials, containers and packing materials needed for export shipments.

However, good initial relationships have been established with McCormick and other buyers in the U.S. It is hoped that in future seasons Indalsa will be in a better position to exploit export opportunities.

CIHUP -- *Centro de Investigación Huaral Progreso* (CIHUP) is an association of growers in the Huaral Valley. The valley is located within two hours of Lima with an unusual micro-climate along Peru's Pacific coast offering rich potential for agriculture diversification. The farmers are sophisticated and experienced. Predominately of Japanese descent, they have received technical and financial support from the government of Japan's international development agency, JICA. Their primary crop has been citrus (Satsuma mandarins), but they are able and willing to diversify into other fresh or processed agriculture products for export.

APTLink added activities with CIHUP rather late in the project, identifying two goals for the group. The first objective was to determine if the mandarins grown in Huaral would be suitable for processing into canned citrus segments. The second objective was to begin commercial trials for vegetables identified by NORPAC to have good export potential for U.S. frozen food markets.

APTLink identified a consultant with over 20 years experience in the international citrus segment industry; he had technical expertise for processing as well as knowledge of market requirements, demands and pricing. After spending a week in Huaral he declared their fruit to be of the highest quality, (in terms of size and rind quality) excellent raw material specifically for processing.

Due to extremely high domestic prices for mandarins, the association did not seek financing for a citrus segment processing facility. In an exit interview association members said the technical assistance was very helpful in their decision making and that they will definitely continue to pursue opportunities for export markets in the near future.

NORPAC was engaged in the technical assistance process for CIHUP very early in the project. They provided a list of recommended crops for variety trials (all crop trials were for frozen products imported by NORPAC from Taiwan and mainland China). APTLink's consultant who helped with the trials also visited NORPAC's Oregon offices and developed relationships with the buying and quality control staff there. This provided for a continuous flow of information from NORPAC, through the consultant, to the CIHUP farmers.

APTLink arranged for a U.S. trip for two CIHUP members. Four main objectives were realized. First, the group was hosted by Al Guilin, Executive Vice President of Limoneira

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Company, a 4,000 acre citrus and avocado operation in Ventura County. The group toured groves and learned about planting configurations, irrigation, fertilization, pest control and other agriculture practices. A citrus and avocado nursery was visited and the growers both purchased root stock and bud wood. Calavo and Sunkist packing houses were also inspected. The growers were able to observe state of the art fruit packing technology such as electronic sizers, computerized pack recorders (for grower accounting) and mechanical count-fill equipment.

Second, the group attended the National Orange Show Citrus Institute in San Bernardino. Topics included genetic engineering, biological pest control and rootstock and variety trends. A Trade Show was held in conjunction with the Citrus Show and the group was able to gather a good assortment of promotional information on irrigation equipment, fertilizers, field boxes, field tools, etc.

Third was an important visit to NORPAC's headquarters in Stayton, Oregon for a brief overview of the cooperative's history, membership, and marketing philosophies. The group then visited three processing facilities including the repack facility where the growers were able to see how their products would be used in the end form. NORPAC indicated once again their desire to identify an alternative supplier for "oriental" vegetables. Assuming that price and quality are satisfactory, NORPAC pledged interest in buying frozen vegetables from the CIHUP growers.

Finally, the group met with Robert Lambrix, Technical Director for Rani, a processed citrus production and marketing firm. He provided a comprehensive overview of the international scene for citrus segments, sharing information and photos. Plans were made for Mr. Lambrix to visit Peru when harvest was peaking.

APTLink also introduced CIHUP to Agripac, a new ACDI cooperative member that specializes in frozen vegetables. One of Agripac's Vice Presidents participated as a speaker in an ACDI/ADEX seminar on asparagus in Peru. While he was in the country, a visit to Huaral was arranged. Instantly recognizing the valley's potential and the ability of the CIHUP association to develop new crops, Agripac has begun negotiations for a joint venture. If negotiations succeed, a new cooperative will be formed where CIHUP will grow and freeze specialty vegetables and Agripac will provide marketing functions. CIHUP members will travel to Oregon in early 1994 to continue talks.

## **IMPACT**

In order to measure the impact of APTLink activities, baseline data was gathered at the beginning of the project and again at the project's conclusion. Data was collected on processing plant employment, number of growers delivering raw material to the plants, percentage of raw material produced by cooperatives or grower associations, average yields,

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average prices paid to farmers, average production costs, seasonal production volume, export volumes and foreign exchange earnings (See Appendix IX for more detail).

CHART I  
APTLink IMPACT

	Processing Plant Employment		Growers or Farm Workers		Foreign Exchange Earnings	
	1992	1993	1992	1993	1992	1993
<b>EL SALVADOR</b>						
Del Tropic*	90	153	1,408	2,896	\$1,380,000	\$2,200,000
Okra			582	1,089	164,500	430,000
Black-eye Peas			--	50	25,900	64,000
Broccoli						
ACOPAI						
Sesame Seed	8	8	776	832	201,730	188,145
<b>El Salvador Totals</b>	<b>98</b>	<b>161</b>	<b>2,768</b>	<b>4,867</b>	<b>\$1,772,130</b>	<b>\$2,882,145</b>
<b>ECUADOR</b>						
TropiFrutas	34	156	490	605	\$2,300,000	\$2,720,000
Maracuya			--	550		
Banana						
Ecuavegetal	250	250	1,100	2,000	2,400,000	5,600,000
<b>Ecuador Totals</b>	<b>284</b>	<b>406</b>	<b>1,590</b>	<b>3,155</b>	<b>\$4,700,000</b>	<b>\$8,320,000</b>
<b>PERU</b>						
Indalsa	10	30	350	450	\$220,000	\$450,000
AgroIndustrial San Lorenzo*	100	145	680	800	no exports	642,000
<b>Peru Totals</b>	<b>110</b>	<b>175</b>	<b>1,030</b>	<b>1,250</b>	<b>\$220,000</b>	<b>\$1,092,000</b>
<b>APTLink TOTALS</b>	<b>492</b>	<b>742</b>	<b>5,388</b>	<b>9,272</b>	<b>\$6,692,130</b>	<b>\$12,294,145</b>

Del Tropic note: Assume 4 workers for okra, 3 for black-eye peas and 2 for broccoli (per manzana).

AgroIndustrial San Lorenzo note: Assume 4 workers per hectare.

Chart I summarizes changes for the pilot exporters between 1992 and 1993 in the areas of processing plant employment, employment at the farm level and foreign exchange earnings. APTLink cannot take credit or accept responsibility for all of the changes. Climate, domestic markets, international competition, internal decisions and many other factors influenced the overall situation. However, the additional market opportunities facilitated by APTLink protected many jobs and contributed to significant employment generation.

Del Tropic, TropiFrutas, Ecuavegetal and Indalsa are agro-processors. ACOPAI, Agroindustrial San Lorenzo and CIHUP are grower associations that utilize processing facilities on a maquila basis. Processing plant employment increased for almost all pilot exporters, largely because of the growth in their export sales. In the case of TropiFrutas, by diversifying their product line they were able to increase plant jobs by 122. Due to the positive reception the market has given their aseptic banana puree they will soon be adding additional equipment to process frozen banana concentrate and even more new jobs will be created.

A dramatic increase was also seen in farm level jobs. At the end of APTLink's project life, an additional 3,884 farmers and farm workers were producing raw materials for the pilot exporting firms -- in each case the increase can be attributed to additional exports. Due to diversification into banana puree products, TropiFrutas contributed to employment for over 500 farm workers. Likewise, because of stronger markets and export demand, Del Tropic's grower base almost doubled over the APTLink project's life.

Export successes also impacted the grower associations. ACOPAI added 54 new members to their cooperative and Agroindustrial San Lorenzo and CIHUP have received numerous requests from growers wishing to join their associations.

Baseline and end of project data was collected for average yields, average field prices and average growing costs in an effort to measure APTLink impact on grower incomes. It was not possible to conclusively quantify the impact on grower incomes because APTLink worked primarily with agro-processors rather than the farmers. In general, field prices increased, but so did costs of production. One interesting example of better pricing for raw materials was Ecuavegetal. Because of increased market demand for their exports, Ecuavegetal launched a major campaign to enlist more growers to supply pigeon peas and tomatoes for processing. Ecuavegetal provided cash advances, seeds and other inputs, technical assistance and increased the field price to the growers. Their grower base increased from 1,100 to 2,000 in one year.

Higher fuel price was the chief culprit for the higher production costs. Yields varied due to climatic conditions. For Peru and El Salvador, El Niño conditions in 1993 caused drastic crop reductions.

## **CONCLUSIONS/LESSONS LEARNED**

The needs and interests of exporters in developing countries and marketers in importing countries are clearly complimentary; each can benefit through trade links with the other. However, one of the key lessons learned in APTLink is that common interest is frequently not enough to bring them together. Suppliers lack the confidence, resources and know-how to access and compete in new markets. Similarly, many marketing cooperatives and other businesses do not know where to begin in cultivating trade relationships overseas. The APTLink project showed how a facilitating entity can foster these mutually beneficial trade links.

APTLink's key philosophy was to bring the marketing partner into the trade equation at the earliest possible moment. The prevailing objective was to ensure that all activities were market driven -- activities to help the exporter offer products for sale that were sure to meet or exceed international standards.

After two and one-half years working to facilitate trade links, APTLink can recommend a model with a logical sequence of steps and recommendations:

1. Begin with a good and knowledgeable counterpart contact in-country. It would have been impossible for APTLink to achieve the desired results without the in-country support provided by our development counterparts. They helped in many ways:
  - identified pilot exporter candidates,
  - provided technical assistance to the exporters and the farmers who supplied the raw materials for processing,
  - made in-country logistical arrangements for APTLink project management, consultants and potential market partners, and
  - fostered communications.
  
2. Select participants carefully. It is critical to work with honest, reliable and financially strong partners. The exporters must be quality oriented and flexible, able to meet the requirements of international markets. The buyers must be ethical and willing to share market intelligence. Perhaps most important, both partners should be motivated to cultivate a long term relationship. If both are working with a win/win mentality, they can ultimately help one another through good and bad market conditions.

3. Start with and maintain realistic expectations. The exporters should be provided with as much market information as possible. They should understand how supply and demand affects price, how to target market windows, who their competitors are, what advantages (and disadvantages) they have, how the product is customarily traded, and what their potential risks are.

Expectations on pricing should be realistic. For example, exporters might hear that mangoes are selling for \$2.00 each in U.S. supermarkets -- the equivalent of \$25.00 or more per box. Obviously, this can create false expectations. Total costs of placing the product in the target market have to be considered including packaging, handling, shipping, and paperwork.

It is extremely important for exporters to be realistic about getting their product to market within the target window. Prices can drop dramatically in just a few days, or in some cases a few hours. Careful planning, with consideration given to transit times and customs clearing is critical to insure that the product reaches its final destination during the optimum pricing window. Each year the window can become smaller as competitors build their production. Exporters need access to timely and on-going information throughout the season as shipping decisions are made. Their market partner should routinely supply this information.

Another expectation or misconception to avoid is that finding a direct buyer/importer will insure greater returns. Almost all exporters think they could receive higher prices if they could just find a direct buyer, cutting out the "middleman". In reality, brokers and importers serve a valid function, particularly for processed products. ACOPAI provided a good example of this potential pitfall. They were storing their sesame seed, hoping to find a direct buyer (a bakery or restaurant chain). These industrial procurement agents always buy from brokers. Bakery buyers may purchase hundreds of ingredients and it is not practical for them to source each ingredient directly.

4. Don't try to do too much. APTLink learned this with both Del Tropic and CIHUP. The initial objective was to conduct variety trials on 5 to 7 new crops in each area. Once the variety trials were completed, it was planned to conduct commercial trials with the most promising varieties in order to determine volume and profit potentials. It became clear that to attempt more than one new crop at a time was unrealistic. These growers are fully occupied with their primary farming activities and the trials require intensive management. It is best to set realistic goals and proceed at a pragmatic pace.

5. Work with a market representative when identifying the constraints to expanding exports. Involve the exporter in every phase because his/her participation and commitment is critical -- they must recognize the problem and be willing to dedicate whatever resources are necessary to find solutions. Try to involve the marketing partner as early in the process as

possible. Recommendations on quality issues, packaging, and shipping schedules should come directly from the buyer to avoid costly mistakes.

6. Exports may not be the only or the best marketing option for growers or processors. While APTLink focused on exports it became evident that growers universally needed marketing support, and frequently for crops that for one reason or another are not exportable. There are many reasons export may not be an option for growers. Volume may be too low, the product may not be in demand internationally, the quality may not measure up to export requirements, or transportation costs might be prohibitive. A rational approach is to determine which market is best for the growers to target. It could be the domestic market, it could be neighboring countries, or it could be first world markets.

## **WHAT IS NEXT?**

ACDI was extremely pleased with the success of the APTLink pilot project. Important and relevant expertise in the areas of trade promotion and market networking were developed for ACIDI over the project's life. For these reasons, ACIDI has proposed adding this "trade link" capability to its core activities.

As an innovative pilot project, APTLink activities focused in Latin America only, participating exporters were all agro-processors, and the United States was the only target market. ACIDI has proposed expanding the APTLink concept in four ways:

- Expand participating countries in three stages - first by adding countries in Latin America, second by beginning work in targeted African countries, and finally offering global participation with emphasis on CEE and NIS.
- Work with exporters of both fresh and processed agricultural products.
- Focus on marketing help, whether it be for the domestic, regional or international markets.
- Promote bilateral trade by selecting participants likely to require inputs that could be provided by U.S. exporters.

The new program area will be called Agriculture Trade Links (ATLink) and will build and expand on ACIDI's experience with international trade development, most notably the APTLink project. With a distinctive marketing orientation, the program will identify trade opportunities based on the exporting country's comparative and competitive advantages. Promising market partners will be identified as will the constraints to successful export activities. Whenever possible, the marketing partner will be brought into the trade equation as soon as possible; in this way technical assistance will be precisely targeted to specific problems and solutions.

*APLink Final Report*

Initially, APLink will focus on those countries which show the most promise for agricultural trade and investment, and candidates will be ranked and selected based on their readiness to export. Concentration on projects with the best chance for successful exports will allow the project to develop substantive ties that can be built upon, adapted and replicated.

Only partially funded through ACDI's core grant, APLink's primary funding will come through mission buy-ins.

A five year project, APLink will begin by expanding activities in Latin America where extensive country and enterprise assessments have already been conducted. Activities will then expand to Africa, concentrating in Malawi, Uganda, Zambia and Zimbabwe where ACDI has extensive experience and where recent liberalized trade policies favor export promotion. Ethiopia will also be targeted allowing ACDI to build on its on-going relationship with the African Village Academy. Next, ACDI will offer the resources of APLink globally to interested AID missions and other export promotion groups, looking first at the Southern Tier countries of CEE and NIS including Albania, Macedonia, Bulgaria, Romania and Kazakhstan.

What will be the effects of the inputs described above that will help APLink achieve its stated purposes? There will be six primary project outputs:

- Market Studies - With its distinctive market orientation, all activities will be based on known market demands in targeted markets.
- Country Appraisals - USAID missions and various governmental export promotion agencies will be contacted. The success of APLink will be published and the model offered to prospective countries. Several criteria such as trade policies, export taxes and other macro policies will be considered in the country selection process.
- Enterprise Appraisals - Within each country, individual exporting enterprises will be appraised and ranked. APLink will seek exporters with manageable constraints as project participants.
- Identification of Technical Assistance Needs - With input from prospective market partners, constraints to exports will be identified. APLink anticipates approximately 130 days per year of targeted technical assistance.
- Continued Flow of Information - The program manager's responsibility, through travel and regular communication, will be to insure that negotiations between prospective trade partners continue until final contracts are signed.

- Mobilization of Matching Resources - APLink program resources will be augmented significantly by buy-ins from USAID missions and in-country export promotion organizations. APLink will also tap into the interest and technical and financial resources of existing organizations and projects in need of a strong marketing component.

**APPENDICES**

Appendix I ..... Counterpart Contributions

Appendix II ..... Sampling of Published Articles

Appendix III ..... Goals, Indicators and Accomplishments

Appendix IV ..... Purposes and Accomplishments

Appendix V ..... Outputs and Accomplishments

Appendix VI ..... APLink Brochure

Appendix VII ..... Pilot Country Selection

Appendix VIII ..... Mango Seminar Outline

Appendix IX ..... Impact

APLink Final Report

APPENDIX I

APLink COUNTERPART CONTRIBUTIONS

	1992	1993
VOCA		
Tropifrutas	2,600	
Tropifrutas	3,275	
Del Tropic	2,375	
Del Tropic	3,270	
Del Tropic		1,625
MISSION RESOURCES		
FUSADES	3,500	3,000
CLUSA	5,125	11,700
PROEXANT	18,750	14,065
FUNDEAGRO	50,000	--
ADEX		130,000
MARKET STUDIES		
Sesame	2,000	
Garlic	1,500	
Concentrates	750	
Ethnic Products	750	
STEERING COMMITTEE	3,000	2,000
OTHERS		
USDA/OICD Materials	1,000	1,500
Conventions, etc.	1,250	1,250
Yearly Totals	\$99,145	\$165,140
Grand Total		\$264,285

APPENDIX II

PARTIAL LISTING OF PUBLISHED ARTICLES

1. *Frozen Food Age*, April/May issue, 1993.
2. *Food Production/Management*, March 1993. \*\*
3. *Farmer Cooperatives*, June 1993. \*\*
4. *International Produce Journal*, August 1993.
5. *Farmer Cooperatives*, October 1993.
6. *International Produce Journal*, October 1993.
7. *American Vegetable Grower*, December 1993. \*\*
8. *International Produce Journal*, January 1994.
9. *La Industria* (major newspaper in Peru), January 19, 1994.
10. *The Packer*, February 5, 1994.
11. *California Grower*, March 1994. \*\*

\*\* Article included in Appendix

# International Sourcing Opportunities Available Through APTLink

U.S. food companies may capitalize on a research and development project designed to encourage sourcing and joint ventures with Latin American and Caribbean (LAC) agro-processors.

APTLink was funded in early 1991 by the U.S. Agency for International Development to promote exports of processed fruit and vegetables from LAC. APTLink is a trade resource for U.S. buyers and investors seeking to expand their role in international trade with LAC agro-processors. No charges are made to any parties for its consulting services.

APTLink, an acronym for Agro-Processing and Trade Linkages Promotion, developed its expertise in comprehensive one-year, 10-country research to identify eight LAC firms for special promotion as model projects. They are located in El Salvador, Peru, and Ecuador. APTLink project manager Cynthia Steen noted the project companies were chosen from many desirable firms.

Beyond the common thread of being strong, successful operations, the eight share an interest in joint venture projects or establishing long-term export supply contracts with U.S. food manufacturers and distributors.

The project firms produce sesame seed, IQF and wet-pack frozen fruits and vegetables, tropical fruit juice concentrates, ethnic canned vegetables, dried herbs and spices, tropical specialty/ethnic gourmet preserves and fresh mangoes.

The eight processors were selected against a demanding market analysis criteria. Factors considered within the analysis were existing processing and transportation infrastructure. Also evaluated were volume production potential, plus comparative advantages like

contra-seasonal cycles. Individual firms' organizational strengths also were evaluated within the Washington, DC-based APTLink project.

Research complete, APTLink's second phase is underway to connect LAC food manufacturers with U.S. buyers and investors.

One APTLink client is Paul L. Caldaroni, president of Caldaroni Food Sales, Inc., Chelsea, MA. Caldaroni has "very optimistic" expectations for handling the all-natural fruit preserves manufactured by one of the APTLink project companies, Cremino, of Guayaquil, Ecuador.

Caldaroni describes the preserves as "wonderful products", made to higher quality standards than those of U.S. manufacturers. Caldaroni is also initiating arrangements to handle Ecuadorian fresh vegetables, ethnic canned vegetables, and Peruvian dry beans.

Caldaroni said APTLink served a key role in making initial contacts, providing product samples and literature, and overcoming cultural barriers that may have otherwise existed.

For more information contact Cynthia Steen or Bob Fries, APTLink, at (202) 638-4661. ■

## NFPA Applauds EPA Action On Pesticide Petition

Action taken by the Environmental Protection Agency on a petition by the National Food Processors Association "is a great step toward reasonable pesticide policy," according to NFPA.

EPA is requesting public comments on an NFPA petition asking that pesticide residues deemed safe for raw agricultural commodities be allowable in equal or less amounts in processed foods.

NFPA's petition, filed on September 11, 1992, was joined by the United Fresh Fruit and Vegetable Association, the Florida Fruit and Vegetable Association, the Northwest Horticultural Council, and the Western Growers Association.

"It is impractical and illogical to have different residue standards for raw com-

modities and processed foods," said NFPA President and CEO John R. Cady. "We are very pleased that EPA sees the importance of resolving this situation."

The NFPA petition came in the wake of a recent Appeals Court decision that the Agency must strictly apply to Delaney Clause of the Federal Food, Drug, and Cosmetic Act (FFDCA), rather than using a negligible risk approach to pesticide residue tolerances.

## AFFI Urges Changes To Nutrition Labeling Rules

The implementation date for products entering into interstate commerce, as well as the "40 gram" requirement for meal and main dish products contained in the Food and Drug Administration's (FDA) final nutrition labeling regulations need revision, the American Frozen Food Institute (AFFI) said in comments submitted to FDA.

While the nutrition labeling regulations are final, FDA did allow for comments on technical matters or unintended technical consequences arising from specific provisions in the regulations.

Specifically, AFFI is concerned with statements included in FDA's preamble suggesting that the regulations become applicable on the date that products are introduced into interstate commerce. However, the Nutrition Labeling and Education Act (NLEA) states that the regulations become effective on the date that a product is actually labeled.

## "Baby Boomers" Benefit Restaurants

The "graying" of America, along with high economic growth rates in Southern and Western markets, will provide new opportunities for foodservice operators.

Because middle-aged consumers spend far more for food away from home than younger or more elderly consumers, the aging of the "baby boom" generation is predicted to benefit the eating-out industry. In households headed by persons in the 45 to 54 age range, away-from-home expenditures continue to grow and are almost 36 percent above spending in households in the 25 to 34 age group.

As the population ages, opportunities for family fare in restaurants will grow due to the increase in family households. It is also predicted that the sophisticated palates of middle-aged consumers will likely seek more varied menus, as well as food items perceived as "healthful" by the diet-conscious "baby boomers."

APTLink, an acronym for Agro-Processing and Trade Linkages Promotion, is operated by Agricultural Cooperative Development International (ACDI), a non-profit organization based in Washington, DC. ACDI's membership is represented by 46 of the United States' leading farm cooperative organizations.

# Caribbean Connection

BEST AVAILABLE DOCUMENT

## ACDI Program Offers Co-ops New Trade Links

**F**armer cooperatives interested in starting or expanding trade with Latin America and the Caribbean have the benefit of calling on an international cooperative organization with considerable experience in the field. Agricultural Cooperative Development International (ACDI) has launched a project called APTLink to develop trade links between farmer associations in Latin America and the Caribbean (LAC) with the United States. Cooperatives in the U.S. are key beneficiaries of the APTLink project.

Based in Washington, D.C., ACDI is a nonprofit training, technical and management assistance organization. Its members are 46 U.S. agricultural cooperatives. ACDI is affiliated with the National Council of Farmer Cooperatives and the Farm Credit Council.

APTLink, an acronym for Agro-Processing and Trade Linkages Promotion, is funded by the U.S. Agency for International Development to encourage LAC-region, grower-owned associations in fruit and vegetable processing. Cynthia Steen, APTLink project manager, previously was affiliated with Calavo, a California avocado marketing cooperative. She started the project in June 1991.

APTLink's first phase was a one-year comparative study of 10 LAC countries. Based on this research, eight strong agro-processors were selected to receive special APTLink assistance in developing trade links. Beyond the common thread of being successful, reliable operations, the eight companies — based in El Salvador, Ecuador, and Peru — share an interest in joint venture projects or establishing long-term export supply contracts.

Beyond specific opportunities with the project firms, APTLink offers — at no charge — its expertise in the broad LAC region to help U.S. cooperatives



*Frozen broccoli is processed in a plant in Ecuador — one of the nations U.S. farmer cooperatives can establish trade links with under a new program being launched by ACDI. Photo courtesy Thompson Communications*

participate in the fast-developing world of international trade.

"United States farmer cooperatives can gain in several respects through our work," Steen says. "The diverse climates of the Caribbean Basin and Latin America provide opportunities for cooperatives interested in diversification or expanding their volume base to acquire tropical and counter-seasonal products. Our extensive research in the LAC region provided APTLink with a comprehensive understanding of investment and sourcing opportunities there."

She says APTLink's mandate is to give ACDI member cooperatives the first chance to become involved with the opportunities uncovered by its work. Other U.S. cooperatives will be given the second right of refusal. "Then, if specific opportunities remain unclaimed, the U.S. business community at large has the chance to seize this head start in international competition."

For more information contact Steen or Bob Fries, APTLink, telephone (202) 638-4661 or fax (202) 626-8726. ■



## In The Process

By Cynthia Steen

### Develop Partnerships In Latin America, Caribbean

**V**EGETABLE and fruit processors in Latin America and the Caribbean are aggressively seeking market partners. For U.S. processors, there could be a variety of benefits:

- By obtaining off-season produce, they could extend their market season and keep their products

in front of consumers for a larger part of the year.

- They could extend their product lines with tropical vegetables and fruits.

#### An Up-And-Coming Industry

Export of fresh produce has blossomed in Latin America and the Caribbean in recent years, and food processing appears ready to follow suit. Much of the industry's growth could occur through activities complementary to the fresh produce industry.

For example, if produce does not meet export requirements, processors would provide a valuable secondary market.

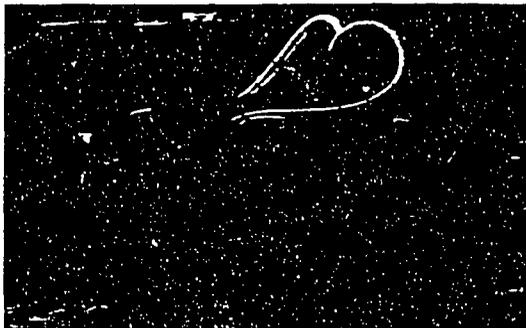
Or, if a particular harvest is off schedule and misses a tight market window — or market prices fall, or international transportation problems arise — the processing option would be open to grower-shippers.

In fact, confidence in the potential growth of processing in the region is so high that the capacity of plants built in recent years has

Steen is project manager of APTLink. Interested processors can contact her at Agricultural Cooperative Development International, 50 F St. N.W., Suite 900, Washington D.C. 20001; 202-879-0244.

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34

routinely been two to three times the volume of locally grown produce. The expectation, of course, is that production will rise to meet the processing potential.

#### One Processor's Story

One company that has created a partnership in Latin America is NORPAC — an Oregon-based processor that had 1992 sales of \$237 million.

When the company was considering expansion of its product line by sourcing product from El Salvador, NORPAC quality assurance manager Geary Nosker was highly sceptical. "I was concerned about the political situation," he says, referring to the reconciliation process following El Salvador's decade-long civil war.

Nevertheless, Nosker made a 3-day trip to El Salvador last March and came away with a different point of view. Not only were his initial misgivings unfounded — "I wouldn't hesitate to go back there again," he says — he was also impressed with the production facilities at a local frozen food processor. In fact, he cleared Del Tropic Foods, based in the capital city of San Salvador, as a supplier of frozen vegetables for NORPAC.

#### Bridging The Gap

Key to creating these partnerships was APTLink — or Agro-Processing and Trade Linkages Promotion. With financial support from the federal government's Agency for International Development, APTLink works — at no charge — to hook up U.S. companies with growers, processors, and current or potential exporters in Latin America and the Caribbean. (APTLink is in turn run by a Washington D.C.-based international consulting firm called Agricultural Cooperative Development International.)

Some of the Latin companies want a joint-venture partner to help launch their products in the U.S. market. Others are looking for long-term market partners, technical assistance to diversify their product offerings, or help in financing specific exports.

But no matter what the "partnering" method used, both sides win. □

## Green Beans: A New Fresh-Cut Product?

**O**FFER fresher, more flavorful, more tender green beans in value-added packaging, and consumers will gobble them up, according to a recent study sponsored by Rogers NK Seed Co.

The study indicated that 69% of consumers would serve fresh green beans "much more" or "somewhat more" often if they were

trimmed, precleaned, and packed ready to cook.

More than 80% say they desire more flavorful beans. Beans with a fresh, sweet taste were preferred over a bland or slightly bitter bean. About 25% preferred a more well-cooked, softer bean. As expected, 78% of respondents rated fresh appearance important. □



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# Building Markets For Agricultural Exports

by  
Bill  
Black

*"The 20th century has taught us that security is indivisible. The safety, freedom and well-being of one people cannot be separated from the safety, freedom and well-being of all."*

National Security Strategy of the United States, White House, August 1991.

At first pass, it may seem counterintuitive to say that spending United States resources to advance agriculture in developing countries will benefit U.S. agriculture. However, those associated with foreign agricultural development projects offer several strong justifications for the efforts.

The United States Agency for International Development (USAID) indicates foreign aid to developing countries eventually increases markets for United States exports. The agency reports:

- In 1990, developing countries bought U.S. products worth \$127 billion.
- More than 30 percent of all U.S. exports go to the developing world.
- More than half of America's agricultural exports go to the developing world.
- 43 of the 50 largest buyers of American farm goods today are countries that used to get food aid from the United States.

- 4 out of 5 consumers in the year 2000 will live in the developing world.

- USAID financed the purchase of almost \$3.25 billion worth of American products and services in 1991, including over \$1.0 billion in agricultural products.

The agency also indicates that USAID-financed agricultural research in developing countries has brought new technologies to U.S. farmers. For example:

- A potato variety, now grown in the United States, was found in Peru and is resistant to the destructive golden nematode.

- USAID-funded peanut research developed integrated pest management technology expected to save North Carolina and Virginia producers some \$1.5 million annually.

- Asian wheat and rice varieties with



*Cynthia Steen, the APTLink project manager, looks at papayas that the Indalsa company of Piura, Peru will process. Indalsa is one of the three Peruvian participants in ACDI's APTLink project.*

dwarfing genes now grow on almost two-thirds of the area under wheat cultivation, and one-quarter of the rice area, in the United States.

Bruce Brower, an executive with a USAID-funded project that develops non-traditional exports from Central America, estimated that "for every dollar of U.S. taxpayer money that has been spent on [the project], over four dollars have been returned to the economies of Central America. Even more gratifying, for every dollar spent, over nine dollars

have been returned to the economy of the United States."

Among the key organizations expediting such development is Agricultural Cooperative Development International (ACDI), of Washington, D.C. ACDI president Ron Gollehon contends that as a nation begins to move toward broader economic development, it must establish economic and democratic institutions to help meet its needs in agriculture and other industries.

"As that process starts," Gollehon said, "there is a move toward a more commercial atmosphere. Farmers with subsistence incomes of \$300 per year in country X aren't going to buy anything from anyone. But, through a process of development, their average income may double to \$600 per year.

"One of the first things they do is upgrade their diets, creating more demand for higher-value agricultural products. As these countries progress, they move toward being full trade partners.

"This lets us improve our agriculture by marketing to them and buying goods from them in order for them to be able to buy from us."

Gollehon continued: "We see that if we are not successful in improving the economic well-being of other people, we will do our agriculture a disservice, hurting ourselves, and the world will become less peaceful and less stable. With success, we will be able to improve U.S. agriculture, as well as the standard of living of people in various parts of the world."

ACDI is a nonprofit, private voluntary organization and the overseas development arm of United States agricultural and farm credit cooperatives. ACDI was created in response to U.S. congressional mandates in the Foreign Assistance Act of 1961 and has been undertaking projects in developing countries since 1963.

In developing countries and emerging democracies, ACDI provides a variety of services to agricultural cooperatives, pro-

*Bill Black is Assistant Vice President of Communications for Washington, D.C.-based Agricultural Cooperative Development International.*

ducer-owned enterprises, farm credit systems and agricultural associations. These services include technical assistance in agricultural marketing, processing, supply and credit-related services.

In 1991, USAID recognized the need to boost non-traditional fruit and vegetable trade in the Latin America and Caribbean region beyond the fresh pro-

ducer-owned enterprises, farm credit systems and agricultural associations. These services include technical assistance in agricultural marketing, processing, supply and credit-related services.

would have required Calavo to have additional staff." It also benefits Calavo, he said, to have off-season tropical products within its marketing plan. Off-season commodities do not compete with California production, but allow Calavo's sales force to keep in touch with buyers through a greater part of the year and generate added revenues for the co-op.

APTLink manager Cynthia Steen adds that U.S. producers and shippers have benefitted in other ways from contra-seasonal imports. "The products not produced in the U.S. are logical extenders to a company's product line. United States companies not only can use their sales staffs more efficiently, but also their warehouses, trucks and other infrastructure."

Steen said contra-seasonal imports of asparagus, grapes and melons to the United States have shown that U.S. consumers become more accustomed to using such items with expanded availability. Thereby, consumption has risen for those items produced in the United States.

"The needs and interests of exporters in developing countries and marketers in importing countries are clearly complementary; each can benefit through trade links with the

vanguard when U.S. marketers look, frequently for the first time, to Latin America for specific agro-processed imports. From these inquiries ACIDI learns which products are in demand, the best windows of opportunity, quality standards and specifications, packaging requirements, favored ports of entry, and other crucial trade intelligence. This intelligence allows for truly demand-driven export promotions."

Steen emphasized that APTLink and ACIDI "are very cognizant of the sensitivity of trade issues, given that our members are farmer cooperatives. We're very sensitive to not doing anything counter to their interests."

APTLink provides an interesting case study for how USAID projects develop international agricultural production.

The APTLink project began with Steen appraising the agro-processing potential of ten Latin American and Caribbean nations. From these, El Salvador, Ecuador, and Peru were chosen as pilot countries for the APTLink project.

Within these countries, eight agro-processors were selected for APTLink assistance in developing trade connections. Special emphasis has been placed on links with U.S. cooperatives and other member-owned organizations. These project companies offer the U.S. market sesame seed, IQF and wet pack frozen fruits and vegetables, tropical fruit juice concentrates, ethnic canned vegetables, dried herbs and spices, tropical specialty/ethnic gourmet preserves and fresh mangoes.

In addition to APTLink, ACIDI has projects to match U.S. companies with potential business partners in Hungary and in the Central Asian republics of the former Soviet Union. The Hungarian program, called Restructuring Agriculture and Agribusiness: Private Sector (RAAPS), has several California firms involved in it. Sunfruit/Agrovice, of Madera, has imported dried vegetable and fruit powders from a Hungarian company. Another participant, Tri Valley Growers, of San Francisco, has introduced its Hungarian partner to several California fruit drying enterprises.

Economically weak nations are rising with the world's growing trade tide, as they develop and capitalize on their natural resources. Operating in a healthier global business environment, American agriculture can be expected to flourish within this forward international trade surge.



*These workers at this Ecuadorian facility are washing "hands" of bananas. While this facility does not participate in ACIDI's APTLink project directly, it supplies bananas to TropiFrutas, who does participate in the program and who will process these bananas into puree.*

duce industry and toward processing, a critical second market. To accomplish this, USAID selected ACIDI and provided funding to the organization to design and administer a program called Agro-Processing and Trade Linkages Promotion (APTLink).

Calavo is an ACIDI member. Jeff Long, who is Calavo's manager of international and diversified products, listed a number of ways APTLink has benefited his co-op. This winter Calavo is sourcing Peruvian mangoes through APTLink contacts, "because Peru is one of the few sources for mangoes in the dead of winter," Long pointed out. "ACIDI was instrumental in our getting involved in Peru. Without ACIDI bringing us leads, it

other," Steen said. "However, one of the key lessons learned in APTLink is that common interest is frequently not enough to bring them together. Suppliers lack the confidence, resources and know-how to access and compete in new markets. Similarly, many marketing cooperatives and other businesses do not know where to begin in cultivating trade relationships overseas.

"Through the APTLink project, ACIDI has actively publicized its ability to help U.S. marketers with their international sourcing requirements. These efforts have paid off and ACIDI is frequently contacted to provide information to companies that are starting to 'test the international waters.' ACIDI is seen as the

APPENDIX III

GOALS, INDICATORS & ACCOMPLISHMENTS

GOALS	INDICATORS	ACCOMPLISHMENTS
<p>1. Increase the incomes of small and medium-sized farmers in LAC.</p> <p>2. Enhance the involvement of U.S. cooperatives in international trade &amp; coop. development</p>	<p>1. 10% increase in incomes of participating farmers, in the 1st year after their organization completes a marketing agreement with a U.S. firm.</p> <p>2. Negotiation of at least 2 new trade agreements between U.S. coop and producers/ processors in LAC.</p> <p>3. Involvement of at least 3 ACIDI member coops in overseas cooperative development activities.</p>	<p>1. Difficult to measure because APTLink worked primarily with agro-processors, but processing plant employment increased by 49% and number of farmers delivering raw material increased by over 60%.</p> <p>2. All 7 exporting participants have current trade links with U.S. buyers. Three U.S. partners are coops.</p> <p>3. Norpac provided TA to Del Tropic; Calavo provided TA to Agro-Industrial San Lorenzo; and Agripac provided TA to CIHUP.</p>

APPENDIX IV

PURPOSES & ACCOMPLISHMENTS

PURPOSE	PLANNED END OF PROJECT STATUS	ACCOMPLISHMENTS
<p>1. Facilitate trade ties in the area of processed foodstuffs between farmer-owned organizations in the U.S. &amp; farmer-owned organizations in LAC.</p> <p>2. Foster substantive trade ties between 2 "demonstration" countries in LAC and the U.S., ties that can be built upon, adapted and replicated.</p> <p>3. Promote the image of Latin America as an accessible and reliable source of processed fruits and vegetables.</p> <p>4. Mobilize technical &amp; financial resources of U.S. cooperatives to promote agro-processing in LAC.</p>	<p>1. Negotiation of at least 4 trade agreements, 2 in each of the demonstration countries, that allow for the U.S. marketing of fruits or vegetables processed in LAC.</p> <p>2. At least 1 party in each agreement will be a farmer-owned organization.</p> <p>3. The use of at least 3 ACIDI member coops in technical assistance and/or training components of the program.</p> <p>4. The involvement of at least 1 member coop in a joint venture with an LAC producer/processor.</p>	<p>1. All 7 exporting participants have current trade links with U.S. buyers. Three U.S. partners are coops.</p> <p>2. Exporting participants were either farmer-owned, or a significant percentage of their raw material was sourced from farmer-owned organizations.</p> <p>3. Norpac provided TA to Del Tropic; Calavo provided TA to Agro-Industrial San Lorenzo; and Agripac provided TA to CIHUP.</p> <p>4. Agripac is currently negotiation a joint venture arrangement with CIHUP, a farmer cooperative in Peru.</p>

APPENDIX V

OUTPUTS & ACCOMPLISHMENTS

OUTPUTS	INDICATORS	ACCOMPLISHMENTS
<p>1. Rapid appraisal of and prioritization of 5 or 6 countries in LAC.</p> <p>2. Selection of 2 "demonstration" countries.</p> <p>3. Continued flow of info between potential processors and buyers; constant networking and negotiating w/ these parties.</p> <p>4. Technical Assistance in areas of training, feasibility studies, production and handling, processing, transportation and/or farmer organization.</p> <p>5. Mobilization of matching resources through parallel projects, mission buy-ins, potential processors or buyers, or nat'l export promotion groups.</p> <p>6. Raised interest of ACDI member coops in actively participating in overseas cooperative development activities.</p>	<p>1. "Prioritization Report" completed by 8/31/91.</p> <p>2. Publication of promotional brochures on 2 demonstration countries, at least 10 concept papers outlining potential deals.</p> <p>3. Technical and/or organizational improvements made in at least four farmer-owned organizations in LAC.</p> <p>4. Funds for in-country costs of at least 4 consultancies provided by non-program sources.</p> <p>5. Participation of at least 3 ACDI members in TA, training and/or joint ventures.</p>	<p>1. Due to local mission interest, 10 LAC countries appraised for participation. Rigorous ranking process resulted in selection of El Salvador, Ecuador and Peru.</p> <p>2. APTLink brochure published and distributed. Promotional articles published in 10 trade journals and periodicals.</p> <p>3. All 7 exporters participating received technical assistance.</p> <p>4. Twelve technical consultancies provided; all funded by non-program sources.</p> <p>5. Norpac provided TA to Del Tropic; Calavo provided TA to Agro-Industrial San Lorenzo; and Agripac provided TA to CIHUP.</p> <p>6. Two new members (Calavo and Agripac) joined ACDI as a result of APTLink activities.</p>



Celebrating **30** years 1961 - 1991

# TRADE LINK

a publication from APTLink

## APTLink Channels Changing Winds

The changing winds of global economics create new needs. APTLink is a product of our developing world, designed to enhance a specific industry's contribution to international development.

An acronym for Agro-Processing and Trade Linkages Promotion, APTLink was created to promote the exports of the fruit and vegetable processing industry of the Caribbean and Latin America (LAC).

The United States Agency for International Development (AID) began funding the APTLink project in 1991. AID recognized the need to boost the growth of non-traditional fruit and vegetable trade in the LAC region beyond the fresh produce industry toward processing, a critical second market.

U.S. business interests and consumers are expected to benefit from this growing industry. U.S. food production and processing equipment exporters and manufacturers will enjoy a broader market. Food processors will have greater year-round supplies of seasonal crops and may expand their product lines with tropical foods. And consumers will enjoy a greater selection in their food stores.

AID selected the Washington, DC consulting firm, Agricultural Cooperative Development International (ACDI) to design and administer APTLink.

Beginning in June 1991 and managed by Cynthia Steen, APTLink began establishing trade links between U.S. marketers and distributors and LAC agricultural producers, processors, and potential exporters.

In its first year, APTLink appraised the agro-processing potential of ten LAC-region countries through work with national export promotion agencies. From many strong candidates, El Salvador, Ecuador, and Peru were chosen as pilot countries for the APTLink project.

Within the three countries, eight agro-processors were selected for APTLink assistance in developing trade links. Special emphasis is being placed on links with U.S. cooperatives and other member-owned organizations.

The eight businesses are attractive trade partners, the common denominator being a willingness to engage in joint ventures or create

long-term supply contracts. These project companies offer the U.S. market sesame seed, IQF and wet pack frozen fruits and vegetables, tropical fruit juice concentrates, ethnic canned vegetables, dried herbs and spices, tropical specialty/ethnic gourmet preserves and fresh mangoes.

Beyond its focus on the project firms, APTLink is available as a trade resource between U.S. buyers and investors seeking to expand their role in the fast-developing world of international trade with any LAC agro-processors. ☉



*An abundance of skilled labor offers competitive advantages for food processors throughout Latin America and the Caribbean.*

### APTLink OFFERS BROAD ASSISTANCE

Charging nothing for its services, APTLink can facilitate agri-trade activities with its project participants, which are briefly described in this brochure. APTLink can help potential buyers and investors to identify technical assistance needs, engage required production and processing expertise, and provide other support to joint venture investors and marketing partners.

APTLink, experienced in the processing trade of countries throughout much of Latin America and the Caribbean, is also available to provide similar links with many companies within and beyond the countries of the formal project partners.

For more information, contact Cynthia Steen, APTLink Project Manager, or Bob Fries at ACDI, 50 F Street N.W., Washington, DC 20001. Telephone (202) 638-4661 or fax (202) 626-8726. ☉

## AGRO-PROCESSING TRADE EXPANDING IN EL SALVADOR

El Salvador has long been a country of traders. With peace firmly established in this Pacific Coast country, those instincts toward trade are being fulfilled with renewed vigor.

High quality sesame and frozen vegetables are being exported by two Salvadoran food processors chosen for participation in the APTLink project.

In San Salvador, ACOPAI is a 40-year old federation of cooperatives representing 250 sesame farmers. The organization annually produces two million pounds of sesame seed, ICTA R198 hulled and natural, at 99.9 and 99.5 percent purities. Its packaging can be tailored to buyers' needs. The co-op seeks a long-term relationship with a buyer needing significant sesame volume.

The other APTLink participant in El Salvador is Del Tropic Foods. Enjoying a modern, two-year old plant, the San Salvador firm annually processes 13 million pounds of IQF and frozen wet pack vegetables. Its traditional products have been okra, black-eyed peas, and broccoli. Del Tropic Foods seeks a joint venture and/or long-term contractual arrangement extending technical and product diversification marketing support.

Del Tropic operates its plant 10 months a year and employs between 70 and 135 workers a day.

ACOPAI offers growers management of sesame harvest, post-harvest handling, processing, packaging, and shipping. Operating a strict quality control program, ACOPAI conducts quality checks throughout the processing process.



*Growers discuss a broccoll crop in the highlands of El Salvador. The broccoll will be frozen in the two-year old plant of Del Tropic Foods in San Salvador.*

ACOPAI's contact in El Salvador is Stanley Kuehn, who can be contacted at telephone 503-98-2765 or fax 503-98-3476.

To discuss trade possibilities with Del Tropic, call Pedro Urquilla at telephone 503-38-4100, or fax 503-38-4149.

Information on ACOPAI or Del Tropic, or other Salvadoran non-traditional products exporters, may also be obtained in El Salvador from The Agribusiness Development Project at telephone 503-23-1743 or FUSADES at telephone 503-78-3366. ☉

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## ACDI DEVELOPS INTERNATIONAL FRONT FOR U.S. CO-OPS

Agricultural Cooperative Development International (ACDI) is a non-profit training, technical and management assistance organization created by leading U.S. agricultural cooperatives and farmer organizations. Its mission is to improve commercial and credit services to growers in developing countries by responding to the needs of agribusinesses, agricultural cooperatives, farm credit systems, and supporting government agencies. ACDI activities include the identification, development, implementation, and evaluation of management and technical assistance projects in developing countries.

ACDI has 46 member cooperatives and is affiliated with the National Council of Farmer Cooperatives and the Farm Credit Council. ☉



*Sesame is cultivated for El Salvador's ACOPAI, a 40-year old federation of cooperatives representing 250 sesame farmers. The organization annually produces two million pounds of sesame seed.*

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## ECUADOR OFFERS VARIETY OF PROCESSED PRODUCTS

Processed products of almost any nature are available from the diverse country of Ecuador.

APTLink has selected three processors in the equatorial country to receive assistance in developing trade links with the United States.

These firms include Cremino, in Guayaquil, which uses Italian technology to produce tropical fruit preserves, jams and marmalades. Babahoyo, Ecuador, is a small town an hour's drive from Guayaquil on Ecuador's table-flat coastal plain. There, in a noisy, modern facility Ecuavegetal S.A. produces canned vegetables. Computerized equipment and seemingly endless shiny stainless steel equipment characterize the operations of TropiFrutas, which processes tropical fruit juices, pulps and concentrates.

Cremino sought the Americas' best location to manufacture exotic preserves. Ecuador was chosen in part because of its stability and ability to produce a wide range of fruit products. Modern Italian processing equipment is used in the new facility, which focuses on high quality specialty products, produced in high volume at a low price for the U.S., Europe, and the Pacific Rim.



*High quality preserves and marmalades such as these are processed and packaged at Cremino in Guayaquil, Ecuador.*

Cremino has the capacity to annually process a total of 10,000 tons of fruit. Currently the firm handles passion fruit, mango, papaya, pineapple, orange-banana, babaco, strawberry, blackberry, guava, and tomato mixtures.

Cremino seeks a joint venture partner to launch these fine quality exotic tropical products in the U.S. market.

Ecuavegetal is designed to process a wide range of products. Over 1,000 growers rely on Ecuavegetal as a market, supplying pigeon peas, hominy, baby corn, hearts of palm, white, pink and red beans, as well as tomatoes for paste.

Ecuavegetal, which operates year-round, employs up to 250 people. The firm seeks a joint venture and/or long-term contractual arrangement extending product diversification, technical and marketing support.

Ecuador is the world's largest banana producer, so the 1992 addition of an aseptic banana puree operation was a logical move for TropiFrutas, which has a production capacity of 8,000 tons a year. Beyond bananas, the company currently manufactures passion fruit, mango, papaya and pineapple. Exports absorb all the production.

TropiFrutas' facility is only two years old and employs 35 to 50 workers.

TropiFrutas is interested in identifying long-term contractual marketing partners as they diversify from the original exclusive base of passion fruit processing.

For more information on Cremino's preserves, jams and marmalades, contact Marco Fontana by telephone at 593-4-445-114, or fax 593-4-444-952.

To discuss business opportunities with Ecuavegetal, call Francisco Larrea at 593-4-287-386. Or fax 593-4-289-106.

German Lopez can answer questions concerning trade links with TropiFrutas. Lopez' telephone is 593-4-255-300. Or fax 593-4-255-231.

PROEXANT, the Promocion de Exportaciones Agricolas No Tradicionales, in Quito, can provide information on these, and all other Ecuadorian fresh and processed produce exporters. Contact David Anderson of PROEXANT at telephone 593-2-462-544, or fax 593-2-462-543. ☉



*Marco Fontana, general manager of Cremino, points to Guayaquil, Ecuador's port location, which is perfectly suited for the export of processed goods.*

## PERU DEVELOPING POTENTIAL

In Peru, great natural resources and undeveloped agricultural potential awaits entrepreneurs.

APTLink has designated three companies in the Andean country as project partners. With processing facilities in Peru's northwestern province of Piura, Indalsa is an integrated agribusiness group with regional interests throughout Peru. Indalsa manufactures tropical fruit juices, pulps, and concentrates. Agroindustrial San Lorenzo, also in Piura, is a 17-member association which grows and exports fresh mangoes. APTLink is also working with the Huaral Valley Growers Association, based in Lima, to develop exports of citrus and diversified agriculture products.

Within the Indalsa agribusiness group are growers, processors and distributors of tropical fruit products, which are marketed domestically, in Europe and the U.S. The organization has expansion potential with access to 2,000 hectares (5,000 acres) of undeveloped irrigated land in Northern Peru. And the company has the installed capacity to process a wide variety of products. Currently, it processes passion fruit, mango, papaya, sour sop, essential lime oil, paprika, and beans.

Indalsa seeks joint venture and long-term contractual marketing partners to help finance specific crops and establish marketing distribution channels.

Agroindustrial San Lorenzo harvests mangoes from about November 15 until February 15, which is a prime early fresh export market window. USDA's Animal & Plant Health Inspection Service (APHIS) permits the export of fresh Peruvian mangoes to the U.S. because of the availability of four hot water dip plants to disinfest the fruit. APHIS representatives staff these plants throughout the harvest and shipping season.

San Lorenzo's membership involves the largest and most experienced mango growers in the region. Ninety percent of their collective production is of the Haden variety. The remainder is Kent. Both varieties are popular in the U.S. The organization has the export production capacity of 1,000 metric tons.

San Lorenzo seeks a joint venture or contractual marketing arrangement with a marketer. For working capital and harvest management, they will need about \$100,000 advanced in three installments, based on 1,000 tons for export.

Peru's Huaral Valley has an unusual microclimate offering rich agricultural diversification potential along Peru's Pacific Coast. The valley is a two hours' drive from Lima.

Formed in 1991, the 25-member Huaral Valley Growers Association provides a variety of grower supply services, and is working with APHIS to start a medfly control program. Its location between two desert areas gives the Huaral Valley hope for medfly control, which would ultimately expedite exports to the U.S.

Many of the valley's growers are sophisticated and experienced. Predominantly of Japanese descent, they have received technical and financial support from Japan's international development agency, JICA. The predominant crop is high quality Satsuma mandarins.

The Growers Association seeks to diversify its fresh or processed agricultural exports through marketing partners who provide guidance and distribution. The growers require little or no financial support, however technical assistance and market intelligence is needed.

For direct information on Indalsa, contact Alfonso Benavides in Peru at telephone 51-14-37-5533, or fax 51-14-37-5537. Or, in the U.S. contact Felix Baldeon at (202) 483-2096 or fax (202) 483-0644.

The in-country contact for San Lorenzo and the Huaral Valley Growers is Connie Guterrez, USAID/Peru Trade and Investment Division, telephone 51-14-33-3200 or fax 51-14-33-7034. ☉



Cynthia Steen, manager of APTLink approves of fruit packing in Peru.

## APPENDIX VII

### ACDI

#### APTLINK COUNTRY SELECTION

The Agro-Processing and Trade Linkages Promotion project (APTLINK) began on June 15, 1991. The APTLINK grant was funded by USAID/FVA/PVC to demonstrate how value-added agro-processing for export is a viable and timely option for farmer and member-owned organizations in Latin America and the Caribbean. APTLINK's mandate is to foster and facilitate marketing agreements between LAC producer/processors and marketers in the United States. Priority will be given to cooperatives and producer organizations.

The first phase of the project was a rapid appraisal of the Latin America and Caribbean region (LAC) in order to select two model countries to participate in APTLINK activities. This paper will describe the country selection process.

- I. Success Indicators
- II. Country Eligibility
- III. Project-by Project Analysis
- IV. Country Ranking

#### I. Success Indicators

ACDI's grant proposal agreed to deliver the following end of project outputs:

- A. Increase incomes of participating farmers by 10% in the first year after their organization completes a marketing agreement with a U.S. firm,
- B. Involve at least 3 ACDI member co-ops in overseas cooperative development activities (technical assistance and/or training components of the program),
- C. Negotiate at least 4 trade agreements, 2 in each demonstration country, that allow fruits and vegetables processed in LAC to be marketed in the U.S.,
- D. Facilitate technical and/or organizational improvements in at least four farmer-owned organizations in LAC,
- E. Involve at least 1 member co-op in a joint venture with an LAC producer/processor, and

- F. Place at least 13 short-term advisors, and Mobilize non-program funds to finance at least four in-country consultancies.

Realizing that these outputs are the minimum indicators of achievement for this project, the strongest candidates are those countries having conditions which favor their delivery. It is recognized however, that these outputs do not necessarily guarantee success. Therefore, in addition to the above, APTLink will make every effort to document its impact on: 1) the increase of agro-processing export volumes, 2) the generation of foreign exchange, and 3) the creation of employment. Base-line data will be recorded for participating agro-processing beneficiaries in order to measure these impacts.

## II. Country Eligibility

Two sets of eligibility criteria have been established for ranking the 17 countries in the USAID LAC region: criteria for ineligible countries, and ranking criteria for the remaining candidates. As a first step, countries were eliminated where conditions preclude their participation in the APTLink project. A country was eliminated from consideration if one or more of the following conditions applied:

- A. Inadequate infrastructure and/or inappropriate agro-processing activities to attract, in the short term, a marketing partner or make a meaningful impact in the farm sector.
- B. Severe security concerns which would inhibit providing on-site technical support and/or interrupt delivery of raw materials to the processing facility and/or product movement to market.
- C. Refusal by the local USAID Mission to allow APTLink activities in that country.
- D. The constraints to growth in the agro-processing sector may be beyond the scope of the APTLink project, as in addressing raw material supply obstacles. While APTLink can provide some technical assistance in this area, its

resources are focused primarily on market facilitation.

Those countries not eliminated were evaluated for APTLink participation by first appraising individual agro-processing facilities, or "projects", observed during the country visits. Final country ranking was based on a matrix which considered these "project" scores, the availability of non-program support and macro-policy framework. A final criterion estimated, by country, the number of viable projects with a strong likelihood of establishing trade links.

### III. Project-by-Project Analysis

Data was gathered through visits to ten countries. Itineraries were arranged by the host country export promotion organizations in collaboration with USAID Mission staff. The number of country visits exceeded the amount originally planned due to strong interest exhibited by many USAID Missions to participate in APTLink. Expansion of the country visits resulted in developing a beneficial cross-section of the agro-processing industry in the LAC region; we are grateful for the interest and courtesy displayed by the various Missions.

A considerable effort was made to appraise representative industry and export operations. Agro-processing facilities, farmer-owned organizations, export promotion institutions, USAID Missions, governmental agencies, shipping and storage facilities and agricultural production areas were visited to gain an overview of the agro-processing industry in each country. Existing or proposed projects received a weighted score based on the following indicators:

A. Market Potential - Successful links will require products with good market potential - products with a high probability of establishing a trade link. Since the primary objective of APTLink is to initiate links with U.S. marketing cooperatives, identifying products of interest to the most promising of these cooperative partners was compelling. Under the Market Potential category, projects were evaluated for their likelihood of establishing a marketing link with: 1) a U.S. cooperative, and 2) a non-

cooperative marketer.

B. Finished Product - Successful links will also require the availability of "marketable" processed products for export. "Marketable" products must be of high quality, and in suitable volumes. Supply and deliveries must be reliable. The project's market should have high volume potential and favorable dynamics (growing demand, stable prices, profitable margins, etc). Also, the LAC country must be able to compete in the international market.

To address these market requirements, the Finished Product category ranked each project in terms of: 1) ability to produce a suitable volume in order to attract a viable market partner, 2) growth potential and flexibility to adjust their operations in response to the market, 3) product quality, and 4) efficiency, measured in terms of a plant's capacity utilization. It was assumed that the more efficient agro-processors would have the best prospects for competitive pricing.

C. Readiness to Export - Before June 1993, a minimum of four trade links should be on line, actively exporting processed food products from LAC to the U.S. market. For selection purposes, a country's eligibility was enhanced if it had a range of projects to select from. There are many existing, on-going processing activities in the LAC, and there are also some "proposed" projects. These "proposed" projects cover a wide spectrum - some exist only in the conceptual stage; encouraging feasibility studies have been completed for others; in some cases the agro-processor is currently limited to domestic distribution, but wishes to export; and other agro-processing facilities need upgrading or re-tooling in order to meet international market preferences.

APTLink, in its broadest concept, could help proposed activities come on-line and/or expedite improvements by introducing viable market partners and highly targeted technical assistance. This would be especially favorable when a farmer cooperative or member-owned organization is contemplating its own processing facility.

The Readiness to Export category ranked agro-processors: 1) with the highest score if they are exporting now, 2) with the next

highest score if they have appropriate products, volume, etc. but no export experience, and 3) by assigning a relatively low value score to appropriate agro-processing projects still just in the planning stage.

D. Constraints to Growth - There are various constraints to growth for agro-processors in the LAC. For some, the problem is finding appropriate marketing links; for others it is a combination of marketing options, processing technology and raw material availability; and for others their progress is limited by the lack of obtainable raw materials. Addressing raw material supply constraints is beyond the scope of APTLink. While APTLink can provide some technical assistance to help increase volume and improve quality, its primary focus and strength has been defined as market facilitation.

The Constraints to Growth category ranked projects by the causes of their limitations: 1) the need for market links, 2) a combination of market links, processing technology, and raw material, or 3) primarily raw material supply problems.

E. Producer Base - APTLink was designed to work with producer groups, and aspires to reach as many producers as possible. Therefore, each agro-processing facility was assigned a score for: 1) the percentage of farmer/producer associations delivering raw material to the plant, and 2) the impact, in numbers of growers involved in supplying raw materials.

#### IV. Country Ranking

Final country selection was based on a matrix ranking each qualifying country on the following criteria:

A. Project Scores - A description of how the project scores were determined was presented above. Each country's average project score, weighted to reflect the number of viable projects, was used in the country ranking process.

B. Non-Program Support - The availability of complementary non-project resources such as funding for feasibility studies, short-term technical consultants, travel expenses, hosting of potential investors, training, etc. will also enhance the country

selection choices.

APTLink's marketing focus will complement the on-going and planned activities of other organizations working to promote agro-processing in the region. During the rapid appraisal phase, many of these organizations expressed an interest in coordinating activities and pledged technical, financial and human resource support to APTLink.

APTLink has a limited budget. Therefore, the mobilization of these matching resources is vital, and is explicitly stated as an end of project output. Access to non-project funds will allow APTLink to make use of resources above and beyond the limits of its program budget. This support is necessary to fully integrate APTLink's efforts into on-going locally managed activities and will contribute to the sustainability of APTLink's impact.

The additional project backing was scored for: 1) External Donors - the USAID Missions, other international PVOs, and particularly ACDI's sister organization, Volunteers in Overseas Cooperative Assistance (VOCA), and 2) Local Development Organizations - export promotion projects, local agriculture extension services, other in-country institutions, contributions of participating beneficiaries, etc.

Furthermore, APTLink will promote maximum involvement of ACDI's institutional network of U.S. marketing cooperatives. Long term trading linkages will foster highly targeted technical assistance and distribution possibilities.

C. Macro Policy Framework - Finally, the country's overall ability to attract foreign investors was also considered.



**SUPPORT RANKING MATRIX**

	<b>AVAILABLE MONEY</b>	<b>USAID INTEREST</b>	<b>INSTITUTIONAL SUPPORT</b>	<b>COMPLIMENTARY PROJECTS</b>	<b>VOCA SUPPORT</b>	<b>Total</b>
<b>scoring</b>	<b>15, 10, 5</b>	<b>5, 3, 1</b>	<b>5, 3, 1</b>	<b>3, 2, 1</b>	<b>2, 1</b>	
<b>Bolivia</b>						
<b>Costa Rica</b>						
<b>Ecuador</b>						
<b>El Salvador</b>						
<b>Guatemala</b>						
<b>Honduras</b>						
<b>Jamaica</b>						
<b>Panama</b>						
<b>Peru</b>						

**COUNTRY RANKING MATRIX**

	<b>PROJECT SCORE</b>	<b>NON-PROGRAM SUPPORT</b>	<b>MACRO POLICY</b>	<b>VIABLE PROJECTS</b>	<b>Total</b>
<b>scoring</b>	<b>55%</b>	<b>30%</b>	<b>5%</b>	<b>10%</b>	
<b>Bolivia</b>					
<b>Costa Rica</b>					
<b>Ecuador</b>					
<b>El Salvador</b>					
<b>Guatemala</b>					
<b>Honduras</b>					
<b>Jamaica</b>					
<b>Panama</b>					
<b>Peru</b>					

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## APPENDIX VIII

### MANGO SEMINAR PIURA, PERU September 6 & 7, 1993

#### MARKETING

##### Fresh

- Market Potential, by Variety  
(are new plantings necessary?)
- Market Windows - Price Variations, by Month
- Quality
- Distribution Channels
- Marketing Contracts (customary terms, advances, etc.)
- Joint Venture Opportunities
- Transportation
  - Packaging
  - Controlled Atmosphere
  - Air Versus Sea Shipments
  - Alternative Ports to Miami
  - Containerization

##### Processed Products

- Market Potential/Uses for Non-Exportable Fruit
- Concentrates, Pulps, Purees
- Dried
- Flour
- Frozen
- Refrigerated
- Processing Technologies

#### PRODUCTION

- World Production (volume projections/competing countries)
- Competitors' (other countries) Costs of Production

##### Cultural Practices

- Fertilization
- Irrigation
- Root Stocks
- Grafting
- Costs of Production
  - Methods of Controlling Costs

##### Pests, Diseases

- Chemical Usage Guidelines and Regulations

Import Requirements (Fresh and Processed)  
USDA/APHIS and FDA Chemical Residue Tolerance  
European and Japanese Requirements

Harvest and Post-Harvest Handling

Methods to Extend Season  
Forced Flowering Research  
Commercial Varieties and Alternatives  
Tommy Atkins, Keitt, Van Dyke

## QUARANTINE TREATMENTS

Hot Water Dip Treatment  
Techniques for extending fruit shelf life

Alternatives to Hot Water Dip  
Hot Air  
Irradiation  
Steam

Quarantine Facilities in Other Mango-Producing Countries

Practical Problems and Solutions in the Mexican Mango Industry

## **APPENDIX IX**

### **IMPACT ANALYSIS**

In order to measure the of APTLINK activities, baseline data was gathered at the beginning of the project and again at the project's conclusion. Data was collected on processing plant employment, number of growers delivering raw material to the plants, percentage of raw material produced by cooperatives or grower associations, average yields, average prices paid to farmers, average production costs, seasonal production volume, export volumes and foreign exchange earnings.

APTLINK cannot take credit or accept responsibility for all of the changes. Climate, domestic markets, international competition, internal decisions and many other factors influenced the overall situation. Additional market opportunities, however, protected many jobs and contributed to significant employment generation.

Following is an analysis of the changes in each category over the APTLINK project's life. All information was provided by the pilot exporters.

#### El Salvador

##### **ACOPAI**

1. Processing plant employment  
1991/92 cycle: 8  
1992/93 cycle: 8
2. Number of growers delivering raw material to the plant  
1991/92 cycle: 778  
1992/93 cycle: 832
3. Percentage of raw material produced by cooperatives or associations  
1991/92 cycle: 70 %  
1992/93 cycle: 85 %
4. Average yields (quintals per manzana)  
1991/92 cycle: 8  
1992/93 cycle: 8
5. Average field price (colones per quintal)  
1991/92 cycle: 251.64  
1992/93 cycle: 153.35  
note: Reduced field prices reflect lower international selling prices due to cyclical supply and demand.

*APLink Final Report*

6. Cost of production (colones per manzana)  
1991/92 cycle: 600  
1992/93 cycle: 900  
note: Increased production costs reflect increases in fuel and other required inputs.
7. Production volume (lbs)  
1991/92 cycle: 800,000  
1992/93 cycle: 1,000,000
8. Export volume (lbs)  
1991/92 cycle: 623,000  
1992/93 cycle: 666,000
9. Foreign exchange earnings  
1991/92 cycle: \$201,730  
1992/93 cycle: \$188,145  
note: Reduced foreign exchange earnings on a larger export volume reflects lower international selling prices due to cyclical supply and demand.

**Del Tropic**

1. Processing plant employment  
March, 1992: 90  
December, 1993: 153
2. Number of growers delivering raw material to the plant  
March, 1992: 20 (employing 1,990 farm workers)  
December, 1993: 35 (employing 4,035 farm workers)
3. Percentage of raw material produced by cooperatives or associations  
March, 1992: 60%  
December, 1993: 85%

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Crop	4. Yield (lbs/mz)	5. Field Price (cents/lb)	6. Cost of Production (cents/lb)	7. Production Volume (lbs/yr)	8. Foreign Exchange Earnings
Okra 1992	13,500	9	4.9	3,700,000	\$1,380,000
1993	10,500	10.7	7.7	6,000,000	\$2,200,000
Black-Eye Peas 1992	3,800	7.5	6.9	350,000	\$164,500
1993	7,500	10.3	5.4	1,000,000	\$430,000
Broccoli 1992	10,000	10	n/a trials	120,000 (60% exported)	\$25,900
1993	12,500	14	n/a trials	250,000 (80% exported)	\$64,000

Ecuador

**TropiFrutas**

1. Processing plant employment

June, 1992: 34

December 1993: 156

Note: Increase in processing plant employment due largely to addition of banana processing line.

2. Number of growers delivering passionfruit raw material to the plant

June, 1992: 40 + 3 middlemen (approximately 450 additional growers)

December 1993: 105 + 1 middleman (approximately 500 additional growers)

Note: TropiFrutas purchases their bananas for processing from middlemen who buy from privately owned plantations. We assumed that at least as many workers are employed in banana production as in passionfruit production. Multinationals (Dole, Del Monte, etc. do not own plantations in Ecuador the way they do in Central America).

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3. Percentage of passion fruit raw material produced by cooperatives or associations  
June, 1992: not identified  
December 1993: approximately 10%
4. Average yields (passion fruit, lbs per hectare)  
June, 1992: 25,000  
December 1993: 25,000
5. Average field price (passion fruit, sucres per lb)  
June, 1992: 120  
December 1993: 115  
note: field prices have decreased due to an international cycle resulting in over-supply and low selling prices for finished product.
6. Production costs (passion fruit, sucres per lb)  
June, 1992: 65  
December 1993: 75
7. Production volume (lbs passion fruit)  
1990/91 season: 7,500,000  
1991/92 season: 25,000,000  
1992/93 season: 36,300,000
8. Export volume (lbs frozen passion fruit concentrate)  
1990/91 season: 625,000  
1991/92 season: 1,780,000  
1992/93 season: 3,088,000  
1993/94 projection: 1,500,000  
note: TropiFrutas is focusing on banana products because international passion fruit prices are projected to be extremely low due to surplus inventories.
9. Foreign exchange earnings (banana and passion fruit)  
1990: \$688,000  
1991: \$1,375,000  
1992: \$2,300,000  
1993: \$2,720,000

**Ecuavegetal**

1. Processing plant employment  
November 1992: full time, 120 -- peak season, 250  
December 1993: full time, 140 -- peak season, 250
2. Number of growers delivering raw material to the plant  
November 1992: 1,100

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December 1993: 2,000

note: Due to increased markets and better prices, Ecuavegetal has actively increased their grower base. They have done this by providing more technical assistance and production cost advances as well as paying a higher price for raw material supplies.

3. Percentage of raw material produced by cooperatives or associations

November 1992: not indicated

December 1993: approximately 5%

Crop	4. Yield (MT/ha)	5. Field Price (cents/lb)	6. Cost of Production (\$/ha)*	7. Production Volume/yr	8. Foreign Exchange Earnings
Tomatoes 1992	28	2	\$900	Tom Paste Brix 32 500,000 kg	Total 1992 \$2,400,000
1993	30	6	\$1,400	600,000 kg	
Pigeon Peas 1992	2.5	4	\$130	Cases (24 x 16oz) 200,000	Total 1993 \$5,600,000
1993	2.7	6	\$200	420,000	

\* note: Production cost increases are due to higher wages and fuel costs.

Peru

**Indalsa**

note: Indalsa has several processing and distribution facilities throughout Peru. For purposes of measuring APLink impact, only the tropical fruit concentrate processing facility in Sullana (and the growers delivering raw material to that facility) were considered.

1. Processing plant employment

May 1992: 10

December 1993: 30

2. Number of growers delivering raw material to the plant

May 1992: 3 middlemen (approximately 350 additional farm workers)

December 1993: 50 individual growers + company land (approximately 450 additional farm workers)

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3. Percentage of raw material produced by cooperatives or associations  
May 1992: not indicated  
December 1993: approximately 50%
4. Average yields (passion fruit, lbs per hectare)  
May, 1992: 26,000  
December 1993: 26,500
5. Average field price (passion fruit, cents per lb)  
May, 1992: 5.8  
December 1993: 5.6
6. Production costs (passion fruit, cents per lb)  
May, 1992: 3.2  
December 1993: 3.7
7. Production volume (metric tons)  
1991/92 cycle: 600  
1992/93 cycle: 1,200
8. Export volume (metric tons)  
1991/92 cycle: 180  
1992/93 cycle: 360
9. Foreign exchange earnings  
1991/92 cycle: \$220,000  
1992/93 cycle: \$450,000

**AgroIndustrial San Lorenzo**

1. Number of members in the association  
January 1993: 17  
December 1993: 17  
note: Numerous growers have requested membership in ASL. Applications are under study and it is anticipated the association will grow quite dramatically in the next few seasons.
2. Number of farm workers employed  
January 1993: 680  
December 1993: 800  
note: Assume 4 workers per hectare.
3. Average yields (MT per hectare)  
1992/93 season: 15  
1993/94 season: 8-9

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note: Decrease in yields is due to alternate year bearing and effects of El Niño weather patterns.

4. Average field prices (cents per kilo)  
1992/93 season: 30  
1993/94 season: 30 - 42
5. Average costs of production (cents per kilo)  
January 1993: 15  
December 1993: 15
6. Export volume: (MT)  
1992/93 season: no exports as a group  
1993/94 season: 292 (58,400 boxes)
7. Foreign exchange earnings  
1992/93 season: no exports as a group  
1993/94 season: \$642,400

**Centro de Investigacion Hualal Progreso (CIHUP)**

1. Number of members in the association  
January 1993: 45  
December 1993: 48  
note: Numerous growers have requested membership in CIHUP. Applications are under study and it is anticipated the cooperative will grow quite dramatically in the next few seasons.
2. Number of workers employed  
CIHUP has developed several trial plots covering about 5 hectares in total. The plots have involved 15 growers and the labor of 2 maintenance workers per hectare and 5 harvesting workers per hectare.