# POST-NAFTA POLICIES & INVESTMENT IN MEXICAN AGRICULTURE:

## *CONFERENCE PROCEEDINGS*

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and

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Editor

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NAID Center, UCLA

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This collaboration with the Bank of America was the basis for organizing the conference reported on in these proceedings. The conference was organized by Robin Marsh and David Runsten, with the valuable assistance of Roberta Cook. Administrative and technical details were attended to by NAID Center staff Craig Wolff, Jose Arredondo, and Brenda Walker. The conference was recorded and transcribed by Maria Teresa Urzua. Bank of America staff who assisted in preparing materials for the conference included Virginia and Rose Vela. This document was prepared by Robin Marsh, with the editorial assistance of David Runsten and Roberta Cook.

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**<u>About the Sponsors</u>**

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The North American Integration and Development (NAID) Center of the School of Public Policy and Social Research, UCLA, was created in 1993 to conduct ongoing research concerning North American integration and to assist communities and governments to develop policies and investment projects for sustainable and equitable development across borders. The NAID Center is a founding member of the North American Development Bank (NADBank) Community Adjustment and Investment Technical Assistance Consortium, created as part of the North American Free Trade Agreement

(NAFTA) implementing legislation, which assists U.S. communities negatively impacted by NAFTA.

The NAID Center conducts research and assists organizations and localities in North America to monitor the impacts of NAFTA and to seek loans for alternative strategies for economic development. Interactive communication and monitoring of NAFTA impacts are enhanced through the wide range of information supplied on the NAID Center's Web site (http://naid.sppsr.ucla.edu).

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## I. Preface

On September 27, 1996, the North American Integration and Development Center at the University of California, Los Angeles, and the Bank of America co-sponsored a bi-national conference, entitled: *Post-NAFTA Policies & Investment in Mexican Agriculture*. The all-day conference at the UCLA campus brought together Mexican and California experts from the agriculture, banking and academic communities, as well as influential policymakers, to discuss the leading issues affecting U.S. investment in Mexican agriculture.

The conference was motivated by research conducted by the NAID Center that indicated two interesting trends: 1) overall direct foreign investment (DFI) in Mexican agriculture since NAFTA has been low and below expectations (less than one-tenth of one percent of total DFI in Mexico, according to SECOFI's data); yet, 2) there is ample evidence of successful business partnerships between U.S. (and other foreign) agribusiness firms and Mexican growers and processors. Recent policy reforms in Mexico have markedly improved the investment climate for foreigners, while NAFTA has paved the way for increased U.S.-Mexican economic integration. Yet for many firms the perceived risks of investing in Mexican agriculture outweigh the perceived benefits. Opportunities abound but are left unexplored.

The NAID Center and the Bank of America decided that it was time to facilitate an informed discussion on the opportunities and barriers for U.S. investment in Mexican agriculture. From the conference presentations and discussion the co-sponsors hoped to extract key policy issues and recommendations for improving U.S.-Mexico agricultural trade and investment. These issues and recommendations (which appear in Section III following the Executive Summary) are divided into four themes: finance, research and technology, marketing and trade, and legal reforms. Specific recommendations are made for involving the small farm sector in viable bi-national joint ventures.

Due to delays in issuing the conference proceedings, a number of policy recommendations and comments by speakers have been rendered moot by the passage of time. Some of these changes were no doubt influenced by this conference and similar discussions that have occurred, while others, such as a changing macroeconomic environment, have responded to broader policy changes. For example, in this report, policy recommendation five under Finance states that Mexico lacks a functioning credit bureau. This was rectified in September 1997 with the creation of the *Buró de Crédito Personas Morales*, with 38 banks participating in collaboration with Dun & Bradstreet. It was expected that information from foreign banks would be included in 1998 and that eventually all credit-granting agencies in Mexico would be included. In addition, the U.S. produce industry credit-monitoring firms Red Book and Blue Book are now functioning in Mexico and attempting to expand their coverage. New reforms to Mexican banking laws have been introduced in the 2000 congress. Another example of changing events is the opening of the U.S. market to Mexican avocado exporters. Though the market is limited to a group of Northeastern U.S. states and the suppliers limited to

U.S.D.A.-certified shippers from certain regions of Michoacán, this is surely the first step towards free trade in avocados and renders the discussion contained in the proceedings somewhat obsolete.

Despite these caveats, we believe that the discussion was extremely significant and we are pleased to issue this record of it. Many of the policy recommendations are still of the utmost importance in terms of lowering the barriers to investment in Mexican agriculture, and anyone concerned with the sector would do well to study them.

## II. Executive Summary

- The bi-national (U.S./Mexico) conference sponsored by the NAID Center and Bank of America brought together Mexican and California experts from the agriculture, banking and academic communities, as well as influential policymakers, to discuss opportunities and barriers for increasing investment in Mexican agriculture.

- Raul Hinojosa Ojeda, Research Director of the NAID Center, gave an overview of the current macroeconomic situation in Mexico, focusing on U.S.-Mexico trade and investment relations. He also presented data demonstrating the impact of NAFTA on these relations.

- The data indicate very little direct foreign investment in agriculture, as compared with the more dynamic sectors: manufacturing, financial services and tourism. With respect to NAFTA, its impact on trade and investment has "by far been overwhelmed" by unilateral economic reforms by the Mexican government and overall economic conditions in Mexico that determine its ability to sustain growth (and imports).

- Roberta Cook, Extension Marketing Economist from the University of California at Davis, presented a talk on *U.S.-Mexico Bilateral Horticultural Trade and Investment*. Mexico represents about 31 percent of total U.S. horticultural imports; Mexico dominates vegetable imports—76 percent in 1995; the United States imported more than $2.2 billion dollars worth of horticultural products from Mexico in 1995.

- Despite attractive opportunities for foreign direct investment in Mexican horticulture, especially in non-traditional crops such as tropical fruits, such investment has been low, representing just .06 percent of total FDI in Mexico.

- Dr. Cook identified the following principal barriers for increasing investment, especially FDI, in Mexican agriculture: macroeconomic and exchange rate instability; poorly developed infrastructure; lack of information about potential investment opportunities and partners; legal restrictions on foreign investment and land ownership; need for better market intelligence; and need for commodity specific agricultural research and development and post-harvest management.

- Following the Hinojosa and Cook presentations, Dr. Javier Morales (Dean of Graduate Studies, ITESM, Mexico City) moderated a panel entitled: *Agricultural Policy Environment in Mexico.*

- The Director of the National Institute for Agricultural, Livestock and Forestry Research (INIFAP), Ing. Jorge Kondo, gave a presentation on the current status of agricultural research and development in Mexico. The major new agricultural program in Mexico, *Alianza para el Campo*, is aimed at capitalizing the countryside through subsidization of productive inputs (primarily machinery and irrigation). Kondo argued that the conditions for Mexican agricultural trade and investment have been improving since 1996 with a more stable economy and currency, lower interest rates, and importation of advanced technology.

- Ing. Kondo stated that the greatest investment opportunities in Mexico are in the Southeast, in tropical fruits and vegetables, precious woods, palm oil, latex rubber and coffee.

- Dr. Rubén Yesín Toledo followed with a presentation on *FIRA and its Role in Mexican Agricultural Financing*. FIRA is a government financial institution that promotes agricultural lending from commercial banks by providing loan guarantees and technical assistance to borrowers, thus reducing the transaction costs and risk perceptions of the lending institutions. Over the last few years, FIRA has faced a strong reluctance by commercial banks to lend to the agricultural sector, especially to low-income producers. However, the new land tenure law, clarifying peasant property rights, and stabilization of the economy have improved the investment outlook of agriculture since 1995.

- Dr. Juan Carlos Martínez of the Inter-American Bank spoke on: *Mexico Post-NAFTA: Food and Agricultural Sector Reforms and Private Sector Opportunities.* Martínez reviewed the major agricultural policy reforms undertaken by the Government of Mexico (GOM) over the last several years: land tenure reform, commodity market liberalization, decoupled income transfers for farmers and consumers, and institutional reform in agricultural storage, marketing and risk management. He argued that these reforms have greatly improved the environment for agricultural investment in Mexico.

- Mr. James McCabe, Senior Vice President of the Bank of America in Mexico, completed the morning panel with a presentation on the history of the bank's operations in Mexico since 1950, and an analysis of the crisis of the Mexican banking system. He argued that the Mexican commercial banks were ill prepared to take over lending to the agricultural sector, ending up with a very high default rate, which, together with the 1994 devaluation, precipitated a liquidity crisis, lending contraction and economic recession. Recent GOM banking reforms will go a long way to develop a healthy Mexican banking system in the future. However, McCabe admonished that the banking system cannot be expected to carry alone the heavy burden of financing agricultural growth and development; diversification of rural finance is essential.

- The lunch time speaker was Lic. José Angel Pescador, General Consul of Mexico for Los Angeles. Lic. Pescador gave a talk on NAFTA and its impacts, focusing on U.S.-Mexico trade and the economic opportunities and joint ventures that have emerged since its signing in January 1994.

- The first speaker of the first afternoon panel was Ing. Javier Usabiaga, Secretary of Agriculture in the state of Guanajuato and a major player in the vegetable industry of Mexico for many years. Ing. Usabiaga summarized the innovative programs he has supported to improve agricultural production and marketing in Guanajuato. To progress, he argued, Mexico must overcome the technical and social backwardness of its farmers, their lack of market knowledge (since farmers historically depended on the government to buy their surpluses), sorely inadequate financing for agriculture, and poor rural infrastructure, especially irrigation.

- Stephen Barnard, President of Mission Produce, presented the history of his firm's avocado processing and shipping operations in Mexico since 1985. Mission Produce employs over one thousand people in its five facilities in Mexico and exports 4.5 million boxes of avocados annually. Barnard remarked that overall Mission's experiences in Mexico have been very positive, after overcoming some initial hurdles. Barriers still to overcome: unstable political environment; lack of bank financing (high interest rates); and remaining restrictions on land ownership by foreigners.

- Douglas Bullman, Vice President of Monterey Mushrooms, presented the experience of his firm in Guanajuato, Mexico (*Champiñones San Miguel*) over the last 18 months. The objectives of their operations in Mexico are twofold: 1) to provide a source of mushrooms at lower cost than in the United States to be competitive in canned mushroom exports; and 2) to develop a mushroom market within Mexico. *Champinoñes* has been successful in meeting the first objective (labor costs per unit in Mexico are about 30 percent of U.S. costs), however, the current Mexican recession has limited domestic demand for mushrooms. Bullman concluded that businesses that make intensive use of unskilled labor can have a significant advantage in Mexico, despite the productivity differential and higher transportation costs.

- The final presentation of the panel was by Ing. Francisco Obregon, Undersecretary for Economic Development for Southern Sonora. Ing. Obregon gave a detailed presentation of the agricultural sector in Sonora, its human and physical resources, current investment projects and future investment opportunities. Although Sonora is fortunate to have attracted many foreign investors, Sonora continues to need more foreign investment in agricultural production and processing: “ We need processing and marketing technology, and we can provide raw materials, water, land, transportation, infrastructure and people.”

- The last panel of the conference focused on opportunities for forming business partnerships/joint ventures with the small farm sector in Mexico. Dr. Robin Marsh of the NAID Center, UCLA, summarized her research with David Runsten on the potential for Mexican smallholders to participate in production and marketing of high value crops, especially fruits and vegetables. Marsh summarized an alternative model for diversification of small-scale agriculture that would avoid the common pitfalls of such ventures. Key elements of this model are: early detection of market potential, organization of producers to reduce transaction costs, and forming reliable business partnerships to assist with financing, technical assistance/quality control and marketing (especially for export production).

- The next presentation (also by Dr. Marsh) described the unique “model of collaboration” of the marketing firm, Earth Trade, Inc., based in Oakland, California, with grower partners in Central America and Mexico (over 1,600 farmers organized in cooperatives). The model provides for assistance in the areas of production technology, credit and market access, either directly or through local development organizations. Their principal commodity is organic sesame seed and oil, for which there is growing demand in the United States, Europe and Japan. After several successful years, Earth Trade experienced serious production and financial setbacks in 1995-96, primarily caused by adverse weather conditions and high default rates on farmer loans. The firm is now in the process of major restructuring to reduce its exposure and improve its financial position.

- Lic. Antonio Ruíz García, Director General of the Mexican Foundation for Rural Development (FMDR) made a brief presentation on recent economic and policy changes affecting rural Mexico, and the role of FMDR in promoting sustainable rural development (32 offices in 24 states serving 15,000 small producers). FMDR’s main contribution has been providing alternative financing and technical assistance for small and medium-scale agricultural enterprises, primarily in production and processing of grains and dairy products. FMDR also assists in forming mutually advantageous associations between small farmer organizations and large agribusiness firms.

- Mr. David Griswold, President of Sustainable Harvest Coffee Company, analyzed the importance of the coffee sector in Mexico and the opportunities for partnering with coffee cooperatives for marketing high quality, organic coffee in specialty markets in the United States and elsewhere. At its peak, his former company, Aztec Harvest, was distributing organic coffee in 30 U.S. states, sold coffee on all United Airlines flights from Mexico to the United States, and had an ice cream flavor named for it by Ben and Jerry's ice cream company. However, Aztec stalled and recently folded because of difficulties obtaining credit to finance coffee production. Sustainable Harvest has learned from this experience and now works only with coffee cooperatives that are self-financing. Sustainable Harvest projects 1998 coffee sales at $3.0 million, including sales of Aztec organics.

- Mr. Larry Jacobs, President of Jacobs' Farm and founder of the Del Cabo Cooperative in Baja California Sur, gave the last talk of the conference on the investment opportunities and obstacles for working with small growers in Mexico. He argued that partnering with *campesinos* presents a unique opportunity for producing niche market crops for local consumption and export. "The very large number of hectares currently farmed by small growers in Mexico represents an unlimited production potential, when and if it's properly organized."

- Jacobs briefly related the story of the very successful organic herb and vegetable cooperative that he founded in the mid-1980s in Baja California Sur—Del Cabo—which now has sales of over $5 million annually. He offered the following key criteria for success: 1) reliable transportation (ship/truck/air); 2) sound business management by/for growers (teaching/training); 3) mutual long-term commitment between marketing company and growers; and 4) mutual trust and respect among growers, marketing people and the organization's employees.

## III. Policy Issues

*The following policy issues and recommendations were extracted from the conference presentations and discussion sessions. They are issues that conference participants deemed important for increasing investment in Mexican agriculture, particularly U.S.-Mexican joint ventures. Participants were not asked to endorse any specific policy recommendations. Therefore, the following ideas do not represent a consensus of opinion but rather a constellation of ideas that emerged from the conference.*

### FINANCE

1. Strict collateral requirements have restricted access to Mexican and foreign bank loans by agricultural investors, especially the undercapitalized small- and medium-sized farm sector.

To increase access, reforms are needed on collateral requirements. Government shared-risk programs and use of para-financial agents should be strengthened and expanded to reduce real and perceived risks by lending banks. Collateral requirements should be reduced for small-farm agricultural projects supported by sound feasibility studies and good credit records.

2. Direct foreign investment in Mexican agriculture is typically financed by foreign banks, and is therefore limited to investors with adequate foreign-based assets to meet collateral requirements. Foreign banks are reluctant to accept Mexican-based assets as collateral. Limited access to foreign loans, in addition to a tight credit market within Mexico, reduces the possibility of joint venture investments in Mexican agriculture.

To encourage joint venture investments in Mexican agriculture, collaborative financing by foreign and Mexican banks should be explored. Such financial partnerships must be based on adequate credit information on potential borrowers and research on profitable lending opportunities. U.S. banks with operations in Mexico (e.g. Bank of America) are in the best position to acquire this information and to form partnerships with Mexican banks.

3. Private investment in Mexican agriculture has been limited because most agricultural activities cannot succeed with the high interest rates that are set by the market in Mexico today (30 percent and above).

In the short run, programs are needed that offer lower interest rates to low-income producers with good credit records (e.g. FIRA). In the longer run, macroeconomic reforms, bank restructuring and economic recovery are needed to bring the cost of capital down to a reasonable level for agricultural investment.

4. Mexican banks are reluctant to lend to agriculture in general (high default rates in the past), and to small producers in particular because of high transaction costs and perceived high risk in handling large numbers of small loans.

FIRA's SIEBAN program (*Sistema de Estímulos a la Banca*), through transaction cost reimbursement, is aimed at increasing commercial bank lending to small farmers. FIRA also works through para-financial agents and financial intermediaries (e.g. credit unions, non-governmental organizations, rural development foundations, producer associations) to reduce the transaction costs of commercial banks lending to small producers. Para-financial agents are able to meet the needs of the small farm sector by distributing small loans in a timely and flexible manner, thus reducing default rates to acceptable levels. These types of programs and financial intermediaries need to be strengthened and expanded.

5. Mexico lacks a functioning credit bureau that would enable the banking system to impartially review the credit records of potential borrowers. This leads to inefficiency and errors in loan decisions.

The government of Mexico should support the creation of a credit bureau and insist that the Mexican banking system share its financial information with that credit bureau to make it effective.

6. The savings rate in rural Mexico is too low, contributing to scarcity of capital for agricultural and other rural investments.

Financial institutions are needed for encouraging higher rural savings rates, especially in low-income rural areas. The Mexican government is supporting a pilot rural financial program funded by the World Bank, but this program should be broadened to include a wider array of potential institutional solutions, including funneling remittances from migrants in the United States through such institutions to allow for their mobilization in productive investments.

## RESEARCH AND TECHNOLOGY

1. In the past, the Mexican institute for agricultural research and extension, INIFAP, has often conducted research that does not meet the needs of Mexican growers, large and small, with correspondingly low adoption rates.

There is a need to orient agricultural research and extension to meet the specific and dynamic needs of producers and their markets, that is, to be "demand driven." This will require restructuring of INIFAP and the extension system.

2. Access to quality agricultural research and development is a consideration when U.S. growers think about transferring some of their operations to Mexico. Seed varieties and agronomic practices are very specific to each commodity, region and season, so

adaptation to local conditions is critical. Post-harvest management is also very critical, i.e. pre-cooling, grading, packing, and packaging.

There is a need in Mexico for more applied research on non-traditional crops, particularly fruits and vegetables. To attract foreign investment and partners and to compete in global markets, producers require access to "state-of-the-art" varieties and production and post-harvest management techniques (e.g. originating from California, Israel, Japan, Chile and adapted to local conditions). Though Sinaloa growers have had some success in this regard, INIFAP should provide leadership in developing appropriate technology transfer and exchanges for other regions of Mexico.

3. Any country needs to count on ten to fifteen years of scientific research to overcome non-tariff restrictions imposed by importing countries, especially in regard to phytosanitary problems. Research is expensive and the government of Mexico needs to invest in targeted research to be able to expand export markets.

The experience with fresh avocados produced in the state of Michoacan shows the need for continual pest management research that supports producer efforts to overcome phytosanitary barriers imposed by importing countries. Another specific need is to streamline the process by which pest control products approved by international organic certification agencies are registered and imported into Mexico. This will allow Mexican producers, especially small farmers, to compete more effectively in the growing "niche" organic market.

4. The current agricultural extension system is very weak and needs to be strengthened in innovative ways that involve the universities, the private sector and NGOs.

The possibility of integrating internships by agricultural university students into state research and extension programs should be explored. In Guanajuato, a program has recently been established where student interns work with local farmers to understand their specific production needs and resource constraints and to develop research agendas and technologies that appropriately address those needs and constraints. The extension system can also be strengthened by subsidizing rural development NGOs to provide technical assistance to farm communities (e.g. through contracts with FIRA, SAGDR/INIFAP and the development banks).

5. Agriculture supports nearly 25 percent of the Mexican population and is an important component of Mexican exports, yet less than 0.05 percent of the federal budget is spent on agricultural research and extension (1996).

Government investment in agricultural research and extension should be increased to at least 0.1 percent of the federal budget. The responsibility for managing and distributing these funds should be devolved as much as possible to the state and municipal levels.

6. There appear to be very interesting opportunities for agricultural joint ventures in southeastern Mexico (Tabasco, Yucatan Peninsula), particularly in tropical fruits, yet for the most part these opportunities have not materialized into successful enterprises.

International demand for tropical fruits (fresh and processed) is growing, including the specialty market for organic fruits. In order for Mexico to compete in this market—and also to involve small tropical fruit producers—an integrated public-private collaborative approach must be taken that ensures financial, technical and marketing assistance for producers, and promotes joint ventures with foreign investors/shippers. A small pilot project methodology is recommended as a means to test the approach before it is expanded on a greater scale.

## MARKETING AND TRADE

1. U.S. demand for traditional horticultural products, such as tomatoes, is leveling off or has stabilized.

Mexico needs to diversify its export markets to include Asia, Europe and Latin America, and to further target its own domestic markets (over 90 million consumers) as demand recovers. Producers need to diversify into products with growing international demand, such as tropical fruits, specialty vegetables, organics, ethnic foods and medicinal plants and herbs.

2. Information on foreign markets is critical, yet in Mexico there is no responsible agency for providing reliable, current market information to producers and exporters.

There is a need in Mexico for an agency similar to the Foreign Agriculture Service (FAS) of the U.S. Department of Agriculture to provide a constant stream of information on international trade and appropriate importers and handlers around the world. As a first step, existing information can be accessed (from FAS over the Internet) and packaged for growers in a helpful way.

3. Direct knowledge of the marketplace is very helpful for learning about buyer preferences and gaining access to new markets, yet market intelligence is generally weak in Mexico, especially among small farmers.

Mexican export agriculture would benefit from more trade missions where producers and processors go out and meet wholesale and retail buyers in importing countries. Also, the government of Mexico needs to support the development of (private) trade associations that promote trade in specific commodities and provide a forum for sharing information and addressing common problems.

4. Distributor/handler problems are very common, where brokers promise growers in Mexico that they will market their product and fail to do so, or sell it at a price that does

not return a profit to the grower. A different kind of investor/buyer is needed, especially in partnerships with small and medium farmers.

By means of a market information service (see #2) and trade associations, there is an urgent need to assist growers to connect with reliable investor partners and buyers, within Mexico and in importing countries.

To succeed in working with small and medium farmers the investor partner must: 1) work closely with the farmers to identify products suitable to the local area and to their capabilities, while also meeting market demand; 2) work on developing attractive and durable packaging; 3) provide advice on appropriate transportation; 4) be responsible and concerned for the well-being of the farmers by working to minimize losses and optimize revenues. A long-term commitment by the partners to the growers, demonstrated through on-going technical support and investments, is critical to overcome the financial, technical and marketing barriers that exist under current conditions in Mexico.

5. Less developed infrastructure means higher risk in Mexico. Transportation is a major consideration in deciding if and where to invest in Mexico.

There is a need to coordinate transportation policies with the needs of export sectors, e.g. direct flights from export areas to key markets in order to lower per kilo air freight rates. With this type of coordination it would be possible to develop export markets to new regions.

6. An overvalued peso with respect to the dollar severely limits the competitiveness of Mexican agricultural exports.

It is critical that the government of Mexico maintain a balanced exchange rate based on current economic conditions and expectations, and avoid peso overvaluation.

## LEGAL REFORMS

1. Legal restrictions on foreign investment in agriculture and foreign ownership of land act as impediments to increasing foreign investment in Mexican agriculture.

Despite the reforms to Article 27 of the Mexican Constitution, there are still restrictions on the amount of land that each individual can own: 100 hectares of irrigated row crop land, 300 hectares of irrigated orchard land. Furthermore, foreigners can only own 49 percent of the maximum area allowed. Foreign agricultural processing and marketing firms may wish to expand into production to guarantee a reliable supply of raw product. Nevertheless, the 49 percent ownership restriction discourages investment in production.

2. There is a perception of lack of legal protection of property rights in Mexico that discourages foreign investment.

In recent years, this perception may not be supported by fact. Nevertheless, the fear of expropriation and lack of legal protection is an important reason why foreigners are reluctant to make equity investments in Mexico.

## **INVESTMENT OPPORTUNITIES**

"The new economic and political reforms in Mexico open the way for joint ventures and contract farming. The conditions for such endeavors are much better than a few years ago, and offer one way to overcome highly fragmented land resources and size limits on foreign land ownership." (Dr. Juan Carlos Martinez, Inter-American Development Bank)

"U.S. companies would do well to target those Mexican companies which are gearing up to export, and which will require increasing amounts of capital and intermediate goods. Some government measures to meet the crisis will also provide opportunities to U.S. firms. Mexico's infrastructure still needs investment, and the government of Mexico has announced plans to privatize more government-owned operations to raise cash. The privatization of the ports and airports, for example, will be accelerated." (Lic. Jose Angel Pescador, Mexican Consulate, Los Angeles)

"Now people are going to Mexico for marketing reasons and counter-seasonality." (David Mendel, California agribusiness consultant)

"Businesses that make intensive use of unskilled labor can have a significant advantage in Mexico." (Doug Bullman, Monterey Mushrooms)

"Most equipment available in Mexico (*manufactured in the U.S. or Canada*) is geared towards large farmers. European manufactured tractors and other farm equipment for smaller size operations present a more reasonable model for small farmers in Mexico. I think there's an opportunity for someone to import that equipment into Mexico." (Larry Jacobs, Del Cabo Cooperative/Jacobs Farm)

"The challenge is to get major foreign investment into the non-traditional areas, the tropicals (fresh & processed) and other commodities for which there is not sufficient Mexican investment and for which demand is expanding." (Dr. Roberta Cook, U.C. Davis)

"The supply stability issue is really a critical issue for any kind of food processing firm. People don't make multi-million dollar investments unless they have an assurance over the regularity, cost and quality of the supply." (Dr. Roberta Cook, U.C. Davis)

"The investment opportunities in Mexico are primarily in the Southeast, not so much in grains but in fruits and vegetables and agribusiness. Mexico could be a strong contender in tropical fruit exports, and yet it is not. Macademia, passion fruit, maracuya are easy to produce. There are also opportunities in precious woods and ornamental plants." (Ing. Jorge Kondo, Director, INIFAP)

"Most California and Mexican farmers and food processors see each other as competitors. Yes, we are in some instances; but there are abundant possibilities for complimentary use of resources if we become creative and find good ways to cooperate. We need processing and marketing technology, and we can provide raw materials, water, land, transportation, infrastructure and people. Let's not be competitors, let's be complimentary and find new markets in the Orient, in Europe and Latin America and also within Mexico and the United States." (Ing. Francisco Obregon, government of Sonora).

## IV. Conference Proceedings

*The conference presentations were transcribed from tapes. The transcripts and supporting written documentation provided by the presenters were combined and edited for this report. Questions and discussion that follow the presentations were transcribed and reported with minimal editing.*

### Greetings

**Dr. Raymund Paredes,** Vice-Chancellor for Academic Development, UCLA

I welcome all of you to UCLA for this important conference. It is important to do what we can to improve understanding between Mexico and the United States and to investigate opportunities for cooperation and joint development. I grew up in El Paso, Texas, approximately 100 yards from the Rio Grande. I am a Professor of English and I am doing research and teaching on the linkages between literature in Mexico and literature in the American Southwest. This activity today is one of what I hope will be an increasing number of initiatives that bear fruit at UCLA to deal with the relationship between Mexico and the United States. We have plans to bring in more scholars from Mexico and to develop exchange programs.

I wish you every success with your conference and I hope it generates a lot of wisdom and understanding.

**Mr. Orlando Loera**, Executive Vice President for International Trade, Bank of America

The purpose of this conference is to facilitate an informed discussion of the current issues affecting investment in Mexican agriculture. We have brought together policy makers, academics, members of the agricultural communities on both sides of the border and a few Bank of Americans from both Mexico and the United States.

This conference touches on three core businesses of the bank:

1. Bank of America has always been very extensively involved in California's agricultural and agribusiness industries, dating back to 1904 with a loan to a wine company in Santa Rosa.
2. Bank of America's commitment to Mexico is also historical. We have been in Mexico for 46 years and just recently, in 1995, established a full corporate banking subsidiary and leasing and capital financing subsidiary in Mexico City. We have been trying to establish this local presence for over 20 years and NAFTA was the key that opened the door and made it possible.
3. Our bank has been a leader in international trade since the end of World War II. We have been innovators in trade finance around the world. In 1993, we created a specialized group focused on international trade (International Trade Bank). Trade

has gone from 4 percent of the U.S. GDP 15 years ago to about 23-24 percent in 1995. Our clients insist upon our trade expertise.

Our leadership role in these three areas obliges us to look to the future. Although trade has grown significantly in the last decade between Mexico and California and Mexico and the US Southwest, we have yet to see a dramatic increase in Californian investment in Mexican agriculture. We are puzzled by that. Something is missing, something that we might identify here that will lead us to suggestions and recommendations to improve the flow of investment, so that the successes that NAFTA might afford us in the agricultural field can be fully realized.

We believe this forum can provide a practical business perspective on the issues and challenges for doing agricultural and agribusiness investing in Mexico. We will develop from this forum a list of the issues that affect cross-border agricultural investment and maybe some recommendations on how these might be addressed. We at the Bank of America are committed to fostering this process over the long term.

## Keynote Presentations

**Dr. Raul Hinojosa,** Research Director, NAID Center, UCLA

### An Overview of the Current Macroeconomic Situation in Mexico, and the Economic and Labor Impacts of NAFTA to Date

(Note: this discussion was updated in early 1998 and the Figures referred to appear after the discussion of Dr. Hinojosa's presentation.)

I will set the stage for today's conference by situating agriculture in a broader context of recent transformations in US-Mexico economic relations. I basically want to do three things today: 1) analyze the recent transformations in the Mexican economy, focusing on U.S.-Mexico trade and investment relations; 2) explore the impacts of NAFTA on these relations; and 3) describe our research at the NAID Center for tracking the impact of NAFTA and North American integration in general on labor markets on both sides of the border. One of the principal missions of the NAID Center is to provide technical assistance to the newly created North American Development Bank (NADBank), which was created in part to provide financing for communities adversely affected by NAFTA, both in Mexico and the United States as well as along the border.

Regarding the evolution of the Mexican economy over the last fifteen years, some key points:

- A dramatic decline in the GDP of Mexico since the devaluation of 1994, recovering in the last two quarters of 1996. A very serious economic crisis, surpassing the 1982 fall in output. The recovery led to record high growth rates not seen since the early 1980s (Figure 1).

- In terms of trade, from the mid-1980s an explosion of imports and exports driven by the unilateral liberalization of Mexico, eventually leading to an unsustainable trade deficit on the Mexican side and a collapse in imports. Since mid-1997, Mexico has been running a more manageable trade deficit (Figure 2).

- Two-way growth in U.S.-Mexico trade grew in the mid-1980s and early 1990s. Mexico developed a very large trade deficit by 1993 leading to the peso devaluation and contraction of imports. Mexico has maintained a large trade surplus with the United States for the last six years. This is a further indication that Mexico is moving toward being an export platform for Asian and European intermediate goods ending up as final goods in the United States (Figure 3).

- Unilateral liberalization of trade in Mexico led to a high propensity to import relative to Mexican growth and a high dependency on imports for growth, leading to chronic current account and trade deficits (Figure 4).

- Mexico's capital account was sustained by foreign investment inflows rather than loans and savings; and primarily portfolio investment (stocks and bonds) rather than direct foreign investment (equity), leaving Mexico vulnerable to volatile shifts in investment flows (Figure 5).

- The real challenge for Mexico is to develop long-term financing of chronic trade deficits. The NADBank has the potential to serve as an instrument for targeting long-term capital into communities and sectors negatively affected by liberalized trade.

- Very little foreign direct investment is taking place in agriculture; FDI in tourism and financial services, however, has taken off at a rapid pace (Figure 6).

- In terms of trade, agriculture continues to be important on a cyclical basis. However, the most dynamic sector is in manufacturing exports and intermediary goods imports. Mexico is becoming a strong platform for exports of final goods to the US. After the peso crisis, intermediary goods imports suffered slightly but have already recovered (Figure 7).

- A breakdown of what is traded between the United States and Mexico shows that 60 percent is accounted for by electronics, transportation, machinery, and (to a lesser degree) apparel.

Regarding the impacts of NAFTA on trade and investment relations between the United States and Mexico:

- Mexico had already dropped its tariffs on most products unilaterally since the mid-1980s (Figure 8).

- A further decline in tariffs on the Mexican side after NAFTA; U.S. tariffs were already low with respect to Mexican tariffs and dropped to very low or nothing (Figure 9).

- The NAFTA impact on trade has been by far overwhelmed by what has happened to the exchange rate and on the macroeconomic account, and by overall economic conditions in Mexico that determine its ability to sustain growth. There is no surge in U.S. imports from Mexico directly attributable to NAFTA; (the devaluation crisis had a more powerful effect of trade).

Regarding the labor impacts of NAFTA:

- The prediction was that the biggest labor impacts would be attributable to changes in the Mexican agricultural sector resulting from price liberalization, e.g. a potential for dramatic rural out-migration. Less impact was predicted from increased trade and plant closings.

- In fact, the labor impacts of NAFTA have been less than originally expected, both by those who projected a large loss in U.S. jobs (plant closings) and those who claimed NAFTA would create hundreds of thousands of new U.S. jobs through increased exports. Projections of massive rural out-migration in Mexico were, apparently, also wrong.

- The NAID Center has developed an alternative methodology for looking at the sectoral employment impacts of NAFTA: jobs created from increases in exports to Mexico minus jobs lost from plant closings, per sector. This methodology and preliminary numbers are presented in a report released to the Department of Labor in December 1996. The NAID numbers show that, despite the peso collapse, economic crisis in Mexico and recent trade deficits with Mexico, the post-NAFTA period has generated a *net increase* of jobs in the United States.

- The NAID Center web site has detailed regional maps of the United States showing where the import penetration and job loss impacts are, principally in south Texas and California, using numbers generated by the Department of Labor.

In conclusion, I leave you with the important question of how to attract and sustain long-term investment in Mexico, required to finance its on-going heavy reliance on imports in the post-NAFTA liberalized era. Mexico cannot go back to financing future deficits in its current account with short-term bonds. Our role here today is an important part of that picture.

**Discussion/Questions:**

**Juan Carlos Martinez:** What are you calling liberalized and non-liberalized sectors?

**Raul:** The liberalized sectors are those that have already undergone full liberalization—to zero tariffs—as a result of NAFTA or previous unilateral liberalization. Non-liberalized sectors are those that will undergo gradual liberalization over the next twelve years or so.

**Orlando Loera:** By your methodology, the net employment impact of NAFTA in the United States is much less than the government estimate of negative 70,000?

**Raul**: The Department of Labor is only looking at displacement numbers, not the number of jobs supported through increased exports. We look at both. The level of exports to Mexico, despite the peso crisis, is now above the pre-NAFTA level, having recovered most of the decline. That gives you a lot of jobs supported by exports to Mexico, and if you compare those with the jobs lost on the import side, you get a positive number. We have a positive net job gain right now.

**Orlando Loera**: Is there a study that has been done on the employment impacts of NAFTA in Mexico?

**Raul:** We are turning to that now with a database that looks at the Mexican side as well. There has been a major decline in manufacturing in Mexico since the peso crisis. About 60 percent of manufacturing jobs in Mexico were already lost since the 1980s, primarily production for domestic markets. A lot of that has shifted to the *maquiladoras*. So there has been a shift in growth to *maquiladora* employment but a wrenching collapse in the manufacturing sector geared for domestic markets. That sector suffered from import penetration both before and after NAFTA.

**Dr. Roberta Cook**, Extension Marketing Economist, UC Davis.

**U.S.-Mexico Bilateral Horticultural Trade and Investments: Trends, Barriers and Opportunities**

Why horticulture? One of the main purposes of this conference is to look at how we can improve investment in the Mexican agricultural sector. If we look at U.S.-Mexico trade, in 1995 we imported about $4.4 billion dollars worth of food and agricultural products of all types from Mexico, and over half of that was in horticultural commodities. Clearly, Mexican horticultural exports to the U.S. are very significant. We sent $3.5 billion dollars worth of food and agricultural products to Mexico in the same year, down from earlier levels. In 1995, for the first time since 1990, the U.S. had an agricultural trade deficit with Mexico.

In terms of marketing, Mexico needs to be demand driven, not just production driven, especially given that horticulture production in Mexico is just a small part of Mexican agriculture. Expansion of horticulture cannot be the solution to all problems. If we convert too much land in Mexico into horticultural production, there may be no profitability for anyone. So, I don't want to exaggerate the potential that horticulture represents. Nevertheless, we do see an important gain in horticultural exports to the United States. Mexico is already working on diversifying the markets that it reaches—Japan and elsewhere—and needs to diversify further both its products and markets.

There has been strong growth in fruit, vegetable and floriculture imports from Mexico since the peso devaluation in late 1994, projected at about 2.5 billion dollars for 1996. U.S. horticulture exports to Mexico have also been strong since Mexico joined the GATT in mid-1980s, and especially during the 1992-1994 period. After the devaluation there was a major decline in the export market, especially in deciduous fruit, also vegetables. In retrospect the earlier high growth rates were artificial, due to the overvalued peso. Exchange rates do matter.

Mexico represents about 31 percent of total U.S. horticultural imports; Mexico dominates vegetables—76 percent. It is important to note that when you are such a major actor in the market, increasing supply has a major impact on total supply and prices, e.g. tomatoes. U.S. demand for some of these products is leveling off or has stabilized. Expansion may not be profitable. Therefore, Mexico needs to diversify its markets, including its own domestic markets (over 90 million consumers) as demand recovers.

On the fruit side, Mexico represents only 15.8 percent of our imports, which are dominated by bananas from Central America and Ecuador. Mexico has an opportunity to increase exports in fruits, particularly tropical fruits, for which there is increasing demand in the United States. It is easier to achieve rapid growth rates in those types of commodities. However, there is a need for appropriate R& D to support tropical exports, to ensure that Mexican production is viable and competitive as compared to other sources.

Tomatoes dominate Mexican vegetable exports to the United States. Production decisions are made based on internal cost structures. Firms are often driven to increase volume and achieve economies of scale to decrease per unit costs. We see production expanding without regard to aggregate supply and the ability to market it, e.g. Sinaloa tomatoes. We can be assured of continued trade disputes, if Mexico continues to expand production in the main crops like tomatoes. We should not forget that despite trade liberalization, the United States still has on the books very powerful anti-dumping laws. Therefore, all bankers and investors interested in investing in Mexico need to know that, despite NAFTA, the U.S. industry still has the ability to protect itself, like it or not.

This point is very related to our conference here and our interest in attracting foreign investment. Mexican capital is capable of expansion in the mainstream horticultural crops. The challenge is to get major foreign investment into the non-traditional areas, the tropicals (fresh & processed) and other commodities for which there is not sufficient Mexican investment and for which demand is expanding.

Are more U.S. firms going to build subsidiary plants in Mexico or export final goods to Mexico? For food processing firms to move, they want to be very sure of stability of supply and economies of scale in supply (agricultural inputs). There are good potential areas for this in Mexico, including avocados. The cost and reliability of supply, relative to competition around the world, often decides where to locate plants. For instance, asparagus plants are locating in Peru where there is good raw supply. Frozen broccoli has been a success story in Mexico, with plants concentrated in the *Bajío*.

Today, foreign direct investment in Mexican agriculture is low, representing just .06 percent of total FDI in Mexico. What are the **principal barriers** for increasing investment, particularly foreign investment, in Mexican agriculture?

1) Need for **macroeconomic and exchange rate stability**.

2) Less developed **infrastructure** means higher risk in Mexico. Transportation is a major consideration in deciding if and where to invest in Mexico. There is a need to coordinate transportation policies with the needs of export sectors, i.e. direct flights from export areas to key markets in order to lower per kilo air freight rates. With this type of coordination you can develop export markets to new areas. Until transportation is in place at an economically viable rate, it is difficult to get expansion. Other infrastructure issues include housing and transportation for workers.

3) **Information** is critical. Investment is occurring but primarily on a joint venture basis rather than as direct investment in order to tap into the knowledge and contacts of the Mexican partners. Foreigners don't understand the local system in terms of production. It takes maybe a decade of operating in agriculture in Mexico before you feel capable of going out on your own. Horticulture is a big industry, but there are not that many well-capitalized growers capable of export, making it difficult to find the right grower partner.

At the state level, Mexico needs to help potential U.S. and other investors connect with appropriate grower partners, something already taking place in Guanajuato and Sonora. Distributor/handler problems are very common, where brokers promise growers in Mexico that they will market their product and fail to do so. This practice needs to be curbed. We need an entirely different sort of partner, more committed.

4) **Legal restrictions on investment** in agriculture act as an impediment. Although the reform to Article 27 removed a lot of restrictions, there are still restrictions on the amount of land that each individual can own: 100 hectares of irrigated row crop land, 300 hectares of irrigated orchard land. You can combine your land with others but that increases transaction costs. Furthermore, treatment of nationals and foreigners is different such that foreigners can only own 49 percent of the maximum area allowed. There is also a perception of lack of legal protection of property rights in Mexico that discourages foreign investment.

5) Need for **market intelligence and diversification** in trading countries and sectors. Need to identify target markets and distribution handlers from the beginning and supply them consistently. Who is going to handle the product and get it on the shelves? Need to

get access to the retail chain, especially for processed products. We are dominated by chains and have become very concentrated. There are under 400 integrated wholesale/retail buyers in the U.S. that you have to sell to. Never underestimate the importance of market intelligence and strategic alliances with the right partners.

6) Access to quality **agricultural research and development** is a consideration when U.S. growers think about transferring some of their operations to Mexico. Seed varieties and agronomic practices are very specific to each commodity, region and season, so adaptation to local conditions is critical.

7) **Post-harvest management** is also very critical, i.e. pre-cooling, grading, packing, and packaging.

In conclusion, every firm when they are making their decision to invest, is making their decision based on supply, demand, relative competitive positions, and the marketing, distribution, transportation and quality issues. The reality is that the fundamentals have to be there. Our challenge is to try to put some of the policies in place that might foment this.

**Specific policy recommendations**:

1. Information on markets is critical. There is a need in Mexico for an institution similar to the Foreign Agriculture Service (FAS) of the USDA that provides constant information on appropriate importers and handlers around the world, and keeps up on the competition. Mexico needs to create this type of information network. As a first step, existing information can be accessed (from FAS over the Internet) and packaged for growers in a helpful way.

2. There needs to be more trade missions/market intelligence, where producers go out and meet the buyers.

3. The government of Mexico needs to support the development of (private) trade associations that promote trade in specific commodities.

4. Long-term institutional commitment to targeted agricultural research and development and removal of phytosanitary problems are two related and critical policy issues. Any country needs to count on ten to fifteen years of scientific research to overcome non-tariff restrictions imposed by importing countries (e.g. U.S. research undertaken to gain access to Japanese markets; Mexican pest control research required to sell avocados to the United States). Research is expensive and the government of Mexico needs to invest in research to be able to expand export markets.

5. Policy/legal reform to strengthen and streamline the legal channels for resolving agricultural investment disputes, particularly regarding protection of property rights.

6. Policies are needed to support the efforts of non-governmental organizations (NGOs) and international donor agencies to promote the development of small-scale horticultural production with organized small-scale producer groups. Access to credit and management/market training are particularly critical to ensure the success of these types of endeavors.

**Discussion/questions (continues after the morning panel)**

**Jim Faber:** I have heard that the agrarian reform is not as workable as it is purported to be for a large-scale farming venture, which we would like to achieve in Mexico. We find it very difficult to work with the reform issues. Twenty-five 100 hectare combinations are allowed, however, another problem is that there are not those large size tracts of land available for purchase. We would like to own the land because we would like the stability and the safety of managing our own investment in Mexico. So, it is more interesting for us to own the land then to put together a grower-investor partnership.

We have found many good people to associate with in Mexico, but haven't figured out a good way to get down there. We have our own markets that we think would be synergistic with many of the tree fruit horticultural products which we grow and market in the United States. But we are not sure how to get over the land purchase hurdle.

Once you do find a seller, we find that the cash return on investment is lower in Mexico with the current prices. This doesn't make sense, given that we should have a 2, 3, or more percent increase over what we are getting in the United States, which is in the 6 to 8 percent range. The prices that we can negotiate in Mexico today promise only a 4 percent return on investment. We think that the opportunities there are in labor, a progressive management culture, and good productivity. There are great opportunities for firms such as us to get into labor-intensive production. We see a lot of advantages but just don't know how to get in.

**Roberta Cook**: Other investors have faced these same obstacles. In my interviews with Mexican growers/shippers, asking them whether they have taken advantage of the new land reform laws and policies to change the legal structure that they are operating under, very few have made any changes. In the past, Mexican firms have found ways around the system. But for U.S. firms who are coming in under the new laws, the laws are still extremely restrictive. This is one of the messages for policy makers—the restrictions on land ownership for foreigners are not realistic. This is a sensitive, historical issue for Mexico. Another problem is land fragmentation, which certainly has hindered investment in certain sectors, such as citrus in Veracruz. Regarding land values, when land first becomes a tradeable commodity nobody really knows what the value of the land is, and often people end up asking more for the land than what it would be worth in the United States, even though it has less infrastructure.

**Morning panel: Agricultural Policy Environment in Mexico**

**Dr. Javier Morales, Dean of Graduate Studies, ITESM, Mexico D.F., Moderator**

(Discussion followed the panel presentations.)

**Ing. Jorge Kondo Lopez**, Director of the National Institute for Agricultural, Livestock and Forestry Research (INIFAP)

**Mexican Federal Agricultural Policies**
(translated from Spanish)

The theme of this panel is what is the environment for agricultural policy in Mexico. Basically we can characterize the changes in Mexico as a concession to the needs of the productive sector: less government and more free enterprise and civil society. In the past the government thought it could do everything. In the agricultural sector, producers are now taking on the roles that the government used to play—in irrigation, research, warehousing, phytosanitary control. Constitutional changes have allowed for the privatization of *ejidal* land in Mexico.

The impact of NAFTA on agriculture has various components. It is not very important to the agricultural sector in general because the tariffs were not very high on horticultural products before NAFTA. In any case, the horticultural sector can be considered a winner under NAFTA. In terms of basic grains, because of the suspension of guaranteed prices, these producers could be considered to be losers under NAFTA. For several years before NAFTA, the government of Mexico already decided to reduce or eliminate tariffs, as Hinojosa pointed out earlier. Why did the GOM decide to do this unilaterally? Some people think it was to show good will/intentions for negotiating NAFTA. However, the worst mistake we made was to liberalize trade with the dollar at a very low level. After the 1994 devaluation, we saw that Mexico could still be competitive under NAFTA.

The situation in 1996 is more balanced and we can adjust our expectations more realistically to the situation of the Mexican economy. Now the peso will be floated and overvaluation should not reoccur. Foreign investment (FI) in Mexico had already increased substantially before NAFTA; Mexico was "in fashion". But FI declined after the political instability in Mexico (two assassinations) and the peso devaluation/economic crisis. In 1996, foreign direct investment is growing strongly again, about 10 billion dollars total[1], much more than in Argentina, Colombia, Chile or Venezuela. This shows that FI in Mexico is mature—safe and sound—there is nothing to worry about.

Foreign investment in Mexico will recover in the next few years with the improved Mexican economy, stable and growing reserves, interest rates that have dropped from 100% a year ago to about 20% now, and Mexico now democratizing.

[1] Total FDI in Mexico in 1994 - 9.96 billion dollars, in 1995 - 6.74 billion dollars (SECOFI).

In terms of current agricultural policies, we have *Alianza para el Campo. Alianza para el Campo* has 22 different programs to support capitalization, productive re-conversion and environmental protection. It will create a market demand for between 500 million and one billion dollars worth of agricultural inputs. The government is most interested in productivity and profitability. Our policies are directed in two ways: 1) those oriented toward commercial production and agribusiness; and 2) those oriented toward subsistence agriculture, which concerns about 25% of our people.

Regarding U.S.-Mexico agricultural trade. This year we will import more grain from the United States than ever, 13 to 14 million tons—a boon for U.S. farmers. Disputes over tomatoes with Florida have nothing to do with NAFTA. The problem with vegetable production in Mexico is that there is an excess of supply. In Sinaloa and Sonora we have a greenhouse climate in the winter. Out of a million irrigated hectares we only use 50,000. Between 1980 and 1990, Florida produced better tomatoes than Mexico, but Mexico was able to develop a tomato with a longer shelf life, using Israeli and California technology. A very good quality tomato, high yields, and the devaluation also helped to foster exports. The problem with Florida is quality. When Florida can produce tomatoes of the same quality as Mexico, then it will be able to compete.

What are the prospects or future plans for agricultural policy in Mexico?

1. Maize policy: focus on genetic engineering as a technological solution. Develop maize that is resistant to pests and drought, that is nitrogen fixing and reproduces itself asexually. Our second Green Revolution.
2. The investment opportunities in Mexico are primarily in the Southeast, not so much in grains but in fruits and vegetables and agribusiness. Mexico could be a strong contender in tropical fruit exports, and yet it is not. Macademia, passion fruit, maracuya are easy to produce.
3. We have three big projects planned for the Southeast: a) palm oil (import substitution), b) latex rubber, and c) coffee—the same quality as Colombia. Other potential investment projects include ornamental flowers and precious woods.

In conclusion, the most important thing is the attitude of the government of Mexico. I have to admit that in the past, foreign investment was not welcome. But all of the political and economic reforms that have taken place are precisely to improve the environment for foreign investment, and, to a great extent, the macroeconomic recovery in Mexico depends on this foreign investment.

**Dr. Ruben Yesin Toledo**, Vice-Manager of Programs, Banco de Mexico/FIRA

## FIRA's Role in Mexican Agricultural Financing

I will try to explain and analyze the policies of the agricultural trust fund, FIRA, of the Central Bank of Mexico. The specific objective of FIRA (*Fideicomisos Instituidos en*

*Relación a la Agricultura*), as a financial entity of the Federal Government, is to promote and induce, through commercial banks, those profitable and productive investments that fall within its development goal. This goal is achieved by funding the agricultural sector and providing technical assistance and other services, in order to induce the efficient use of resources.

It is important to mention that in a country like Mexico, the recurrence of high inflation levels requires a sound payment schedule with provisions for interest financing. This escape valve gives temporary relief to the borrower by reducing excess payments in periods when nominal interest rates increase substantially. Although inflation in Mexico has been reduced substantially, it does not mean that it has disappeared. Memories are short and recent events tend to be rapidly forgotten. This is the reason that interest financing schemes are so important for our country.

During the financing process, there is always the inherent requirement of sharing credit risk among participants. For example, during 1989-1994, the participation for every peso lent to the agricultural sector was 19%, 22% and 59% for commercial banks, producers and FIRA, respectively. The number of favored producers (credit beneficiaries) was 658,000. FIRA's guarantee service is not 100% but is given as a complement to the collateral offered by borrowers. It is a back-up designed to motivate private bankers to increase their loans to the agricultural sector, especially low-income producers, by lowering their risk and risk perception.

Whenever a loan guarantee is called on because of payment default, the project's payment capacity is reassessed. In the case that the project promises a high probability of success, the loan is restructured and payments are rescheduled according to expected cash flow generation. With the collateral payment service, FIRA offers a contingent credit to encourage both producers and the banks to remain in the agricultural sector.

The nature of the collateral service has been changed. Initially, it was used for the sole purpose of meeting the legal requirements of private banks. Nowadays it is instrumental in broadening FIRA's producer coverage, contributing to risk dispersion and lowering risk perceptions. Furthermore, it increases bank operations' profitability due to the reduced capital requirements when loaning in association with FIRA's back-up guarantee.

FIRA's SIEBAN program (*Sistema de Estímulos a la Banca*) is aimed at reducing the transaction costs and risk perceptions of financial intermediaries when operating with small-scale producers. Through SIEBAN, FIRA offers to reimburse banks for the cost of granting technical assistance to small farmers. FIRA also operates with para-financial agents to reduce the transaction costs of commercial banks lending to small producers, e.g. borrower selection, credit servicing and monitoring, geographic and activity dispersion. Through operating with these agents (e.g. credit unions, FMDR), small producers can gradually gain experience as borrowers and become creditworthy for commercial banks.

Another benefit of operating with para-financial agents is job creation. The total number of peasant beneficiaries as of August 1996 was over 100,000 (101,092). Most of these jobs have been created within the sugar cane refinery business.

Although Mexico's agricultural sector has been facing hard times recently, it is worth mentioning that the number of acres of harvested land in the current year will be superior to previous years. Insufficient credit recovery has led to resource scarcity in the agricultural sector. It is possible that farmers are self-financing this year's production and postponing required regular payments to the FIRA trust.

The new land tenure law has been propitious for the efficient allocation of resources in the agricultural sector. Peasant land property rights have been legally defined, so that land is now marketable. The new reforms will encourage private ownership and large-scale farming. Economies of scale, new technologies and more efficient input combinations will substantially increase productivity in this sector. In short, the investment outlook of agriculture has improved.

International competitive levels, quality control standards, new resource allocation and production patterns have been achieved since NAFTA. Relative price changes will further induce reallocation of agricultural investments toward those products for which Mexico has a competitive advantage (and away from corn, wheat, etc.).

**Dr. Juan Carlos Martinez**, Lead Economist, Food & Agriculture Policy, Inter-American Development Bank

**Mexico Post-NAFTA: Food and Agricultural Sector Reforms and Private Sector Opportunities**

Let me make a disclaimer up front. My comments today present my perspective and do not claim to represent the views of the IDB or the Mexican government.

My role today is to provide an overview on agricultural policy reform in Mexico. The objectives of the presentation are to review recent sectoral policy reforms and analyze the resulting policy environment for private investment. The 1994 economic crisis had negative financial effects but also brought opportunities for the agricultural sector and the continuation of reforms.

The main areas of policy reforms:

1. Property rights on land resources, mentioned already by Roberta Cook. The reforms terminate land distribution and define new ejido property rights through a titling program that allows for a process of transition toward private ownership of ejido land. Very difficult and critical changes needed for economic reform.

2. Commodity market liberalization, with three main components: a) elimination of production subsidies on basic grains; b) elimination of general consumer subsidies and price controls on processed grain products, except maize tortilla; c) decoupling of maize consumer subsidies (tortilla) from maize grain markets (liberalized). The restructuring of maize subsidies was announced in a recent presidential decree, May 31, 1996.

3. Decoupled income transfers for farmers and consumers. Innovative compensatory mechanisms were designed for farmers adversely affected by NAFTA and the end to producer subsidies. The program, PROCAMPO, replaces guaranteed prices on basic grains with income transfers based on acreage of eligible crops cultivated during 1991to 1993. It reaches more than 3 million farm households and covers 14 million hectares.
PROCAMPO is the parallel to the U.S. Farm Bill, which also decouples transfer payments from production decisions. Grains on both sides of the border are going through a very similar process.

On the consumer side, general consumer subsidies are replaced by food-income transfers focused on the poor (e.g. pilot food stamp program in Campeche, free tortilla distribution to about 2 million households).

4. Institutional implications of the new policy framework include: privatization of state owned grain storage capacity - 10 million tons of storage capacity; development of public marketing services through ASERCA; redefining the role of CONASUPO; and development of private commodity markets (more efficient private grain markets), risk management instruments and inventory financing.

How do these new agricultural policy reforms improve the environment for investment? The reforms:

1. Increase the efficiency of the Mexican agricultural sector (factor and product markets), leading to increased productivity and competitiveness.

2. Remove legal constraints for land market and agribusiness development, allowing allocation of land according to competitive advantage in production (note that reforms are not directed primarily for foreign direct investment/ownership of land in Mexico).

3. Open the way for joint ventures and contract farming. The conditions for such endeavors are much better than a few years ago, and offer one way to overcome highly fragmented land resources and size limits on foreign land ownership.

4. Define spaces for private sector development in commodity trading and finance.

5. Reduce the fiscal deficit and improve budget management through the reduction of subsidies and the state role in production and marketing. Fiscal soundness is very important for achieving a stable macroeconomic climate.

In conclusion, the core of the Mexican government strategy is to proceed, on the one hand, with commodity market liberalization, and, on the other hand, to implement compensatory mechanisms as a sort of social safety net for those segments of the population that have suffered from these reforms and cannot recover without state assistance.

**Mr. James F. McCabe**, Senior Vice President, Bank of America Mexico, S.A.

**Perspectives on Bank of America in Mexico**

The Bank of America is a global bank, present in 37 countries. It is not an active agricultural lender in Mexico today, but has played an important role in the overall development of the Mexican economy.

Bank of America offices in Mexico date back to 1950 (Mexico City) with new offices opened in Monterrey (1994) and Guadalajara (1996). The representative offices sell U.S. dollar-based services: corporate finance, cash management, working capital loans, trade finance and foreign exchange. Our customers include the top multinational and Mexican corporations and financial institutions, as well as government agencies. Our current credit portfolio in Mexico is 2.8 billion dollars, and "not one cent past due."

In May of 1995, the Bank of America opened a Mexican commercial banking subsidiary. The strategy for the commercial bank is to use the representative offices as bases to convert to commercial banking branches and to expand geographically to other areas (perhaps Tijuana). We also opened last year a leasing subsidiary (*arrendadora*) in Mexico City to operate financial and operating leases.

A review of the recent history of the Mexican banking system:

When the Mexican banks were again privatized in the early 1990s, they were ill prepared to take on the responsibility of lending to the agricultural sector, once dominated by BANRURAL. They lacked the information, experience and systems to deal with basic risk evaluation, price sensitivity and crop/business cycles at a time when Mexican agriculture was shedding its dependence on substantial government support mechanisms and adapting to freer market policies.

Tremendous pressures were put on Mexican commercial banks to finance a large portion of agriculture's financial needs. With the further opening of the Mexican economy under Salinas, agriculture did not benefit from access to more diverse sources of capital financing. Before the peso devaluation, Mexican commercial banks were responsible for over 73% of all agricultural lending (representing approximately 6% of their total loan portfolios and 19% of their past due loans, pre-crisis).

The current crisis of the Mexican banking system is characterized by:

- 15%+ of loans past due under Mexican GAAP, putting a heavy fiscal burden on the economy (cost estimated at $15-25 billion dollars);
- a serious credit crunch brought on by banks basically trying to survive, and little active lending (“inward focused” banking);
- the “flight to quality” has caused certain top banks to have excessive liquidity and others not enough;
- all of the above requiring massive recapitalization and significant consolidation.

How did this happen? During ten years of nationalized banking (1982-1991) a parallel banking system developed—*casas de bolsa* or brokerage houses—and a credit culture in Mexican banks eroded. There was inadequate investment in technology. The funding of state enterprises and social programs was the primary activity of the banks. Therefore, credit availability for the private sector was limited. Bank services/accounting were outdated and inefficient. Subsequently, banks privatized at very high multiples putting earnings pressure on the new banks to pay back the high costs of acquisition. Poor credit risk assessments and a brokerage house mentality within banks led to rapid growth in past-due portfolios. Liquidity problems came about with the peso crisis and the current economic recession has exacerbated the weak financial system.

What has the Mexican government done to improve the situation? Quite a bit. Various bank reform programs have been instituted and new institutions created to stabilize and improve the financial situation. These reforms include: the role of FOBAPROA (the Mexican equivalent of the U.S. FDIC), which directs government support to the financial system at all levels; restructuring of loans through UDI and public takeovers of failed institutions (e.g. Union, Cremi, Banpais, Bancen); serious efforts to attract new foreign capital and ownership of financial institutions; recapitalization of banks through 2 for 1 debt for equity exchange; modernization of the accounting and reporting standards; and implementation of new domestic savings instruments, among others.

What’s the outlook? There may be more bad news before good. The process of developing a healthy, transparent and modern banking system may be long and drawn out, extending well beyond the year 2000. In the meantime, debtor movements in Mexico are gaining strength and fighting for better restructuring arrangements.

In conclusion, the Mexican banking system cannot be expected to carry alone the heavy burden of financing agricultural growth and development. It has its own problems, as you can see. Both the reforms under Salinas and the passage of NAFTA have created significant opportunities for Mexican agriculture: foreign investment, greater access to U.S. markets, platforms for hemispheric growth, joint venture opportunities, and opportunities for new Mexican private investment as well. In order to move forward, public policies are going to need to make the most out of these opportunities so that Mexican agriculture can continue developing and take advantage of its current competitive advantages.

**Discussion/questions:**

**Raul Hinojosa:** Jorge Kondo and Juan Carlos Martinez, what do you see as necessary to go beyond these temporary programs of income support towards a more stable process of rural development, specifically, in the Southeast of Mexico where we are seeing a great deal of social unrest? I know that the World Bank is involved in an initiative in the poorer states of Oaxaca, Guerrero, Chiapas, and Hidalgo. What will be the role of the IDB? How do you see small producers in these poor states getting involved in the agricultural opportunities mentioned by Kondo, and with what support by the financial sector?

**Kondo**: There are two types of agriculture in Mexico, commercial and peasant. Inside commercial agriculture I think that we are facing good prospects for growth based on the stabilization of the exchange rate, which is quite pertinent in agriculture. For ecological reasons, however, despite the stabilization of the exchange rate, Mexico will continue to depend on grain imports from the United States. In terms of subsistence agriculture, many producer families will continue to depend on government support for basic survival. However, the government cannot continue this support forever because that represents millions of dollars.

The government will probably continue to support the commercial producers during the next four to five years and then at the end of that time will stop its support to commercial producers but continue support to subsistence producers. Through *Alianza para el Campo* there are specific types of support for buying tractors and other agricultural tools at a 50 percent subsidy.

The greatest challenge for improving the situation of the poorest producers is better corn production, especially in the dry areas. And this is an area in which I think we can improve significantly in the next few years, especially in the areas in the south of the country with environmental advantages.

In the Southeastern region there are rich soils, plenty of water and a generally favorable climate. There are some paper companies already investing there. Huge opportunities exist in the Southeast. There is a lot of attention being paid to this region because of the ethnic conflict, but people should realize that it's generally a calm region of the country with many advantages.

**Robin Marsh:** (to Jorge Kondo) We have noticed in looking at the budget for your organization, INIFAP, that it has suffered cuts, and as a percentage of GDP is now very low. Mexico has been criticized by the World Bank for its low level of investment in agricultural research as compared to other developing countries. That's a challenge since you are very interested in technology, in bioengineering and competitiveness. What battles are you fighting right now to get your budget up to a reasonable level?

**Jorge Kondo:** That happens in every government in the world. When you have problems with the budget, the Treasury cuts technology and research expenses first. That has happened in Mexico too. Two weeks ago I met with the Undersecretary of Treasury and he asked me, "Where do you work now, since you left Congress?" I told him I work for INIFAP and he asked, "What is INIFAP?" That is the reason we have problems within the government. But, fortunately, the President of Mexico and the Secretary of Agriculture consider technology to provide important answers. We (INIFAP) spend around 0.4% of the agricultural GDP, and our objective for the next five years is to increase this to close to one percent of the total. I think this is possible but we need to fight for more money with the Treasury Secretary and that's not easy.

**Roberta Cook:** (to Jorge Kondo) I know that you have been involved in restructuring INIFAP and that there are new models in Mexico for working with the private sector to try to better prioritize research, the *patronatos*, and to bring new resources. Could you comment on that?

**Jorge Kondo**: At INIFAP we have many research ideas on the table, but the growers don't know about them. For that reason, we are promoting one agricultural foundation in each State to manage federal money, with the decisions taken by the growers themselves, who are represented by the foundation president. The presidents are all growers, and some are peasants from the *ejidos*. Our objective in INIFAP is to know and follow the grower demands, not simply to offer our research results, because often our researchers produce technologies that are not needed.

**Vernon Crowder**: I hear that restructuring, reforms, changes are occurring, but I still wonder, given the inability of the banks to provide capital, whether there are more reforms necessary to encourage or accelerate this restructuring.

**Roberta Cook**: Ruben Yesin earlier made a comment to me that I think is relevant to what Vernon has asked, concerning a new program of FIRA to fund land purchases and the possibility of restructuring land ownership. Maybe you could address these reforms.

**Ruben Yesin Toledo**: Our involvement in the banking system has been to try to bring in new intermediaries that are more sensitive to investing in the agricultural sector. Many decisions made by the banks today are not necessarily based on good economics, and they are not willing to adopt a favorable position toward investing in agriculture. So, what FIRA is doing is trying to give incentives to encourage bankers to take advantage of all of our programs and funds and try to innovate by using banks as para-financial agents. As a matter of fact, FIRA, and in some cases BANRURAL, are the only banks that are turning to commercial banks for credit. If you look at the data, you see that FIRA has worked hard to finance the agricultural sector: in 1992 our loans through commercial banks grew at a rate of 28%, in 1993 at about 18% to 20%, and even in 1994—when the crisis began—our growth rate of funds to the sector was close to 28%. 1995 was a difficult year.

**Vernon Crowder**: I still would like to pursue my question because I hear you say that there still needs to be more incentives. Do the members of the panel feel that the reforms and incentives that have been put into place are enough or are more necessary?

**Javier Morales:** I have a comment. It is my sense, as an observer, that despite the fundamental reforms there is still not a clear channel to the producers, and that producers are not taking advantage of the market and joint venture opportunities that exist. I know the experience of Bancomer, the second largest commercial bank in Mexico. They are changing their strategy. They realize that their managers were more like "queue" managers and collectors of past mortgages and bad credit card loans. They are changing their mentality towards the agricultural sector with a new program called Managing Local Markets, in which the head of the branch will look around and see who are the potential users of credit and how to improve their opportunities for channeling financial resources to these producers. But this is only one case and may not respond to your question on what other policy reforms are needed to enhance investment in agriculture. But with this I will conclude this panel and let the audience continue their discussions bilaterally during lunch.

## Lic. Jose Angel Pescador, lunch time speaker

*The lunch time speaker was Lic. Jose Angel Pescador, General Consul of Mexico for Los Angeles. Lic. Pescador gave a talk on the North American Free Trade Agreement (NAFTA), and its impacts, focusing on U.S.-Mexico trade and the economic opportunities and joint ventures that have emerged since its signing three years ago. The introduction to the talk is given below, followed by a sketch of his major points.*

### Introduction

NAFTA's first years saw the creation of numerous joint ventures in such areas as agriculture, processed foods and auto parts—to name only a few—where Mexican, U.S. and Canadian partners combined their relative strengths to expand sales, reduce costs, secure market share, and create jobs in all three countries. This strategic alliance among businesses in the three NAFTA nations will also help companies and workers in North America to compete better with their Asian and European counterparts.

There will also be opportunities related to the new strength of Mexican exports. U.S. companies would do well to target those Mexican companies that are gearing up to export, and which will require increasing amounts of capital and intermediate goods. Some government measures to meet the crisis will also provide opportunities to U.S. firms. Mexico's infrastructure still needs investment, and the Government of Mexico has announced plans to privatize more government-owned operations to raise cash. The privatization of the ports and airports, for example, will be accelerated.

Each export product will be affected differently in the current economic climate in Mexico. As with all economic downturns, there will be plenty of areas for new growth.

Certainly, the current situation will require enhanced efforts in the areas of market research, targeting, and especially trade finance.

The currency crisis in Mexico taught us some valuable lessons. One is how interrelated the global economy has become over the last ten years. NAFTA has locked in these reforms, assuring Mexican businessmen and their U.S. and Canadian counterparts that Mexico is committed to free market principles.

The agriculture sectors in the United States and Mexico are playing a strong role in the increased two-way 1996 export growth. Agricultural trade between the U.S. and Mexico is growing rapidly. In the first quarter of 1996, U.S. crop exports to Mexico rose over 100 percent to $799 million, and livestock exports grew 66 percent to more than $17 million (as compared with the same quarter of 1995). This is a large turn around from 1995 when U.S. agricultural exporting states saw their sales drop considerably.

U.S. exports to Mexico show gains in livestock, beef, dairy products, eggs, cereals, oilseeds and grains, fruit, vegetables and sugar products. Mexico's exports to the U.S. remain concentrated in vegetables, sugar, livestock and cut flowers.

<u>Review of NAFTA and its impacts</u>

1. Elimination of tariffs, 1994-2008;
2. Criteria for tariff reductions/rules of origin established;
3. Services covered under NAFTA: transportation, telecommunications, finance;
4. Dispute settlement procedures established;
5. Labor and environmental side agreements;
6. NAFTA impacts on agriculture include provisions on use of non-tariff barriers, tariffs/quotas/licenses, safeguards for producers, rules of origin, and sanitary and phytosanitary regulations.

**NAFTA 1994**: NAFTA's first year results exceeded expectations, with overall trade among the NAFTA partners growing more than $50 billion to reach $350 billion in 1994, an increase of 17% over 1993. Overall bilateral trade surpassed the $100 billion mark for the first time, reaching $106.5 billion. Mexico's exports to the U.S. climbed to $51.7 billion, while U.S. exports to Mexico rose to $54.8 billion. By the end of 1994, 70% of Mexico's exports claimed NAFTA origin.

**NAFTA 1995:** Mexico remained the third largest U.S. trade partner despite its economic crisis. Two-way U.S.-Mexico trade increased by 13%, topping $120 billion for the year. U.S. exports to Mexico declined by 1.8% to $53.8 billion, while Mexico's 1995 exports to the U.S. increased to $66.3 billion, a rise of 28.2% compared to 1994.

**NAFTA 1996:** Spurred by Mexico's ongoing economic recovery in 1996, exports have been growing strongly from both the U.S. and Mexico into each other's markets. Mexico's exports to the U.S. reached an historic monthly high of $5.7 billion in May, while U.S. exports to Mexico for the first five months of the year increased by almost 24% as compared to the same period last year.

Investment liberalization facts

- Eighty-five percent of the Mexican economy is open to 100% foreign ownership.
- Better perspective for foreign direct investment in 1996: $126, $188, $174, $244 and $558 million invested per month, respectively for January, February, March, April and May of 1996.
- The United States is Mexico's largest foreign investor—60% of total FDI (followed by Europe with 25%).
- NAFTA ensures investor certainty: non-discriminatory treatment, elimination of performance requirements, free transfer of funds, protection in the event of expropriation, and dispute resolution mechanisms—all codified into Mexican laws.
- Over 70% of Fortune 500 companies have investments in Mexico.

## 1st Afternoon Session

## U.S. Investment in Mexican Agriculture: Opportunities and Barriers
**Dr. Roberta Cook, Moderator**

(Discussion followed the panel presentations.)

*Roberta Cook introduced the first speaker on the panel, Ing. Javier Usabiaga, who is currently the Secretary of Agriculture of the State of Guanajuato, and is also one of the largest vegetable producers in the Bajío of Central Mexico. He has been involved for many years in fresh and processed vegetable production for domestic and export markets, and therefore brings both the private and public perspectives to the conference.*

**Ing. Javier Usabiaga**, Secretary of Agriculture, State of Guanajuato

### New Agricultural Policies in Guanajuato

In my conversation, I will try to address a lot of problems we have to face in Mexico. Nevertheless, in our state (Guanajuato) we consider every problem an opportunity and that is why we call ourselves the "land of opportunity."

The reforms of the Mexican Constitution were designed to promote investment in Mexican agriculture. Unfortunately, the good intentions of our legislators have not resulted in new, sound investments in farming that are needed to be ready to face the competition from our NAFTA partners. Our legislature forgot to take into consideration that the social problems of our small farmers in Mexico are the hardest problems. Historically, the problem in Mexico has been too much government in agriculture and not enough cultural/civic participation.

In order to correct this, the State of Guanajuato has decided to put the responsibility of agriculture in the hands of farmers, knowing that their experience and knowledge of the area, climate and people make them most capable of making decisions that will benefit the development of agriculture. Some of the problems that we have to solve involve the coordination, application and achievement of new farming technologies. Other problems are the restructuring of the national market to become more competitive with our NAFTA partners, and the financial backing needed to make our natural resources more efficient and to capitalize the farmer so that he can become a cost-effective farmer.

To solve these problems, the State of Guanajuato has created new links between the research centers and universities with farmer and agribusiness partners. Plus we have created an extension service for students to spend their summers and weekends developing a new relationship between technology generation and the needs of the farmer in order to optimize the resources, capital and equipment that the farmers may have. This will lead to demand-driven technologies that are readily adopted.

To solve the biggest problem that we have—the market structure—Guanajuato has distributed most of its agricultural surplus through a program that we call Modernization of the Market. You must realize that before NAFTA, the Mexican farmer had only one buyer for the majority of its crops, which was the government. Our idea is to try to develop a new farmer culture so that producers can be prepared to take advantage of market opportunities while minimizing market risk.

We have co-sponsored with the States of Jalisco, Querétaro and Aguascalientes some actions that we hope will conclude in the creation of the Mexican Cereals Board of Trade. At the moment, 80% of the irrigated farmland in our state is in cereals, and we foresee a great opportunity to change this situation because there are 73 different crops that can be successfully grown in Guanajuato. We feel that we have some advantages over our partners in the free trade agreement in accessing greater market share and new markets. All we need is to generate appropriate technologies in post-harvest management, transportation and increasing the shelf life of our products. And, most importantly, we need to change the methods of marketing domestically and for export.

The worst issue that we have to solve is the financial issue. In this respect, there is very little that we can to. The infrastructure that we have in irrigation, for example, is infrastructure that was built in the early 1940s or before and was never properly maintained. Foreign loans to our country have to be approved by the Department of Treasury and subjected to its rules, which discourages foreign lending and makes it difficult to access the capital needed to maintain and make more efficient the use of our natural resources.

Financially, private enterprise has been very limited because agricultural activities cannot succeed with the high interest rates that are set by the market in Mexico today.

Agriculture in Mexico has not been able to secure adequate collateral for national or foreign bank loans, and neither have the banks wanted to invest in agriculture.

Nevertheless, there is a great opportunity for investment in agriculture in Mexico, especially for businesses interested in developing long-term relationships. My personal experience has showed me that the most important thing for investment promotion is to build mutual trust, mutual trust among agri-businessmen in the three countries, mutual trust in the expertise available in each country—mututal trust that is achieved through good will and honesty.

**Mr. Stephen Barnard,** President/CEO, Mission Produce, Inc.

**Mission Produce in Mexico**

Mission Produce started out as an avocado shipper in Oxnard, CA in 1983, and since then has grown to be an international produce shipper. We market all over the world—the United States, Europe, and the Far East. We ship avocados out of Chile and New Zealand, and recently mangoes out of Brazil. But Mexico is where our main focus has been. We have an avocado packing house and two processing plants for guacamole. Our main office is in Uruapan, Michoacán. We also have a mango packing plant and a lime deal in Veracruz with the Zambrano family (out of Monterrey), with most of the limes being exported to the United States and some to Europe and Japan. In Monterrey we have a warehouse for storing and shipping product coming in from Michoacán and the United States.

Today, after 13 years in business, we are at about $80 million in sales of fresh avocado. We represent 16% of the avocado industry, over 1,400 growers here in Southern California. We supply 50% of the avocado market in Japan year-round—which explains why we got involved in Mexico. In 1985, Dole Fruit approached us to sell them avocados for shipment into Japan year-round. This meant we had to go into Mexico where avocados are totally opposite season from California (here from March through about the end of August and then we switch to Mexico). We started with a co-pack arrangement and then in 1986 bought a piece of property outside of Uruapan to plan for our long-term future in Mexico.

In 1990, we got into the processing business. A lot of the food service chains—for example, Taco Bell, Chilis Restaurant—were buying frozen product instead of fresh product and we were losing market share. At the same time our competition was subsidizing the growers based on the profits they were making in the processing business. So we needed to get into the processed product business. We got together with the J.R. Simplot Company (a large frozen food business based in Idaho), which had the R&D, engineering, technology and distribution capabilities we needed. With Simplot we started a 50/50 processing plant joint venture in Morelia, Michoacan, with state-of-the-art machinery worth several million dollars of investment. We bring in the product from

Uruapan, wash it, ripen it, process and package it and ship it out within two hours. From this plant we supply Taco Bell exclusively worldwide.

In 1993, we built a fresh avocado packing house on our property in Uruapan. We had been using a co-pack arrangement for years and it had been difficult to introduce new products because our co-packer was basically looking for something easy and fast and to keep it simple. But the shipping business doesn’t work that way. It isn’t production driven, but market driven. You have to do a lot of different packages to meet customer needs. So, we built this facility and it is now the largest packing house in Mexico. We pack 50 million pounds of avocado a year and ship mainly to Europe, Japan and Canada. As of today we still are not permitted to ship fresh product to the United States. We size and weigh every single avocado by computer. It’s a very labor-intensive operation and we work round-the-clock for ten months out of the year.

Today in Mexico we employ over one thousand people. We own or control five facilities, packing and exporting over 4.5 million boxes per year (45 million pounds or 1,125 truck loads). Export sales from Mexico are about $30 million in fresh and $15 million in frozen. The value of our assets in Mexico is somewhere between 7 and 10 million dollars.

The question is, where do we go from here? Where do we go next? How do we increase investment into Mexico?

First, stabilize the political environment. That is a big concern. The agriculture community in California is afraid of Mexico, basically, from what they read in the newspaper.

Second, is the banking issue. We have operated in Mexico with California assets. We have not used any Mexican banks, with the exception of transferring money and checking accounts. You cannot pay 30% interest and make it work. And there is not a U.S. bank that I know of that will lend using Mexican assets as collateral. So you have to have a lot of cash to operate in Mexico. Maybe there can be some joint efforts between the Mexican and U.S. banks. If you want to increase investment something has to be worked out in this area.

Third, you have to eliminate the barriers to entry. We are in processing and marketing but have not entered production. In the future we need to get into production to guarantee supply. You can’t go out and lock up these contracts on a year-round basis forever without some sort of hedge against supply problems. But with the 49/51% ownership restriction, we are not going to invest in production. We’re not going to invest 100% and get 49% return. If we did invest, Mexico would benefit from improved production, new technology, growth in exports and the tax base, and a better use of its resources.

All in all, Mission Produce is very excited and positive about doing business in Mexico. One good thing is the attitude of the Mexican government in promoting export companies—much better than the U.S. government attitude. However, we could and would do more if the restrictive rules were changed.

**Mr. Douglas A. Bullman**, Vice President, Monterey Mushrooms, Inc.

**Monterey Mushrooms Operating Experience in Mexico**

I am Vice President with Monterey Mushrooms (headquartered in Watsonville, CA) and General Manager of *Champiñones*, our wholly owned affiliate which is a mushroom farm located in San Miguel de Allende, Guanajuato. Monterey Mushrooms is the largest mushroom grower in the United States, with six mushroom farms that produce 100 million pounds of mushrooms each year. We also have two mushroom canneries, a mushroom fertilizer business and three seed manufacturers.

In early 1995, we purchased Champiñones San Miguel from the Pillsbury Company. We had two reasons for doing business in Mexico: 1) to provide a source of mushrooms at lower cost than those grown in the United States, in order to be competitive in canned mushrooms with Asia, specifically China and Indonesia; 2) to develop a mushroom business within Mexico, a small market but one where the pre-devaluation mushroom prices had been higher than those in the United States. We have now operated this facility for approximately 18 months.

Champiñones is large as mushroom farms go, the 15th largest farm in North America. We have 450 employees and will produce approximately 16 million pounds next year. Our facility is in most respects state-of-the-art. For example, we use a new technology for composting raw materials which is being used in only a few mushroom farms in Europe and is not used elsewhere in North America. We have a very active R&D program that focuses both on mushroom productivity and quality.

We also have an affiliate cannery, *Alimentos San Miguel*, which processes much of our mushroom output for sale to export markets and within Mexico. Alimentos cans for Green Giant, U.S.-based retailers, Mexican retail clients and importers in Central America and Japan. Alimentos has 150 employees.

Now I would like to describe a few of our experiences and business practices in Mexico and contrast those to the United States.

<u>Employment: Workers, Productivity, Costs</u>

Mushroom growing is a people-intensive business. In the United States, 50% of our plant costs are labor costs plus benefits. As a result, labor wage rates and productivity are critical factors for success in mushrooms. At Champiñones, two thirds of our workers are unskilled and in Guanajuato the minimum wage for these workers is approximately $5.00

per day, including benefits. We pay above the minimum wage, but our unskilled labor rates are still only 1/8 of those in the U.S.

From the standpoint of productivity, there is not a perfect comparison between our workers in Mexico and the United States because of different technologies used on the farms. However, if we look at harvesting we can get a rough comparison of productivity. In the United States, our harvesters pick an average of 60 pounds of mushrooms per hour compared to an average of 30 pounds per hour in Mexico, or one-half the U.S. rate. Also, our harvesting needs in Mexico are simpler than those in the United States because we are picking for processing, so we might say that pickers in Mexico are approximately 40% as productive as those in the United States. This may be explained by the relative lack of experience of the Mexican workers.

Thus, with labor rates 1/8 of those in the U.S., and productivity at about 40%, our labor costs per unit in Mexico come to approximately 30% of those in the United States. This is a very significant economic savings. However, because our Mexican workers have much less experience, we invest more time and money on training than we do in the U.S. Also, we provide several additional benefits to employees such as subsidized lunches and transportation to and from work.

## Raw Materials

In mushroom growing, wheat straw is one of the most important raw materials; it is used for making compost, the growing medium for mushrooms. Champiñones uses about 12,000 tons of wheat straw each year.

In the United States, we simply purchase wheat straw from agricultural brokers who supply the straw at the time and in the form that meets our needs. In Guanajuato we found that straw was not available in large bales, which we need to simplify storage and handling. We asked our straw providers to purchase bales at $50,000 each. However, as small businesses, they could not get financing or could not afford the high interest rates. So, we ended up purchasing four balers ourselves and selling them over three years to our providers. We also have to purchase and store a full year’s worth of straw in a six-week period.

## Infrastructure

Our biggest problem has been with the terrible quality and service of the telephone system, Telmex. Now that Telmex is being privatized it is becoming a much better vendor, providing us with high quality, up-to-date service, including a link from Mexico to Sprint in the United States.

Second, the postal system is so bad that it doesn’t get used. We end up using UPS and other courier systems to pay bills and handle routine correspondence.

The toll road system is good but expensive. Electrical power supply is adequate and costs about half of what it costs in California. We have no natural gas and thus are forced to use diesel for our boilers.

In sum, with the exception of the postal service and lack of natural gas pipelines, the infrastructure is generally adequate and improving.

Vendors

One of our biggest problems is the poor attitudes and poor capabilities of our vendors. Even though we are a highly vertically integrated operation, we still rely on a lot of vendors. We experience three key types of vendor problems: failure to keep promises; poor quality products and services; inappropriate pricing (e.g. charges above the U.S. rates for worse quality). We are working hard to train our vendors to meet our needs and will continue to give more business to those that are able to understand and adapt to our needs.

Markets and Marketing

The market for mushrooms in Mexico has been very disappointing for us, we think primarily due to poor economic conditions. Mushroom consumption throughout the world is directly related to levels of income. Unfortunately, the Mexican economy—and the market for mushrooms—has had a very difficult time since the devaluation.

Compared to pre-devaluation conditions, the peso price of mushrooms has remained constant, meaning the dollar-equivalent grower price for mushrooms has dropped 60%, from about $1.50 per lb. to about $.60 per lb. At the same time, dollar-equivalent production costs have dropped by only about 25%. As a result, there has been a tight squeeze on grower margins and our sales volume and margins on business in Mexico are below plan.

On the other hand, our largest market is the U.S. market for canned mushrooms, and the devaluation helped us to be competitive in this market as well as in other foreign markets. Where Mexico once imported mushrooms from the United States, now trade moves in the other direction. We are not fully price-competitive with certain low-wage countries in Asia, even with lower duty rates, but our proximity to the United States gives us a marketing edge there and throughout North and South America.

Conclusions

Our experience over the last 18 months suggests several conclusions about the potential for agricultural business in Mexico:

1. Businesses that make intensive use of unskilled labor can have a significant advantage in Mexico.

2. Our role with vendors in Mexico is much different than in the United States. We have fewer vendors, we train them to do business with us, and we provide financing to many of the good ones.

3. The infrastructure is adequate for our purposes, with the exception of the postal service and the need for wider availability of natural gas.

4. Our market within Mexico has not met our goals, but our exports have become more competitive. We do expect the market for our products in Mexico to get stronger as the economy improves.

**Ing. Francisco Obregón**, Undersecretary for Economic Development for Southern Sonora, Mexico

**Agribusiness Investment in Sonora**

*Ing. Obregón began his presentation with an overview of the Sonoran economy and infrastructure, including the following information: second largest state in Mexico with 365 miles of border with Arizona and 750 miles of coastline; population of 2.1 million; last five years enjoyed a trade surplus compared with several pre-crisis years of trade deficit; 60% of total agricultural production is exported; Sonora has five international airports, a modern highway system, and a deep water port at Guaymas.*

Sonora has the necessary human resources to meet the challenges of future agro-industrial development. It enjoys a diversified economy—agriculture, livestock, fishing/aqua-culture, tourism and manufacturing. Its greatest asset is its abundance and diversification of agricultural commodities (1.7 million acres of cultivated land). The main winter crops are wheat, corn, sunflower, garbanzo beans and vegetables. The main spring-summer crops are cotton, sorghum, corn and sesame seed. Perennial crops include alfalfa, citrus, grapes, pecans, asparagus and olive trees. Sonora is called the bread basket of Mexico.

Cotton has become a very important commodity, with 210,000 acres cultivated today. We want to industrialize not only Sonora's cotton but also California, Arizona and Sinaloan cotton. We have abundant water and energy, we just need the technology.

In the past decade, fresh fruit and vegetable production has gained importance; 205,000 acres are now being grown, representing 12% of total cultivated area, 60% of all agriculture-related jobs and 40% of total value. Produce has been grown commercially in Sonora since 1925, when vegetables were shipped directly to several U.S. locations in refrigerated Pacific Fruit express rail cars.

Today, many foreign groups are investing in Sonora to increase their export base. They bring dollar income to Mexico and create jobs. Some examples of joint ventures:

- In Wisconsin, General Foods just signed a joint venture agreement with Mesoro, a Sonoran company, to produce turkeys;
- A Canadian vegetable company is partnering with Mexican farmers in growing European cucumbers and other fine greenhouse products in Ciudad Obregon to supply Canadian market niches;
- Tanimura & Antle from Salinas is growing celery in Sonora to supply U.S, Canadian, Hong Kong, Japanese and Singapore markets;
- Lee Brands and Dole are partnering with asparagus farmers from Caborca and implementing sophisticated irrigation systems in conjunction with BANAMEX;
- Sacramento table grape farmers are investing in Hermosillo in table grape production;
- Green Giant has a partnership with southern Sonora's cannery plant for packing sweet peas and other commodities.

Foreign investors are participating in agricultural production through several innovative mechanisms that have been implemented in Mexico to encourage partnerships between investors and producers. This includes the "agricultural maquiladora," which allows the foreign investor 100% ownership of the Mexican-based corporation and importation of production machinery, inputs and packaging materials free of import duties. The maquila corporation signs a lease or associates with the Mexican counterpart for the use of land, buildings or any infrastructure needed for production.

Direct foreign investment is also present in Sonora. For instance, Pepsico has a Sabritas plant in Obregon and also a Gamesa cookie plant. But Sonora continues to need more foreign investment in agricultural production and processing. The Mexican banking system is just starting to support agriculture; outside capital is still very important.

Most California and Mexican farmers and food processors see each other as competitors. Yes, we are in some instances; but there are abundant possibilities for complimentary use of resources if we become creative and find good ways to cooperate. We need processing and marketing technology, and we can provide raw materials, water, land, transportation, infrastructure and people. Let's not be competitors, let's be complimentary and find new markets in the Orient, in Europe and Latin America and also within Mexico and the United States.

**Discussion/questions**

**Robin Marsh** (for Stephen Barnard): You'll see in the next panel that we are going to be focusing on small and medium size producers, and there are many such avocado producers in Michoacán. In a sense, the idea that Mission Produce would get into its own production might contradict the hope that you would reach out to cooperatives, to small producers as a source of supply. I am wondering what is the main barrier for you to source where farmers have surplus avocados that they would like to sell to a sure market like your processing plant? What is the problem with relying on them for fresh supply?

**Stephen Barnard**: We do it now. The problem is that the market changes every day and you don't know if it's going to be high or low. If I were to need one hundred million pounds of product, I would like to contract for about one-third of it (and produce the rest). You would still have the opportunity to go outside for product but at least we would have a hedge so we're not shut out one day for whatever reason.

**Robin Marsh**: So, you're predicting a lot of growth in the future?

**Stephen Barnard**: Absolutely, I mean consumption is going up.

**Roberta Cook**: I would just add that the supply stability issue is really a critical issue for any kind of food processing firm. People don't make multi-million dollar investments unless they have an assurance over the regularity, cost and quality of the supply. We have a good example of what goes on in the processing tomato industry. Mexico has trouble competing in processing tomatoes because the processing tomato sector is located in Sinaloa where it's a dual market; farmers can sell fresh or for processing. In California our processing industry is totally different from the fresh industry; it's a dedicated industry with special varieties and the processors know exactly what the deliveries are going to be on a weekly basis.

**Stephen Barnard:** Just to carry that one step further. If you look at the lime business, you have a better example. A lot of the lime farmers dry farm and so a lot of the quality is not exportable. If you went in and had your own orchard, irrigated, fertilized and sprayed, you could produce a quality lime, exportable 95% of the time, where now it might be 5%. In avocados, if you take the general pack-out rate on a Mexican ranch it would be about 35% as compared with a pack-out rate of about 90-92% on a California ranch. If you implemented some technology with vision, did it right, you can send the product to Japan and get top dollar. It all comes back.

**Vernon Crowder**: Let me pursue that thought, because I find this interesting that you are saying there are quality problems in Mexico. Here in the United States a lot of the large packers and processors, like Dole, have actually backed off from getting into production because they see lower margins there and more management problems than they want to get into. Again, Robin's point is, what is to keep you from helping with that education process for these (Mexican) growers?

**Stephen Barnard**: Nothing is keeping us from doing it. We do it now, but I am also saying if you want it done right, you do it yourself.

**Vernon Crowder**: OK, so you are much more comfortable with having hands on at this point.

**Stephen Barnard**: We're really not doing it for the return on investment. It's more of a position, knowing that you will have high quality limes you can sell to Japan year-round, rather than say, "God, I hope old Joe out there has put the fertilizer on this year."

**Roberta Cook:** The dual market issue is also important in limes in that farmers in Mexico can sell in the domestic market. There is a big demand in the domestic market for fresh limes, so processors never know what price they are going to have to pay.

**David Runsten**: Mexican producers have a big advantage in that sense. For instance, Javier Usabiaga produces all the vegetables for his processing plant, where the U.S. firm would have to contract for product and deal with trying to control everyone. I wonder about that, about the change in land tenure arrangements and whether U.S. firms will be allowed to own land and get into direct production. I think it's an interesting point because the U.S. firm is at a distinct disadvantage (with current land tenure restrictions).

**Javier Usabiaga:** I don't see any disadvantage. When we started our business, there were not any farmers that we could trust. By the same token there was big competition for growers from the American companies. They had their hands on good farmers and the way they kept them was they paid top dollar for their product, made capital investments, gave lots of services and offered long-term payment terms. We were a small firm with no capital so that was the reason (we went into production). Instead of investing the capital in somebody else we invested in ourselves. But today we are changing; we now have two agricultural companies and one marketing company. We are trying to extend our experience and our market share by contracting with other growers, and open new doors for new crops that we cannot grow ourselves.

**Raul Hinojosa**: There were a number of comments made about the need for banking, particularly international banks, to get more involved to facilitate some types of investments. I was wondering if there were any comments from Orlando or Vernon (Bank of America) on some of these issues. It was fascinating that Stephen Barnard talked about a thousand workers/jobs from a seven million dollar investment in Michoacán. If we could start getting those types of investments through some kind of participation of international banks…..

**Orlando Loera:** One of the more significant difficulties in Mexico, from a lender's point of view, is collateral rights. The inability to exercise your rights over collateral effectively precludes a lot of our normal lending practices in the United States. In the middle market, for example, in the United States you have a very well documented and followed UCC [Uniform Commercial Code] practice, where you register your leans not only on assets as they exist today but on future assets as they are created. That's not as efficient as it could be in Mexico where it proves difficult to create leans over future assets. As far as fixed assets lending, I don't know what our present experience is right now in Mexico. Generally the Mexican banks have always been very aggressive at fixed asset lending. There is, finally, the point of lending hard U.S. dollars for peso purposes, which ultimately lies with the Central Bank to maintain an equilibrium.

**Raul Hinojosa**: Does Bank of America have a partner, a major partner bank in Mexico?

**Orlando Loera**: I'll bravely state that by having the subsidiary down there, maybe we (Bank of America) didn't have the particular need at this time. Wells Fargo, if I'm not mistaken, does not have a presence in Mexico, so they may have found an alliance convenient for their needs. Jim, do you know much of this alliance?

**Jim McCabe**: The alliance was much celebrated but I don't know if it took effect. Another thing to point out too is the issue of location. It is not a coincidence that 110 foreign banks are in Mexico City and not throughout the rest of the country, because many of the larger corporations and local banks are likewise headquartered in Mexico City. Lending goes on where the customers are. So, one of the strategies of the Bank of America has been to get into the local market place and open offices throughout Mexico to serve companies doing business in different areas.

**Vernon Crowder:** I am not familiar with Mexico, but I will make these observations based on what I have learned from history and what has made our (Bank of America) relations with agriculture work well in California and the U.S. We do have systems for tracking collateral and helping ensure repayments in judicial settlements; we do have title insurance.

I am not sure you should expect us to do something that your own Mexican banks don't do. In our country, I observe that our politicians, our congress, our government frequently try to solve all problems with more credit, but credit is not equal to profits. Sometimes credit is the last thing that industry needs. The primary thing that has been very good for our agricultural industry has been equity capital, and somehow we have had plenty of incentives for that kind of equity investment because of clear property rights. It's that equity investment that you need and it's those incentives that you need, and whatever you can do to provide incentives for equity investment from the outside and internally, then the credit will appropriately follow.

**Orlando Loera**: In the United States it takes me approximately 16 minutes to get a full credit check on anyone who has a social security card. That allows you to make a quick decision initially as to whether you wish to proceed. If we had a request of the Mexican government, it would be to support aggressively the creation of a credit bureau and insist that your domestic banks share their information, as good as they have it, with that credit bureau. The obstacle becomes one of proprietary rights to information and this desire to retain their customers without sharing it. Also, there is a need to support the activities of legal counsel in the United States and Mexico in the creation of a UCC registration system. That challenges a big industry in Mexico—the *notario público*—and that's about as powerful as the American Medical Association in relative terms.

**Robin Marsh:** Ing. Obregon, we heard from Stephen Barnard and Doug Bullman that their operations in Mexico are almost 100% financed by their American banks and partners. And you have mentioned a long list of other joint ventures with foreign partners in Sonora covering many different commodities. I wonder, is that the situation for all of these ventures, whether they are European, Japanese or U.S. companies? Are they all funded by their respective banks in their countries of origin or are you seeing in Sonora some lending from the Central Bank or Sonoran banks to these operations?

**Francisco Obregon**: There is one means of finance not mentioned—the informal financial system, which means an arrangement is made by the producers with their marketing person at the border. These companies at the border advance money and seed, fertilizers and other inputs necessary for production and packing. That way they are assured that the farmer is going to sell through them and that's very negative for that particular farmer because he is stuck with only one type of marketing, and not usually the most efficient type. But that has to happen because in most cases the banks are not lending. This is an opportunity for U.S. bankers to understand this mechanism and the large amount of money being lent informally, which is not the best for the farmer but is currently necessary if he is going to farm at all. Sometimes there are very serious companies at the border, but sometimes they are fly-by-night brokers that will provide money but don't have good marketing and registration access.

The joint ventures that I was talking about in Sonora are financed from other countries. They bring money; most of the time they never ask Mexican banks for money.

**Robin Marsh**: Not asking because of low liquidity or high interest rates?

**Francisco Obregon**: High interest rates mostly. I would say that's the primary reason, because of the rates so high. Plus, short-term payback periods.

**Doug Bullman**: In our case, we don't need Mexican financing because most of our foreign companies are exporting, earning dollars or yen, and we get banking in the United States as a result of it.

**Alain de Janvry**: I have a question on labor. I found very interesting the figures that Doug Bullman gave, about a 1 to 8 wage-rate gap, and also the need for training and to give incentives. Once you create skills, you also create higher incentives to migrate. You invest in the labor force and upgrade skills but you also, in a sense, induce a higher turnover in this labor force. At the same time as you invest you also need to do things to retain the labor that you are training. So, if we take into account not only the wage gap but also the cost of training and what must be done to retain workers and reduce turnover, so as to capitalize on the investment you are making, what is the real gap in wage cost?

**Doug Bullman**: One of the advantages of being in Guanajuato is that while we do have migration to the United States, it is certainly not as much as would happen in Sonora or Baja. Our turnover in our facility averages 4% a month, which is high by U.S. standards, but is very good in Mexico. Facilities on the border average 30% a month turn over. We tend to retain our workers. Two-thirds of our employees have been with us as long as the facility has been around.

**Roberta Cook:** Let's go to David Mendel. He's had a lot of experience in the U.S. vegetable industry working for some of the large players. He has put together, as we say in the trade, a lot of deals for joint ventures between Mexican and U.S. firms.

**David Mendel**: I had a follow-up question that parallels with the last question. With a lot of crops in California, there was historically a belief system that the wage-rate differential was sufficient incentive to motivate people to go to Mexico, because it was cheaper. But building a little bit on this, at the end of the day, when you added it all up, including the externalities and other problems you incur, those variances were blurred. Now people are going to Mexico, like Steve has said, for marketing reasons and counter-seasonality. My question to Doug is, at the end, when you compare your expenses in Mexico versus your expenses in the United States for similar fresh product, where do those figures come up?

**Doug Bullman**: Our cost per pound in Mexico is about 45% of our U.S. cost. But that's a straight comparison. In the United States, we produce for the fresh market while most of our output in Mexico is for processing which doesn't require the same quality as fresh product. I would guess our cost per pound adjusted for the quality difference might be 60% that of the U.S. cost. By the time it gets to the border, assuming away duties, it would be about 75% to 80% of the U.S. cost.

**David Mendel**: Are there any other costs at the border or warehouse facilities where you would possibly be pushing close to parity (with U.S. costs)?

**Doug Bullman**: In mushrooms, the margin in the U.S. is only 10%, so if you make 20% on the plant in Mexico it's only 10% more but it's twice as much.

**David Mendel:** I understand and I didn't mean to minimize it. It's just encouraging to hear from somebody else, that in fact when you do comparable math and actually try to equilibrate, the seduction of the variance in wage rates is shown to be somewhat misleading and short-sighted. Furthermore, if one takes a longer-term view, training workers and coming to depend on those low wage rates gives a somewhat false horizon. At some point, I would suspect, as Raul talked about, this wage variance is going to come closer together.

**Roberta Cook**: In the United States, Doug, what percent of your production is fresh?

**Doug Bullman**: 88%.

**Roberta Cook**: Exactly. In Mexico, what percentage of production is processed?

**Doug Bullman**: 80% is processed.

**Roberta Cook**: Exactly. Just to make clear that we are not talking about apples and apples.

**Carol Zabin:** We do see in a variety of crops that labor productivity is a lot lower in Mexico and it's surprising in some sense because Mexican workers are working on both sides of the border. Also, it seems like you are using state-of-the-art facilities which are quite capital intensive, so maybe there isn't that much difference in the technology used on both sides. I bring this up from a public policy perspective. For Mexico, foreign investment is attractive because it creates jobs, but in the long run the wage levels of those jobs are also important and to the extent you can't increase wages until you increase productivity, I am wondering what are the constraints on productivity of labor for you?

**Doug Bullman**: For us, once again, the statistics are that in the United States average pickers pick 60 pounds per hour, in Mexico it's 30 pounds per hour. Tenure is significant, an average of 2 to 2.5 years in Mexico, while in the United States our pickers average 15 years.

**Carol Zabin**: Is there that much skill involved? Does it take 15 years to be a fast picker?

**Doug Bullman**: No. We have different incentive systems. We intend to institute an incentive system for our harvesters in Mexico. We've not done that yet; we've paid a straight hourly wage. Also, our workers in Mexico average 18-20 years old and they would rather be in town dancing than be working on a mushroom farm. In the United States our average picker might be 35 years old with a family to support and, therefore, wants to work harder. It's more important to him. There are a number of differences.

**Francisco Obregon**: Take state-of-the-art harvest machines for iceberg lettuce from Salinas as another example. The same machine in Mexico had 50% of the productivity—1,200 cartons per day in Ciudad Obregon vs. 2,400 per day in Salinas. The point is that in Salinas, the harvester has been a lettuce harvester since he started with the company 15 years ago. That's all he does and he's got a lettuce foreman and that's all he does. In Mexico, on Monday and Wednesday you are harvesting lettuce, on Tuesday and Thursday you are harvesting celery, on Friday broccoli, and on Sunday, Monday and Tuesday you are transplanting and thinning. So, there is no way that the training can be excellent. Also, the reason why the productivity was 1,200 versus 2,400 cartons per day is because the acreage in Salinas was possibly 50,000 and in Sonora was only 1,000. So, again we are not comparing apples with apples.

**Roberta Cook**: What Francisco is actually saying is that there is a value to specialization and I think that is something that we've all observed in looking at the labor issue in Mexico. There's another point that should be clear from this discussion, that is, the trade-offs that you heard earlier between Steve Barnard and Javier Usabiaga and how Javier's company has changed its attitude over the years with regards to the risks and benefits of their backward-vertical integration and growing the product themselves versus contracting with producers. It all has to do with the availability of a quality pool of growers and that's different by region. Such a pool has been developed now over a period of twenty years in the Bajío, which is enabling Mr. Usabiaga to reconsider that perspective. Which ties into your earlier point, Robin.

Another example is the Del Monte company, which has branched out into melons in Guerrero, and although it sounds incredible to me, I heard that they were contracting with something like 1,000 small growers to get the product they needed in a particular season. Just overwhelming transaction costs that we have to keep in mind.

**Vernon Crowder**: We use the terms skilled and unskilled labor a lot. I've witnessed among our customers in California the difference with labor that has a mature attitude, regardless of whether they are picking table grapes or fruit off a tree. If you talk about years of experience and the appropriate attitude, the productivity is very different between workers. There is skill involved. It takes a lot of experience to pick well.

## 2nd Afternoon Panel

**Investment Opportunities with the Mexican Small Farm Sector**
**David Runsten, Economist, NAID Center, Moderator**

(Discussion followed the panel presentations.)

**Dr. Robin Marsh,** Agricultural Economist and Senior Research Associate, NAID Center, UCLA
**The Potential for Smallholder Fruit and Vegetable Production in Mexico: Barriers and Opportunities**

*(Robin Marsh summarized her research with David Runsten on the potential for small-holder fruit and vegetable production in Mexico, and referred the audience to the Marsh/Runsten paper in the binder for more complete information.)*

Dave Runsten and I have been collaborating for a number of years on research, funded in part by the Bank of America, to look at the potential for Mexican small and medium-size producers to diversify from grains into higher value, higher risk, higher return crops, focusing on fruits and vegetables. Roberta Cook has told us that we need be cautious and not assume that there is unlimited demand for horticultural products, but there are certain niche markets that are still growing. We were interested in identifying the opportunities and barriers for these small-holders to participate in horticulture, particularly for export, but also for domestic markets.

First, we were interested in seeing who among Mexico's small farmers is already engaged in fruit and vegetable production that could be intensified and improved for new markets.

Data from two surveys of *ejidal* agriculture in 1990 and 1994 (SARH/CEPAL, SARH/SRA) show that 625,000 ha of *ejidal* land, or 4.2% of the total, are in fruits, and 384,000 ha, or 2.6% of the total, are in vegetables. Together that equals about one million hectares in fruits and vegetables farmed largely by small-holders, primarily for domestic markets. That equals about 20% of total *ejidal* irrigated land, meaning that most *ejidal* irrigated land is used for growing lower value grains. There could be some further conversion/diversification of this land to more intensive, high-value crops if producers are linked with adequate markets.

In terms of numbers of producers, the census data show that about 320,000 *ejidadarios* out of a total of 2.2 million, or 15%, grow fruits and vegetables. In terms of finding grower partners for joint ventures, we see there is a substantial population that already has some experience in horticulture. Sixty percent of *ejidal* fruit and vegetable growers have irrigated land and 40% cultivate rainfed land, much of that in the tropical Southeast. Regarding fruit and vegetable production by state, the states with the largest number of *ejidal* producers are Veracruz, Oaxaca, Puebla, Michoacán, Guerrero and the Yucatán.

Briefly, a look at the favorable and unfavorable impacts of a few of the recent government reforms on diversification by small-holders. The removal of input subsidies has had an unfavorable impact by increasing the costs of production, but at the same time has pushed growers to consider conversion to higher-return crops. Reduced support for agricultural research and privatization of extension limit Mexico's ability to resolve production quality problems and compete in global markets. In particular, there is very limited research on fruits and vegetables, and the best agronomists are hired by the larger growers. On the positive side, privatization of extension means that farmers are not obliged to take the advice of whatever agronomist BANRURAL sends their way. They have some control over the specialists they hire and often their fees are tied to productivity gains. Regarding NAFTA, the impact on fruits and vegetables has generally been very favorable, especially since the peso devaluation, but Mexican agriculture also continues to face serious import competition from its NAFTA partners (e.g. deciduous fruits from California and Washington) and from Chile and Argentina.

From the eleven case studies that we conducted in Mexico over the last few years in ten different states, covering a variety of fruit and vegetable crops, types of partnerships and markets, we were able to identify the major barriers for small-holders to succeed, particularly in export production: 1) marketing, 2) transaction costs,3) undercapitalization, 4) technology, 5) cultural factors, and 6) labor migration and labor costs.

These barriers have been discussed in other presentations, but the reason that I bring them up again is that the next panelists will be addressing how their firms are attempting to overcome them in their partnerships with small Mexican producers. Earlier, Stephen Barnard mentioned that the transaction costs and risks of relying exclusively on small farmers for supply are too high, so Mission Produce hopes to get into direct production.

You can refer to our paper for a description of the special opportunities and advantages of working with small-holders.

From our research in Mexico, we observed a number of failed attempts at diversification and marketing by small-holders, and successes as well, but probably more failures than successes. Consequently, Dave and I came up with an alternative model for diversification of ejidal agriculture that outlines the chronological steps that a new project should undertake to avoid failure, especially when the principal grower partners are small farmers. This is a model that we hope to test by developing a series of export production projects in Mexico oriented toward markets in the U.S. and Europe.

In this model, you first identify sustainable opportunities. You discover from the start whether there is market potential, adequate land, water and labor. Conduct a market study early on and design a marketing strategy. The important point here is the chronological order. These steps need to take place even before you begin production. Organize the producers in associations/cooperatives to reduce the transaction costs. Obtain start-up capital through domestic loans, government programs, partner investments and advances or grower self-financing. Then you get into the production phase and need to secure appropriate technical assistance to ensure good quality. Finally, start small and plan growth. Don't get beyond the number of producers that can be managed well.

**Margi Clarke**, Director of Business Development, Earth Trade (not present)

**Earth Trade, Inc.: Background, Achievements, Obstacles and Next Steps**

*(Robin Marsh gave a presentation she worked on with Margi Clarke, Director of Business Development, Earth Trade, who was not personally able to attend the conference.)*

Earth Trade is a for-profit marketing company based in Oakland, CA, founded by the investment firm Progressive Asset Management (PAM) in 1992, to sell organic commodities produced primarily in Central America to wholesale manufacturers and health food distributors in the U.S., Canada, Europe and Japan. Its capitalization is from two sources, a stock offering that raised 2.2 million dollars and short-term debt. The objective of Earth Trade is to provide market access for small and medium organic farmers and cooperatives in Central America and Mexico. Their major products are organic sesame seed and oil, organic beans, whole grain products, seeds and herbs.

In their "model of collaboration" Earth Trade provides their grower partners with assistance in the areas of production technology, credit and market access, either directly or through local development organizations. Note that these were the principal barriers for small-holder participation in export markets identified in previous presentations. Most of the Central American cooperatives were already involved in conventional sesame production, so it was not a huge leap to switch to organic production. But Earth Trade and local NGO support were crucial for becoming internationally competitive in organic sesame and for gaining access to export markets.

Another crucial element of the model is the local marketing affiliate with which Earth Trade conducts business for international marketing. It's very difficult to work directly with growers in conducting export business. Earth Trade works with local brokers—sometimes individuals and sometimes the same NGOs that are providing the technical assistance. These local affiliates sell directly into domestic and regional markets or to Earth Trade for marketing in the U.S., Canada, Europe and Asia.

What has Earth Trade been able to achieve in terms of economic and social development in Nicaragua, El Salvador, Guatemala and Mexico (1993-96)?

- Provide export markets for over 1,600 farmers in Central America and Mexico, putting some 3,000 acres into organic production.
- Prices paid to farmers for organic production are more stable and 15% to 30% above the same conventionally-grown crop.
- Organic methods have lowered production costs and increased crop yields (particularly on very infertile soils).
- Technical assistance programs trained over 200 farmers from five countries.
- Low-input and integrated pest management (IPM) techniques spreading to conventional farms and to subsistence crops.
- Diversification and organic production are competitive options for small farmers facing hard choices in the economic liberalization, post-NAFTA era.
- About 20% of organic cooperative members are women; organic herb gardening is particularly well suited for engaging women in viable export production.

There are also a number of important obstacles or challenges that Earth Trade has faced, that provide very useful lessons for other firms or individuals who may be interested in going into this kind of business. Lack of credit has probably been the number one obstacle. Denial of commercial credit to small farmers, high interest rates, liquidity crises in official banks, and skepticism about the prospects of organic production forced Earth Trade to extend production credit to affiliate NGOs and farmers, increasing their exposure and risk.

In 1995, sesame production in Central America was devastated by torrential rains that lasted throughout the "dry" season, coupled with a west coast hurricane in Mexico. Both events severely curtailed sesame supply throughout the region. This led to price speculation by intermediaries, causing Earth Trade growers to sell to other buyers for higher prices and hence problems meeting U.S. supply contracts. The need to purchase high-priced organic sesame wherever available to meet those contracts, as well as high default rates on farmer loans, resulted in serious financial losses for Earth Trade in 1995 and the first half of 1996.

We have referred earlier to this problem of lack of legal enforcement of market contracts when other buyers offer higher prices. Earth Trade's strategy is to overcome this obstacle by building long-term relationships with farmer partners through technical assistance, transparent pricing and co-ownership. The idea of these fair trade principles is to reduce mistrust and the inherent contradictions between farmers and marketers (e.g. farmers wanting highest prices, earliest pay, low quality standards versus buyers needs for lowest prices, latest pay, constant quality).

The other major challenge of this model has been the need to provide on-going training and technical assistance in organic production to improve crop yields and quality, especially in rotation crops, pest control and post-harvest management. The cooperatives need to develop their own working capital funds and hire trained technicians to ensure this type of support. Until now Earth Trade has relied on development foundation funding to support technical assistance, which is not sustainable in the long run.

Earth Trade is currently going through a major restructuring so that it can continue to be a viable firm. The reorganization plan includes several elements: 1) over 50% reduction of fixed overhead costs; 2) getting out of direct lending to farmers; 3) diversifying suppliers; 4) trading only in the most profitable commodities; 5) reducing dependence on short-term debt; and 6) obtaining shareholder and lender cooperation for the reorganization process to succeed.

In summary: "EarthTrade's mission is to accomplish financial goals based on socially and environmentally responsible production methods. The company has produced significant accomplishments in bringing small farmers up to the scale and quality needed to compete in the international market. However, Earth Trade's management inexperience, the sheer difficulty of the structural obstacles faced by small farmers, and the unexpected crop failures have taken a severe toll on the company. Re-stabilizing the company financially must take first priority over the coming year in order to regain momentum toward fulfilling the vision." Margi Clarke, 1996

**Lic. Antonio Ruiz Garcia**, Director General, Mexican Foundation for Rural Development (FMDR)

**FMDR Programs in a Restructuring Mexican Agriculture**

I will talk about what is the perception of our institution, FMDR, about the rural problem in Mexico, and what we have been doing now for thirty years. I will try to explain major events in recent years that have affected the rural sector, and finally, what we have been doing in recent years to deal with these major events.

The main problem in rural Mexico is the population problem. We have 27% of the population in Mexico in rural areas that earns only 9% of gross internal product. That means that we have nearly 75% of the rural population that is not dealing with the market or the global economy or even the national economy. They only produce for self-sufficiency.

The Mexican Foundation for Rural Development is a private organization that promotes rural development, with a focus to develop an entrepreneurial orientation for small producers. In the 1960s we developed a methodology to help them to conceptualize and build small entrepreneurial projects that would improve their living standards. During the same period, the government's vision for dealing with the small farmers was through technical assistance. We thought that extension strategies coming from the United States, for example, were useful for a producer that was already producing something for the market. But the problem in dealing with the small producers who are not related to the market is not only a technological problem. It is to help them build a whole concept of production projects—identification, organization and design of projects, putting into place administrative systems to deal with the projects, developing market relations, and then to finance the projects. This was a completely different concept to the technical or simple extension approach that the government in Mexico was promoting until the 1980s.

FMDR has been working with this concept now for thirty years in 24 states of the Republic. We work with 15,000 small producers, mainly in grains, milk and meat production (lambs and goats, not cows). We channel nearly 25 million dollars of investment funds each year through 32 offices in 24 states.

What has happened in Mexico in recent years? We see four major events that changed completely the vision of working with small producers. First and foremost, market liberalization—meaning that prices that used to be controlled by the government now are open and the farmers must learn how to deal with this. For you, this would be obvious, but in Mexico, where for over sixty years prices have been set by the government, this means a change completely unprecedented for small producers.

The second major event was the change in the Constitution. Everybody here has noted that the 27$^{th}$ Article of the Constitution has changed in recent years and this has created a lot of expectations about (increased) investment and changes in property rights and ownership. That hasn't occurred as we were expecting. However, these reforms have made possible an opportunity to make new combinations and associations in rural areas that would not have been possible before the changes to the law.

The third major event, and this is one that has affected our work most, is the trend for the state structures working with small producers to disappear. That means that the financial structure, for example BANRURAL and the strategy that FIRA used to have with commercial banks (forcing the commercial banks to lend to small producers), does not work anymore. Financial services for peasants are disappearing, as are technical assistance and the government marketing structures (e.g. when CONASUPO bought production surpluses from peasants). We see this as a logical move for the government. The problem is the lack of automatic response when government withdraws. We know the financial system didn't work, that BANRURAL didn't work. The problem is that it has disappeared from one year to the next and we have not developed anything else.

The fourth major event in the rural areas, as Jorge Kondo said, are the changes in agricultural subsidies. We see it on two levels. In terms of PROCAMPO, this is a way of giving the producers money without directing the money to anything, just giving them a check to do something. It was theorized that this program would help farmers change, to make a kind of production re-conversion. This has not occurred. The small producers have used PROCAMPO payments mainly as an income supplement, not as a production investment. And the *Alianza para el Campo*, only two years old, provides subsidies for what the government decides the producers should do with their land (for example, buy new varieties or animals). However, if you look at the production system of the small farmer, you'll often find that this money would be more usefully spent in another type of investment, not necessarily the investment that has been decided by the government.

In light of these four major events, what is FMDR doing now? Mainly, we have to tackle the financial problem. In Mexico it is necessary to build a rural financial system that encourages peasant saving and has access to the national financial system. FMDR has become a para-financial agent, as Ruben Yesin said, to take out loans from the commercial banks and distribute them to small farmers. This has given us a lot of experience in how to deal with lending to peasants. For example, a low interest rate is not the most important thing. It is more important to be timely, flexible and offer small loans. We have been doing this through the commercial banks. For example, we borrow US$10 million and distribute it in hundreds of small loans to the small farmers.

Also, we have developed good relations with big companies that produce and process in Mexico, mainly dairy production. We help small farmers, who cannot relate on their own, to form service cooperatives that enable them to achieve economies of scale for dealing more efficiently with the large processing companies. For example, an organization with 1,400 milk producers in Jalisco—and the biggest dairy production in the area—is Lechera Guadalajara. We are also doing this with corn producers and MASECA, one of the biggest corn processing firms in Mexico. We have organized small producers with 4 to 5 hectares each, up to a total of 20,000 hectares, to produce corn and sell to MASECA.

In these associations we have tried to demonstrate the advantages of dealing with small producers over the large producers. The small producer sector in Mexico can be viable, profitable and competitive. The problem is in which products can they be competitive. It would be difficult to be competitive in tomatoes or even in limes because of the very high and visible quality standards. But they can be competitive in milk and corn production, products where the visible quality is not too important. Also, it is important to focus on products that can compete not in terms of land productivity but in terms of low cost.

What we have in excess in rural areas is labor, not capital. So we must think of activities that could be promoted with low units of capital but high use of labor. This could be done with family entrepreneurial projects that take advantage of the “hidden” costs of family farms—land, management, labor. The family production unit, as in Europe or Asia, can be the most profitable per unit investment. FMDR has invested 25 million dollars with 15,000 producers in the last years or $1,800 per producer, on average. We can double the income of these producers with such an investment. To do so in the agroindustry sector you would need ten times that amount.

The advantage we have with the small producers is their capacity of working, of reducing costs and the ways they can be organized to transform and market their products. We don’t think that we have to build big productive units. We are more in agreement with the model in Europe or South Asia—small producer units at the family level.

Also, we think one of the challenges we are dealing with is to construct long-term relations between small producers and large companies. That’s important because the small producers who used to sell to the government haven’t enough experience to deal with the market. They value short-term income and care about the highest prices they can get, and not the long-term relationship. We think the solution is to work with genuine producer organizations that mature over time and are interested and capable of understanding our rural development approach.

**Mr. David Griswold**, President, Sustainable Harvest Coffee Company

**Coffee Production and Mexico’s Small Farm Sector**

I want to make two key points here. First, on a policy level, I want to try to influence coffee production in Mexico and make the case for how Mexican small producers, which make up a predominant part of the sector, can be encouraged to work smarter, but not necessarily harder. Second, I will briefly describe the Aztec Harvest experience, a company I founded with a group of 35 cooperatives in Mexico to market specialty coffee to the United States.

Mexico is the world’s fourth largest producer of coffee with 750,000 hectares, most of it in tropical shade forest, and 289,000 growers, over 90% small-scale and located in rural, often remote communities. The producers face a number of structural barriers, lack of credit and training. At the same time, the Mexican government is concerned about the poor yields of the coffee plants.

A new trend since the 1970s in coffee production throughout Latin America is called “modernization” or “technification”. Traditional coffee plants grow under a canopy of shade trees, whereas the new hybrids developed in the last 20 to 30 years allow coffee to be grown under full sun or mostly sun conditions. In essence, they are going from growing coffee in a forest system to something that looks like Napa Valley in wine. The change to hybrids means also that you need to add chemical inputs to achieve the desired yields and profits.

We've talked about the privatization or disappearance of key agricultural service industries in Mexico, including INMECAFE, the Mexican Coffee Institute. As a result, there is no longer any agency providing technical assistance to coffee producers, or at much reduced levels, nor key input, marketing, and storage services. These were services that farmers were fairly used to and suddenly in a period of one to two years were left hanging in the free market.

The United States is the largest buyer of coffee in the world, and the largest buyer of Mexican coffee. Coffee consumption rates in the U.S. are slowing. The only growth we're seeing is in the niche of specialty high quality coffee, a $2.5 billion dollar industry. Mexico is the world's top producer of certified organic coffee, which is a small but growing niche market. Within specialty coffee, which is about one-third of the U.S. market, organic coffee grew by 23% in 1995. Gourmet coffee, in general, grew by about 11% in the same year. People who are buying organic products are passionate about it; they have a lot of brand loyalty and it is good for small producers to have markets they can count on from year to year.

In addition to the large coffee companies like Starbucks, there are more than 1,000 micro roasters in the United States, up from 200 just ten years ago. Aztec Harvest marketed largely to these "mom and pop" roasters who buy smaller quantities of specialty coffee.

In looking at Mexican coffee and future steps to take, I want to make the point that Mexico has a competitive advantage in shade coffee. At Sustainable Harvest we've been working with ANACAFE, the Guatemalan Coffee Producers Association, to figure out the relationship between shade coffee and quality, a correlation that the roasters in Italy and other countries are beginning to realize. A move in Mexico toward hybrids may not be what we want. Modernization or technification has some undesirable impacts both on the quality of the coffee and the environment.

There is a huge potential market in linking coffee with environmental protection since Mexico and the U.S. share an ecosystem. For instance, migratory birds that migrate down into the Veracruz coffee fields are of great importance to the 60 million Americans that call themselves bird watchers. Coffee roasters are starting to say—those people are currently the "Folger's" crowd—how do we pull them into high quality shade coffee? Costa Rica and Colombia are starting to move back to the traditional shade varieties because they have found that the hybrids are creating a problem in their quality sales. Mexico can improve the yields of its traditional shade varieties.

<u>Aztec Harvest</u>: Aztec Harvest was developed to get small coffee farmers into the high quality niche, the premium coffee market. The project was originally financed with a grant from the Inter-American Foundation. A very effective element of Aztec was that it was producer owned. The marketing office based in the U.S. was owned by the producer cooperatives. The year that I left we were doing one million dollars in sales.

We used the wine model to market coffee from Mexico by its origin (i.e. Oaxacan Pluma Hidalgo). We found that the model extends beyond geographic location; that consumers want to know about the producers and their cultural traditions, the migratory birds and everything else about the coffee.

We made quality our top focus. That was sometimes a difficult idea to get across because not all of the producers in our cooperatives were producing quality coffee. We had difficulty getting farmers to understand that we were only going after one segment and were not interested in high volume. In Mexico, it has generally been a volume game rather than a quality game.

We invested five years of technical and marketing assistance, all paid for by our own operating costs. This helped us adapt quickly to new market opportunities, particularly organics. An example of our economic success is a cooperative based in Pluma Hidalgo, Oaxaca. When I started with them they were getting negative two cents against the commodity price for coffee for their best grown coffee. Last year (four years later) their average price was plus 28 cents over the world market price. We can't say that we have achieved this with every cooperative, but the model seems to work.

One of the reasons the model has worked is that we were very innovative in trade-marking the coffee name, which the producers owned and had to protect. They learned that if they discredit their name in the market because of poor quality, they will be the ones to pay the consequences. Some people have said, "Aren't you worried that once you have developed a name and invested all this money in marketing, the producers will leave you?" At the point when we are not providing the producers a good service, when they can find better markets, even if we had some legal contract that said you can't leave, I think that would not be serving a useful purpose. We need to stay on our toes to ensure that we're providing useful information and markets for them.

One of the things that we did that was most effective was to bring Mexican coffee producers to the trade shows every year, visiting roasters along the way. An example of how market intelligence can work well is the case of an Aztec cooperative from Chiapas that spent time in the U.S. at the trade shows observing Starbucks and the other coffee shops. They have now put up five coffee shops in Mexico—four in Mexico City and one in San Cristobal (Chiapas). They have been extremely successful setting up this value-added chain in Mexico. In general, more Mexican cooperatives need to expand into the local market and open up their own coffee shops before the U.S. franchisers beat them to it.

Aztec Harvest organic coffee is distributed in 30 states, mainly through the small roasters. In 1993, we cut a deal with United Airlines to sell coffee on all the UA flights from Mexico to the United States—28 flights a day. Ben and Jerry's ice cream company created an Aztec Harvest flavor of ice cream and told our story on the side panel. Five million pints were sold every year.

The company stalled when it came down to financing coffee sales. When the coffee market took off and the prices were higher, it was very difficult for us to get credit to finance our coffee purchases. I was the manager of Aztec Harvest but not an owner, so when I went to U.S. banks for loans I was told that they could not accept assets in Mexico for collateral and I didn't have enough collateral in the United States. Producers were also refused loans from the Mexican banks because they seemed not to believe that they owned a marketing office in the United States. In any case, we were not able to get financing at the necessary levels. Earlier, the coffee growers had sent their coffee on consignment until I could get customers, a sixty day turn around at the very minimum. When prices are high it's hard to convince your cooperative members to hang on that long, especially when they can sell locally at a better price.

One possibility for the future is to link funding for the production of shade coffee with environmental concerns for protecting the forest and biodiversity. Scientists at the Smithsonian have found that a shade coffee forest is as productive in terms of biodiversity as a natural forest. An innovative model of financing, if we could interest banks like the Bank of America, would be to secure loans for biodiversity-friendly coffee where the collateral would be both coffee and accounts receivable to roasters in the U.S. market. It is not difficult to find interested customers for the product because of all the different environmental elements that are combined—high quality, small farmer, and saving the rain forest. In the long run the cooperatives have to figure out how to access credit from local banks, with technical assistance provided by NGOs or foundations and marketing by partners in the United States.

**Mr. Larry Jacobs,** President, Jacobs' Farm/Del Cabo

**The Investment/Production Opportunities & Obstacles for Small Growers in Mexico**

There is a crisis in rural Mexico caused by diminishing economic opportunities. The development of viable production organizations composed of small growers addresses some of the worst north/south social-economic problems, illegal immigration being a glaring example.

Small growers present a unique opportunity for producing niche market crops for local consumption as well as for export to the United States, Canada, Europe and Asia. The very large number of hectares currently farmed by small growers in Mexico represents an unlimited production potential, when and if it's properly organized. We are talking about people who have farmed that same piece of land for generations. So, there's a very large base of local knowledge and local resources among these small growers. They are experienced at growing different crops in their fields and backyards.

Small growers are found throughout Mexico in a wide range of conditions, micro-climates, soil types, latitudes and longitudes. That opens up the possibility for lots of different specialty crops being targeted for both local and export markets. Certain of these communities have the right combination of climate, location, soils, skills and desire to succeed at developing crops for both local and export markets.

For the last ten years my wife and I have been working to develop the Del Cabo Cooperative at the southern tip of Baja California Sur. We've been working with 150 small growers and have succeeded in helping them to organize and export to the United States, now over 200,000 units (organic vegetables and herbs) and 5 million dollars a year. When we first went down there the growers had annual gross sales of about two thousand dollars a year each, and this last year it reached thirteen thousand dollars, on average.

Too often this is a group of farmers that is forgotten even though they are the backbone of many rural communities in Mexico. They're dismissed because of their small plots, old technologies and limited education. They are overlooked because of their apparent small contribution to the GNP. And at the same time they are sought after for their political loyalty and to bring them into the larger economy. Walking or driving through rural Mexico you will see attempts at government assistance littering the countryside, literally—rusted out tractors, abandoned warehouses.

At the same time, there are some success stories. What are the needs/obstacles as perceived by *campesinos*? When you go around asking small farmers what they need, you almost inevitably hear the same answer: "We need markets, *comercialización*." That's not all they need. An *integrated* approach is needed that includes these elements:

- Develop business acumen in *campesinos*. Transform *campesinos* into businessmen.

- Teach quality standards of markets to growers.

- Pool production to take advantage of economies of scale, not only for export production but also for the larger local markets.

- Target specific crops or products that take advantage of market opportunities, growing conditions, local skills and existing assets.

- Provide appropriate technical support on: timely seeding and transplanting to meet supply needs; appropriate pest control to avoid exacerbating agricultural contamination problems; timely/steady harvesting coordinated with the marketplace; and post-harvest handling to get products to market that are acceptable and of good quality. Special needs for organic production are appropriate cover crops and soil amendments to improve soil fertility.

The only way to work with small growers is if they're organized. Growers still work independently and are paid based on their individual work, but the growers' organization pools the product together so that it can be sold and some market penetration can be achieved. Lack of corruption, accounting checks, transparent and honest management of assets—all are necessary for the organization to function well. It must also provide adequate infrastructure for packing, quality control, shipping and material acquisition.

A key point is communication. The organization needs to facilitate constant communication between the market, the growers and the employees of the growers. We've had communication problems and we're trying to have our marketing organization talk more directly to the growers through radios, e.g. "the price of tomatoes is going up, pick more". Finally, it's very important for the organization to develop and maintain a commitment to reliability and quality demanded by the market.

To succeed in working with small farmers, the marketing "partner" must work very closely with the growers to identify products suitable to the local area and capabilities, and that also meet market demand. Marketing partners need to work on developing attractive and durable packaging; to provide advice on appropriate transportation; and to be responsible and concerned for the well-being of the growers by working to minimize losses and optimize revenues. They must also work toward transparent sales transactions to minimize distrust by the growers. A long-term commitment by the partners to the growers is critical, demonstrated through on-going technical support and investments.

Key issues for success, summarized:

1. reliable transportation (ship/truck/air);
2. sound business management by/for growers (teaching/training);
3. mutual long-term commitment between marketing company and growers;
4. mutual trust and respect among growers, marketing people and the organization's employees.

The issues of start-up and growth are important because of the high costs of financing in Mexico and the limited technology available and appropriate to small farms. Mexico's financial institutions lend at prohibitively high interest rates, making the cost of money too expensive to permit growth and maintain a healthy business. We have financed our operation from the North except for one experience with lending from FIRA to buy tractors. Also, most equipment available in Mexico (manufactured in the U.S. or Canada) is geared towards large farmers. European manufactured tractors and other farm equipment for smaller size operations present a more reasonable model for small farmers in Mexico. I think there's an opportunity for someone to import that equipment into Mexico.

In terms of research, SAGDR (Secretary of Agriculture, Livestock, and Rural Development) can help growers by focusing research on their perceived growing problems instead of the constant field documentation, assessment and reporting it currently does. One specific need is to streamline the process by which pest control products approved by international organic certification agencies are registered and imported into Mexico.

In conclusion, *campesinos* with small plots and limited resources represent a large, often overlooked sector of Mexico's agricultural community. They can become viable producers and exporters when and if associated with committed, responsible marketing partners who, with growers' organizations, take an integrated approach in conveying information needed in today's global economy.

**Discussion/questions**

**Dave Runsten:** Well, I think that's a very interesting case, pointing out again what several people have mentioned—the need for a committed, responsible marketing partner. We need to find people who do have a commitment (to fair marketing). Larry is doing five million dollars in sales. I think there is a lot of potential to replicate these types of organizations and involve a large number of farmers in Mexico.

**Orlando Loera:** I was very intrigued by Antonio Ruiz Garcia's presentation (FMDR). Just a couple of questions. What is the normal size of your loans? Do you have a line of credit from a financial institution? Also, what is your loan loss experience?

**Antonio Ruiz Garcia**: The average size of the loan has been around $15,000 to $20,000 per project and each project usually involves ten producers.

**Dave Runsten**: How much do you get from the bank at one time?

**Antonio Ruiz Garcia**: We get lines of credit of about 10 million dollars and we distribute it to the small producers. We also have resources from the Inter-American Development Bank (IDB) to use for non-agricultural projects because we are trying to create jobs in rural areas. In terms of losses, 1995 has been one of the worst years in Mexican history and we had 1.07% in losses with our FIRA line of credit. This is nothing compared with losses in the commercial agricultural sector or even the industrial sector. We think our losses are so low because small producers are competitive if you give them small loans. Banks used to give too much credit to the small producers, even to cover wages working their own land.

**Orlando Loera**: You also made a couple of strong comments, one to the effect that BANRURAL disappeared and nothing took its place. FIRA used to either lend directly or the Mexican banks were obliged to lend to agriculture and nothing took that place. What was expected to have taken their places?

**Antonio Ruiz Garcia**: BANRURAL has not disappeared but has slowed operations. FIRA used to lend to commercial banks, which we call first floor banks, and they also used to obligate the banks to lend to agriculture. When they gave this up the banks didn't want to lend money to rural areas because they said it was not profitable. We think they don't lend because of the difficult geographic access, small operations and high administrative costs. Why the banks will *never* lend to small producers is because they are not designed to deal with small producers. We must build something between the first floor banks and the ground level—the mezzanine bank. We are working as a mezzanine bank or para-financial agency. We also promote rural savings for investment.

**Roberta Cook**: Who's responsible for the bad loans?

**Antonio Ruiz Garcia**: How do we guarantee the loans? We work with FEGA, *Fondo Especial de Garantía*, a federal government program specialized in giving guarantees on loans to small producers. As a private organization that seeks donations from big industry, FMDR is also able to guarantee 10% of the loans directly. For special projects, like milk production in Guanajuato, the state government is funding 10% of the guarantees.

**Robin Marsh**: This question is for Antonio and Larry Jacobs. I heard sort of a contradiction in what you are recommending. Antonio said that the profitable commodities for small farmers were the low-cost commodities that don't require a perfect appearance. Larry is involved in production of very perfect looking tomatoes that I see in local markets and other types of high quality organic produce. Is it that this is a very specialized operation, that while Antonio is talking about working with thousands of producers in Mexico, Larry is talking about working with a few hundred or less? Or is your difference of opinion deeper than that?

**Antonio Ruiz Garcia**: I think it's different perspectives. There can be two ways to do the same thing. We were talking about the lime example. Steve Barnard had said that they couldn't trust the quality of the limes to small producers who may not be able to produce the quality that the market demands. I would agree with him if you are dealing with thousands of producers. If you work with 20 or 30 producers it could be done. When you produce milk or coffee or rubber, quality requirements are different—the range can be wider. We have specialized in these kinds of products. But we are also going into some very high quality products, for example, "*cochinilla*," an insect that lives in the nopal (cactus) and produces a natural pigment—a very small-scale project.

The problem is how much money do we need to invest to construct a better way of living for a small producer. I think that what Larry is doing is right but demands much more investment per family. We have a different mission; we want to deal with more people.

**Larry Jacobs**: I think that both approaches have their place and are needed. It's a big segment of the rural population in Mexico, so many different tactics should be considered and used. Whoever said that small producers can't be counted on for high quality, I would take issue with that. I think that there are advantages to working with small growers. Let's say you want to farm 1,000 hectares. You would have to hire and manage 300 people and make sure each one does what you want. Let's take another approach. You decide to work with 500 small farmers who farm 1,000 hectares total. Then you give them a lot of instruction about quality and the way it has to be done. Each producer farms 2 ha. with family labor (hidden labor that lowers costs), producing under their own organization's product label. They are going to take more interest and do a better job than those 300 hired employees. That's my position. And the guarantee is that you run the product through a quality control system to make sure it's right.

**Javier Morales**: I just want to make a comment that might be a good strategy for the future. When Violeta Chamorro won the election in Nicaragua in 1990, we created a repatriation fund to bring Nicaraguans back from exile and provided them US$1,500 per month for one year if they committed to staying in Nicaragua and opening a business. We have been talking about the lack of economic activities in Mexico that has forced migration to the United States. These migrants have acquired productive skills and been introduced to new technologies and have acquired savings. Now that the laws are changing in Mexico and the Constitution has been reformed, persons with savings can go back and buy farms and grow avocados, limes, chiles or whatever. Maybe that's a good strategy.

**Javier Usabiaga**: The State of Guanajuato has put a lot of effort into doing that. We have several programs to encourage housing development and agricultural investment. We pay 11% interest in dollars on savings deposits. Money made on agricultural projects also pays 11% interest and is guaranteed by the government. For example, we have such a joint venture between some guys coming down from the U.S. and local growers, a project in fruit production (cherries and pears) which we hope will be successful.

**Raul Hinojosa**: That sounds like a very good theme for the next conference. There has been a parallel discussion throughout the day about the role of remittances as basically a wasted resource that could be used for financial intermediation in an interdependent labor market.

**David Runsten**: Well, they certainly provide a potential source of capital if mobilized for that purpose.

## Concluding Remarks

*Dr. Javier Morales and Mr. Orlando Loera presented brief concluding remarks.*

**Dr. Javier Morales**, Dean of Graduate Studies, ITESM, Mexico, D.F.

I have learned a lot from the presentations today. My conclusion is that, despite all the effort and all the changes and policy reforms that we have heard about today, there are not significant changes in Mexican agriculture and investment in agriculture. It is still a world of opportunities. There are specific examples of success stories of U.S. investors investing in projects that have created jobs in Mexico. We have also heard impressive stories about the work of NGOs with small farmers. We need to document these experiences and write up these cases to distribute in the business schools in Mexico.

I am the Dean of the ITESM Business School in Mexico City, and my surprise is that all the students want to be bankers because they believe that's where the money is. But I believe that the money is in agriculture and production. So, I would appreciate the opportunity to work with the companies represented here to write up their cases and to circulate managers to go to the field and observe these agricultural successes.

**Mr. Orlando Loera**, Executive Vice President, Bank of America

I expected to learn quite a bit and I have. From Raul Hinojosa, I learned that Mexico has an excellent export platform not only to the United States, but to Asia. And who can take better advantage of that than American investors. I also learned that the net employment effect in the United States of NAFTA has been positive (jobs gained from exports minus jobs lost from displacement), according to NAID Center estimates.

Roberta Cook pointed out that investment should be in those products for which we have a market, and not in those where there is a glut. We don't need another tomato farm in Mexico. Expand in non-traditional products for niche markets. Too much expansion in traditional products, driven by the desire to reduce unit costs, could lead to trade disputes and enforcement of strong U.S. anti-dumping laws.

Programs should be created to identify grower/producer partners and distribution/handler partners. Investors in the United States need those partnerships. There should be more trade missions and market intelligence. The small farmers need to begin to develop relationships with the large buyers. Restrictions on land purchases are too tight for investors who want direct control over production, without size limitations. Land values are unreasonably high as land has only recently become a tradeable commodity and true values are not known. Transportation is still a problem in many areas.

Ing. Kondo told us that we should be investing in Southeastern Mexico because there are great opportunities in ornamental flowers, palm oil, latex, tropical fruits and other products. There is a need to move the focus away from the north and a little more toward the south of Mexico where there are favorable water, land, climate, soil conditions.

Ruben Yesin told us about FIRA and its guarantee programs. Juan Carlos Martinez reviewed the economic reforms in Mexico—the dramatic elimination of grain subsidies and the compensation program, PROCAMPO. Jim McCabe of the Bank of America in Mexico explained the current problems in the Mexican banking system that have led to lack of liquidity, flight to quality and little lending. Several people have said that foreign and Mexican banks should work together to finance agricultural joint ventures. Joint loans?

From the afternoon panelists we learned that investment in Mexico is a way for widening market penetration for new products. At the end of the day, maybe you don't lower costs producing in Mexico, but you do open up supply that can be effective in meeting year-round global market demand. It has occurred to me that Californians could be excellent intermediaries for the sale of Mexican products into Asia and other parts of the United States. Government must maintain an aggressive peso—let's not have it overvalued. That would cause havoc very quickly.

We need more organizations like FMDR, a non-profit rural development organization that also acts as a para-financial agent, getting large lines of credit for distribution to hundreds of small farmers. Lic. Ruiz Garcia has told us that organizing small farmers to grow products for which they have a competitive advantage is the best way to improve their efficiency and opportunities, and perhaps, I have thought, to help to solve the problems of illegal immigration into the United States.

I was interested in Dave Griswold's comment that producer ownership of the label (coffee) motivates them to get a vested interest in the quality of the product and maintain that quality standard throughout. Larry Jacobs, in working with small farmers in Baja California, stressed the need for growers' organizations and education on quality and market dynamics, and the critical need to help small farmers, *campesinos*, become businessmen.

Wonderful stuff. Thank you very much, personally. I also want to thank the Center for North American Integration and Development, UCLA. There are a few heroes in this room who are working very hard to make the world a little bit better for small farmers. Again, thank you very much.

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