CAMIC 2007:
Transition to CAFTA-DR
Executive Summary

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Arrangements for the Forum are coordinated by Drs. Ron Knutson and Luis Ribera, who are faculty of the Agriculture and Food Policy Center (AFPC), in the Department of Agricultural Economics at Texas A&M University. Dr. Knutson has previously coordinated highly successful workshops of this type for the NAFTA bloc.

CAMIC 2007 Planning Committee:
The following program, authors, and discussants were developed by the CAMIC Planning Committee, which included the following distinguished regional leaders from government, industry, and the research community:

- Sergio Navas – Executive Vice-president, Exporters Association CADEXCO, Costa Rica.
- Luis R. Rodríguez – Undersecretary for Planning, Ministry of Agriculture, Dominican Republic.
- Bernardo López – Minister of Agriculture, Ministry of Agriculture, Guatemala.
- Medardo Galindo – General Manager, Agro-exporters Federation, Honduras.
- Jorge Brenes – General Manager, APEN, Nicaragua.
- Amy Angel – Natural Resources Manager, FUSADES, El Salvador.
- James G. Butler – General Sub-Director, IICA
- Stephanie Murphy – FAS, USDA, U.S.
In November 2007, approximately 70 leaders from the CAFTA-DR countries met in Costa Rica to identify public- and private-sector initiatives needed to foster regional agricultural economic development and market integration. The agenda was set a year earlier by a Planning Committee of eminent private- and public- sector leaders representing each country, who also had workshop wrap-up responsibilities. In this initial workshop, the Planning Committee decided to commission a series of papers on topics that cover the scope of issues confronting the agricultural economies of the CAFTA-DR region. Following a summary presentation of each paper, there was extensive interaction and discussion that often continued informally through breaks, meals, and into the evening. This executive summary is designed to capture the content of the commissioned papers, the discussion, and the major conclusions.

Market Integration in CAFTA-DR: Steven Zahniser, ERS/USDA; Noe Hernández, Ministry of Agriculture, SV; and Megan Romberg, ERS/USDA

Market integration refers to the formation of one market by combining two or more markets, normally as a result of the elimination of barriers to trade among previously separated markets. From an economic perspective, when markets are integrated, product prices become more uniform and differ only by consumer perceptions of differences in product quality and by transaction costs from point of production to the consumer.

Market integration occurs either by freer trade or by direct foreign investment (DFI). In a market economy, firms and individuals trade and invest based upon where they realize the lowest costs and the highest profits. Therefore, trade and investment lead countries to specialize in producing those products for which they have the greatest comparative advantage in the utilization of the resources available to them. This specialization process is the most apparent in the initial stages of achieving freer trade but also continuously evolves as markets become more fully integrated.

Market integration is facilitated by policy integration, which occurs as trade and investment policies and regulations become more uniform and in greater harmony across countries. The formation of CAFTA-DR was the first step in the direction of policy integration, but many more steps are required as individual countries harmonize their laws and regulations. The faster policy integration occurs, the faster market integration will occur, and the more total benefits will be realized from the formation of CAFTA-DR.

The process of CAFTA-DR market integration can be viewed from two perspectives:

- South-south regional integration among Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, and Nicaragua, hereinafter referred to as regional integration. In 2006, there was about $1,500 million in agri-food trade among these six regional countries with the Dominican Republic being the smallest trading partner.

- North-south integration between the six regional countries and the United States. In 2006, there was about $3,300 million in exports from the six regional countries and $2,300 million in imports. The largest of these trading partners with the United States was the Dominican Republic with about $600 million in agri-food exports and imports.

With a base for comparison of 1994-1996, the following general market integration and specialization trends are apparent:

- Costa Rica: Total agri-food imports reached an annual average value of $748 million in 2004-06 – 192 percent larger than in 1994-96. During 2004-06, exports reached an annual average value of $2,311 million – 28 percent more than in 1994-96. Regionally, its largest trading partners are the United States (exports and imports), Dominican Republic, and Nicaragua. In exports, it appears to be becoming more specialized in deciduous fruits, food preparations, live plants, and horticultural crops and legumes.

- Dominican Republic: Total agri-food imports reached an annual average value of $1,000 million in 2004-06 – 162 percent larger than in 1994-96. During 2004-06, exports reached an annual average value of $876 million – 138 percent more than in 1994-96. Regionally, its largest trading partners are the United States (exports and imports), Dominican Republic, and Nicaragua. In exports,
Future growth in trade and direct foreign investment will depend heavily on progress in harmonizing sanitary and phytosanitary regulations and inspection procedures.

It appears to be becoming more specialized in fruits and tobacco.

- El Salvador: Total agri-food imports reached an annual average value of $1,036 million in 2004-06 – 259 percent larger than in 1994-96. During 2004-06, exports reached an annual average value of $645 million – 126 percent more than in 1994-96. Regionally, its largest trading partners are the United States (exports and imports), El Salvador, and Costa Rica. In exports, it appears to be becoming more specialized in meat, dairy products, and live animals.

- United States: Total agri-food imports reached an annual average value of $3,501 million in 2004-06 – 147 percent larger than in 1994-96. During 2004-06, exports reached an annual average value of $1,840 million – 182 percent more than in 1994-96. Regionally, its largest trading partners are Costa Rica, Guatemala, and Dominican Republic. In exports, the United States appears to be becoming more specialized in meats.

- Honduras: Total agri-food imports reached an annual average value of $750 million in 2004-06 – 162 percent larger than in 1994-96. During 2004-06, exports reached an annual average value of $876 million – 138 percent more than in 1994-96. Regionally, its largest trading partners are the United States (exports and imports), Honduras, and Costa Rica. In exports, more emphasis is being placed on deciduous fruits.

- Nicaragua: Total agri-food imports reached an annual average value of $357 million in 2004-06 – 196 percent larger than in 1994-96. During 2004-06, exports reached an annual average value of $700 million – 199 percent more than in 1994-96. Regionally, its largest trading partners are the United States (exports and imports), El Salvador, and Costa Rica. In exports, it appears to be becoming more specialized in tobacco and edible oils.

- Guatemala: Total agri-food imports reached an annual average value of $765 million in 2004-06 – 292 percent larger than in 1994-96. During 2004-06, exports reached an annual average value of $1,016 million – 131 percent more than in 1994-96. Regionally, its largest trading partners are the United States (exports and imports), El Salvador, and Honduras. In exports, more emphasis is being placed on deciduous fruits.

- Costa Rica: Total agri-food imports reached an annual average value of $1,036 million in 2004-06 – 199 percent more than in 1994-96. During 2004-06, exports reached an annual average value of $1,840 million – 182 percent more than in 1994-96. Regionally, its largest trading partners are Costa Rica, Guatemala, and Dominican Republic. In exports, the United States appears to be becoming more specialized in meats.

Menendez indicated that future growth in trade and DFI will depend heavily on progress in harmonizing sanitary and phytosanitary (SPS) regulations and inspection procedures. There is need for a procedure by which laboratories can be certified, preferably initiated by the United States. This process could be aided by setting up one or more joint CAFTA-DR laboratories. SPS training programs are very important, and positive results have been experienced where participants take action to apply concepts learned and pursue remedies. Likewise, securing and sharing laboratory results is very important.

In the discussion it was noted that while good work is being done to facilitate trade, not much is being done to liberalize the ability for foreigners to invest in agriculture. While Honduras has had a proactive campaign to encourage DFI by reducing the time required to set up a business to 28 days, this is not generally the case throughout the region. There is need for a more favorable business climate including increased security and training of the labor force for those skills that are in the greatest need. Such a favorable climate will not only attract DFI but will also attract more local investment and financing.

Many public institutions were characterized as being dinosaurs. While most ministries have improved their information and communication systems as portals for trade, these and other systems need to be integrated for the whole bloc. Included is the need to be able to access...
An important goal for farmers is not to compete against each other but to produce what foreign markets demand according to the principle of comparative advantage.

Lessons Learned from Other Blocs: Rene Ochoa, SAGARPA, MX; Pablo Sherwell, SAGARPA, MX; and Gloria Abraham, IICA

Under NAFTA, agricultural trade among NAFTA members has grown at an extraordinary compound annual rate of 7.8 percent from 1994 to 2004 and accounted for more than 39 billion dollars at the end of 2004. This trade growth has allowed the NAFTA countries to achieve a more dynamic and a faster economic growth. While NAFTA agricultural trade supports around 270,000 jobs in the United States, Mexico’s global exports would be 25 percent lower, and DFI would be 40 percent lower without NAFTA. In addition, Mexico’s technological innovation has increased twice as fast after the implementation of the agreement.

North American agriculture is characterized by a great dichotomy between the highly commercialized economies of progressive state-of-the-art production systems such as those found in Canada, the United States, and some regions of Mexico and many small, often subsistence, non-commercial farmers who struggle to meet their families’ needs. This diversity presents a major challenge for achieving uniform regional economic development and a uniform distribution of NAFTA benefits. This challenge is similar to that faced by the CAFTA-DR bloc vis-à-vis the United States.

Also like CAFTA-DR, there are complementarities in the agricultural products traded. That is, domestic demand for each country is complemented by the production of other NAFTA members. For example, Mexico has been able to maximize fresh produce exports to the United States and Canada where climate does not allow year-round production. On the other hand, Mexico has fulfilled its domestic grain demand through imports from the United States and Canada. Therefore, an important goal for NAFTA farmers is not to compete against each other but to produce what foreign markets demand according to principles of comparative advantage. NAFTA countries have benefited from trading not only in economic terms but also by providing consumers access to products that would otherwise be impossible due to climate or economic constraints.

Mexico’s macroeconomy has stabilized under NAFTA, but it has a higher level of dependence with the U.S. and Canadian economic cycles. The result has been reduced risk and increased investment. On the other hand, one of the major disadvantages of NAFTA is that small producers are not able to achieve the economies of scale leading to rural farmer displacement. Being competitive requires that Mexican farmers find their comparative advantages either in cost or product quality.

NAFTA is more an agreement to trade, than a policy agreement. A shortcoming of NAFTA is that there is no supranational authority or secretariat that advocates uniform policies and that seeks to
Animal health, plant health and food safety control and disease diagnosis must be addressed and treated as a regional CAFTA-DR bloc.

solve disputes among members outside the formal dispute settlement process. Therefore, conflicts often fester, may be dealt with bilaterally, or may end up in a WTO dispute settlement process. As a result, for example, agricultural policies have not been able to be harmonized among NAFTA members. Having different policies, programs, and regulations make trade relations more complex. Policy and regulatory convergence is a condition for efficiently solving trade disputes and to enhancing market integration. However, policy convergence requires close and constant communication among policy makers in order for them to understand their counterparts’ policy goals and impacts and to assess their own policy goals and impacts.

Mexico’s experience with NAFTA suggests that CAFTA-DR needs to focus its attention in the following areas:

- Protecting against animal and plant diseases should be of great concern because an ounce of prevention is worth a ton of cure. Even after an SPS issue has been resolved, it has been very difficult to restore trade to the original levels. Since SPS issues are science based, they can be avoided by following science-based procedures and by following instructions for the use of chemicals.

- The science-based Hazard Analysis and Critical Control Points (HACCP) system should be widely adopted. It appropriately places responsibility for ensuring food safety on the food producers, manufacturer, and distributor.

- In order to improve animal and food trade regionally, private interests and governments should be working to develop regional programs at a regional level. Health and food safety issues for one country are a concern for the rest of the partners. Likewise, regional SPS issues are of direct concern to Mexico.

- Common regulatory programs such as inspection and traceability should be implemented throughout the bloc. Traceability systems are not only a key to disease and pest control but also to finding the most efficient ways to produce, assemble, warehouse, and distribute products in domestic and international markets.

- Bloc-wide risk assessment laboratories should be of common interest for the member countries. The region’s security must be seen as a common interest and priority. Domestic security cannot be accomplished without regional security. Animal health, plant health, and food safety control and disease diagnosis must be addressed and treated as a regional bloc.

- Investment in education and outreach must be a priority. Assuring the next generation of science power and the knowledge required for regional agricultural development and security will be achieved only by investing in education. This effort must be carried out through regional educational programs developed according to the needs of the bloc.

- It is essential to establish and closely follow an agri-food sector adjustment program. This program should provide technical adjustment assistance to subsectors that are going to be able to compete in a more open environment. In these areas, small farmers must be provided assistance in production techniques and in how to access modern supply chains. Signing the trade agreement is a first step; the next step is to determine where CAFTA-DR’s comparative advantages lie; and then to take steps to effectively exploit them. Do not wait for 10 years to begin thinking about needed adjustments.

- Members of the bloc must find means for dealing with differences in agricultural subsidies. The lack of a policy harmonization mechanism is a major NAFTA weakness.

- Members need to seek areas where positions for the bloc as a whole can be agreed upon, such as in international negotiations.

Reaction Panel and Open Discussion: Jorge Tello, Andean Bloc and Daniela Alfaro, MERCOSUR Bloc

The private sector must develop mechanisms for providing technical and economic inputs to the government decision makers. This involves the public and private sector working together to improve the decision process, to increase
The survival of individual farmers and their associations is determined by their capacity to participate in value-added supply chains.

Developing Successful Supply Chains in CAFTA-DR: Mark Lundy, CGIAR, CO and Tom Reardon, Michigan State University

Changes in the agri-food system are transmitted along integrated supply chains managed by increasingly powerful food retailers. The survival of individual farmers and their associations is determined by their capacity to participate in these supply chains. While the rate and depth of change varies across continents and nations, some key aspects hold true in all developing successful supply chains. These include a focus on consistent volumes of products that meet quality and food safety standards as well as a commitment to consistently develop new products that meet retailer needs. The CAFTA-DR countries must conform with these demands if they are to be successful in developing export markets and even in efficiently serving their domestic markets.

If CAFTA-DR signatories are serious about trade as a means of wealth creation in rural communities, certain key elements must be addressed. These include identifying the critical aspects of a value chain approach that make it friendly to the needs of small farmers; working in a more integrated fashion across philosophical, political, and country divides; learning together about what works and does not work; utilizing market linkages as tools for poverty reduction; and developing the necessary complementary policies to generate maximum positive social impacts.

Throughout Latin America, traditional supply chains exist as they have for centuries to move products from farm to market. These traditional supply chains suffer from the following limitations:

• They are inefficient with an inordinate number of traders buying and selling products but adding little value, while experiencing high levels of post-harvest losses.
• They are not well connected to organized markets. This contributes to a low-level of trust among chain actors often resulting in opportunistic, short-term behavior to the detriment of the overall competitiveness of the system.
• They produce highly variable quality as diverse actors seek individual, short-term gains at the expense of other actors.
• They are unable to guarantee product traceability and food safety.
• They lack the capacity to upgrade and innovate.

Despite these shortcomings, traditional supply chains are typical across much of Latin America and are particularly common among resource-poor farmers and their families. The move from traditional supply chains to value chains in the CAFTA-DR region is at best spotty. Notable successes exist, but the vast majority of commercial relationships remain locked in traditional models based on cost competitiveness and conflicting relations between players.

The key requirements to develop successful small farmer value chains in the CAFTA-DR countries include:

• Skills for effective and profitable business partnering must be developed. Profitable businesses must be developed before they can invest in long-term community development projects.
• Organizational and business models must be lightweight and scaleable to large numbers of farmers. Initial efforts should upgrade traditional organizational forms by creating trader networks, as a low-cost way of linking large number of farmers to specific markets.
• Benefit-sharing options must be developed that allow farmers and other marginal chain actors to accumulate an additional share of the overall resources over time.
• Training must focus on problem solving. This requires participation of private sector partners for the adequate evaluation of risk and development of business decision-making skills.
• Governance structure must be based on a long-term, trust-based set of relationships, nurtured by transparent information and knowledge management. It must include effective methods of risk sharing that benefit the overall health of the chain and not just the bottom line of one of the participants.
• A continuous stream of products and process innovation accompanied by technological change is
Quality and safety are rapidly becoming the de facto ticket to entry into supply chains and regional trade flows.

required by dynamic supply chain markets.

- Key financial services must be provided for successful value chains. These services include savings, risk management (particularly climate and market-linked insurance), systems for prompt payment, venture capital, and credit.

- Product quality must be consistent and comply with food safety standards. Quality and safety are rapidly becoming the de facto ticket to entry into supply chains and regional trade flows.

In addition the following key collaborative implementation steps must be taken to develop successful CAFTA-DR supply chains:

- Effective public policy must be developed in combination with effective development policy, effective research policy, and effective private sector policies. Government policies alone are insufficient no matter how well intentioned. Rather, all actors must work together in a much more coherent fashion than in the past. Barring such collaboration, the chances for successful value chains in CAFTA-DR are slim.

- Innovation systems must be developed in a collaborative fashion to resolve key problems and bottlenecks that limit the development of a sector or value chain. Such a system is based on increased linkages between relevant actors – governments, donors, NGOs, private firms, research, and rural populations themselves.

The Impact of Food Safety Standards on an Export-Oriented Supply Chain: Case of the Horticultural Sector in Guatemala: Spencer Henson, and Jose Blandon, University of Guelph, CAN

Food safety standards have become a more prominent issue for global trade in agricultural and food products. Of particular concern is the potential impact of food safety standards, whether promulgated by governments or private sector buyers, on the ability of developing countries to gain and/or maintain access to export markets for agricultural and food products. This not only reflects the growing preponderance of these standards but also the weaker compliance capacity of developing countries.

International competitiveness is no longer driven by price and quality grades. Rather, safety concerns have come to the fore and are the dominant means of competing in many agricultural and food markets. There is greater scrutiny of the production or processing techniques employed along the supply chains. Increased emphasis is being placed on product traceability from farm to table, and increased resources are going into border inspections. There is also concern that many developing countries lack the administrative, technical, and scientific capacities to comply with strict food safety standards, presenting potentially insurmountable barriers in the short and medium-term. Unless these institutional weaknesses and compliance costs are overcome, further marginalization of smaller and/or poorer countries, including their typically small-scale producers and micro enterprises, will occur.

From a more optimistic perspective, public and private food safety standards can be viewed as a necessary bridge between increasingly demanding consumer requirements and as an entrée to international markets. Many food safety standards provide a common language through the supply chain, with the effect of reducing transaction costs and promoting consumer confidence in food product safety, without which the market for these products cannot be maintained and enhanced. Indeed, there is increasing evidence that developing countries have benefited from food safety standards through access to new export markets.

The costs of complying with food safety standards may also provide a powerful incentive for the modernization of export supply chains in developing countries. Compliance with stricter food safety standards can also stimulate capacity-building within the public sector and give greater clarity to the appropriate facilitation functions of government. Further, through increased attention to the spread and adoption of Good Agricultural Practices (GAP) and Good Handling Practices (GHP) in the production and post-harvest marketing of agricultural and food products, there may be spillovers into domestic food safety systems, to the benefit of the local population and domestic market producers. Through the adoption of GAP and GHP, developing countries can enhance their capacity to meet
By enhancing their capacity to meet stricter food safety standards, CAFTA-DR countries can create new forms of comparative advantage over other exporting countries.

As a case example, Guatemala's exports of fresh fruits and vegetables have increased dramatically since the late 1990s, as the government and industry strategy has evolved from one of complacency and only being reactive to increased food safety demands to one on being proactive and collectively seeking and negotiating public and private sector solutions to problems. In the 1990s, Guatemala lost its raspberry market due to bacterial contamination resulting from poor water quality and a lack of attention to human hygiene.

Guatemala also was in danger of losing its dominant position in the fresh snow pea market due to persistent pesticide contamination. In order to address this pesticide residue problem, a series of interventions has been undertaken with collaborative support of public, private, and international agencies. Exporters of snow peas, through the Guatemalan Exporters’ Association (AGEXPORT), established the Snow Pea Committee as a conduit for interaction with government, international donors, and U.S. regulatory authorities. Thus, rather than relying on the government to take remedial actions, the private sector became active in promoting solutions and in promoting industry-wide adoption of GAP and GHP.

Despite the success of this public-private partnership in retaining the U.S. market for snow peas, the sector still faces on-going challenges with the management of pesticides that largely reflect the fragmented nature of the supply chain. While many exporters have their own production facilities and organized supply arrangements, around 60 percent of supply continues to be sourced through traditional markets that are controlled by traders. These traditional markets lack the ability to trace supplies back to their production sources to ensure that appropriate practices are followed. Further, given the tendency for exporters to mingle their supplies, there is limited ability to ensure that any export consignments conform to GAP and meet regulatory pesticides limits.

Exporters continue to make efforts toward integration of the export supply chain for snow peas by increasing their own production and by contracting with small-scale farmers to achieve traceability and to control production practices. Indeed, there is a strong economic incentive to do so. Exporters pay a lower price for snow peas in traditional markets, and the cost of procuring export quality peas is greater than for own or for contract production due to the high rate of out-grading traditional market peas. At the same time, U.S. buyers are making efforts to integrate their supply chains back to Guatemalan exporters. Currently, around 80 percent of snow peas are exported to U.S. brokers, and only 20 percent were exported direct to supermarkets. Increasing the proportion of supply through direct sourcing by supermarkets is seen as a mechanism for ensuring that GAP and GHP are employed and for securing traceability. This is supported through the provision of technical assistance and promotion of third-party certifiers in which they have confidence.

Government’s Role in Food Quality and Safety Certification: Lloyd Day, AMS/USDA

The U.S. Department of Agriculture’s Agricultural Marketing Service (AMS) administers several public-sector services that assist producers and their organizations in production and marketing to facilitate compliance with SPS regulatory requirements and to increase market transparency. These include establishing and improving market news information systems; facilitating prompt payment in the marketing of perishable products; promoting the harmonization of payment terms and conditions within and across countries; establishing and harmonizing grade standards; assisting in the development of GAPs and GHP; certifying products for conforming with GAPs, GHP, and other forms of process verification; providing technical assistance; and identifying funding sources for new fresh produce inspection programs.

In carrying out these market services, AMS has helped to organize, provide leadership for, and participate in the Market Information Organization of the Americas (MIOA), which is available to CAFTA-DR governments and its producer organizations. The greatest need in reducing barriers to trade is to harmonize SPS regulations across countries and to assist producers in understand-
There must be the ability to source products from throughout the CAFTA-DR region to satisfy market demand in the quantities and qualities demanded.

Supply Chain Innovation Reaction Panel and Open Discussion: Jorge Cordero, Wal-Mart, U.S.; Tulio Garcia, AGEXPORT, GT; Ernesto Baron, Poultry & Egg Export Council, U.S.; Beatriz Tubino, Peru

This reaction panel and related discussion brought substantial experience and applied expertise to making supply chains operational.

Cordero explained that the Wal-Mart concept as applied to the CAFTA-DR region emphasizes the setting of standards based on the expectations of their stores and customers, establishment and certification of GAP and GHP that are consistent with achieving those standards, training small- and medium-size producers to utilize the specified GAP and GMP, arranging for financing, and assuring that producers are rewarded consistent with their performance. Local producers are given priority, and operations are scaled to the expectations of the stores. Transparency with producers in discussing market needs is very important. Training includes technical assistance and technology transfer in diversifying to produce the most profitable combination of crops for the supply chain. The emphasis in technical assistance is on problem solving including the responsible use of chemicals. Producers are assured payment at competitive prices and are rewarded for quality. Being part of a profitable supply chain gives producers a sense of ownership and pride.

Tulio Garcia emphasized the need to become export oriented. AGEXPORT has accomplished this by moving from 30 percent nontraditional crops in 1986 to 70 percent in 2006. The creation of value chains requires social responsibility that considers, trains, and rewards all participants in a transparent manner. There must be the ability to source products from throughout the region to satisfy market demands in the quantities and qualities desired. Achieving competitiveness also requires that governments work with the private sector to improve infrastructure, reduce utility costs, and provide security.

Baron provided a U.S. exporter's perspective on the need for CAFTA-DR countries to work together in harmonizing regulations to create a freer trading environment that utilizes the comparative advantages of each country. If we do not harmonize SPS regulations, cost advantages accrue to particular firms and countries. Harmonizing regulations requires that work be done to educate policy makers across CAFTA-DR. Being competitive requires the development of value chains that cut across countries and that recognize differences in consumer preferences. It also requires that systems be developed to reduce and share the risks of diseases such as avian influenza. The key to success in integrating CAFTA-DR markets is working together to encourage adjustment and solve common problems in a transparent manner.

Tubino explained why Peru has been successful in capturing a dominant position in the U.S. fresh asparagus market. In addition to Peru’s natural asparagus growing climate, emphasis has been placed on consistent training, innovation, and problem solving. Marketing plans are developed with production and packaging being coordinated with market needs. Guidebooks have been developed that are consistent with GAP and GHP certification requirements. Risk has been reduced by diversification into other vegetable crops. Cold chains have been developed, although there is need to develop surface shipping and irradiation systems to increase cost competitiveness. Social responsibility is provided by developing day care centers for women who work within the value chains.

The discussion indicated the need for private- and public-sector programs that encourage the transition to nontraditional crops and the development of value chains for marketing them. It emphasized that successful value chains require training and producer commitment.

Transition Policies: Amy Angel, FUSADES, SV

Concerns about the effects of the CAFTA-DR on the region’s agricultural sector are well founded. Production of traditional products in the region is mostly produced by small farms that
The regional governments must coordinate policies to encourage transition from traditional crops for which U.S. farmers have a comparative advantage to nontraditional crops offering substantial opportunities for production by small farmers and for export.

characteristically have excessive manpower and a lower level of education. These characteristics make it difficult for non-competitive displaced farmers to be integrated into the qualified labor market. It also represents a big part of the extreme poverty, which still has a great presence in the rural areas. However, there are substantial opportunities for exports of nontraditional products if smaller farmers are successfully integrated into value chains. As a result, there is an urgent need to plan for the future of traditional products and for transitional policies that encourage adjustment to nontraditional production and marketing.

At the same time, the American agricultural sector is formidable competition. U.S. agricultural policies allow the grains and cotton exports to be priced favorably relative to costs. Although it is possible that U.S. subsidies can become less price and production distortion in the future, it is probable that U.S. supports will continue in the mid-term, which consolidates their competitiveness in these crops. Also, the American sector enjoys scale economies not present in small countries like many subsectors of Central America and Dominican Republic.

The CAFTA-DR allows the partial free trade exemption for the most sensitive traditional products in each country, but it does not guarantee that there will be enough willpower or resources for the farm sector to reorganize and diversify, or that it will be carried out effectively.

The fiscal realities of the Central American countries and the Dominican Republic limit their capacities to implement bigger programs to facilitate the transition of the traditional agricultural sectors. While CAFTA-DR increases the opportunities for export, it does not guarantee that the countries will have exportable products to supply or that they can fulfill the sanitary, technical, and food safety admission requirements.

Effective transitional policy reform requires programs to avoid losses and to maximize profits for small producers and rural households. To accomplish this goal, the emphasis of transition policy will need to be placed on the following areas:

• Provide a combination of support to small farmers’ incomes during the liberalization period, along with technical assistance for the production of nontraditional export crops.
• Provide assistance to access export markets, especially in meeting sanitary and phytosanitary requirements.
• Create a stable and competitive macro environment.
• Facilitate rural economic growth through investments in rural infrastructure.
• Give priority to the management of valuable natural resources to ensure the sustainability of production and exports.

The Central American countries have instituted a series of programs and projects to increase the competitiveness of the agricultural sector. These programs and projects focus on technology innovation, market information, compliance with SPS standards, investments in irrigation, and funds for productive investments and associations. It is critically important that these efforts be translated into concrete changes for the small producers and other micro firms in the agricultural sector.

While CAFTA-DR provides a period for adjustment through long-term tariff reduction for the most traditional subsectors, the Central American countries and the Dominican Republic should not feel comfortable. Structural change in the small-scale agriculture is not an easy or fast process, not to mention the fiscal constraints that exist to finance transition policies. The key to success is the consistency of the message; the existence of complementary supports, like information, infrastructure, education, and technology; and reasonable expectations. It is also important that the countries start a communication process with the potentially affected sectors, so all can be conscious of the changes to come.

Another key implication is that the regional governments must coordinate transition policies to encourage adjustment, conversion, and diversification of enterprises that are not directly competitive with the current primary basic U.S. crops such as corn and sorghum.
The most productive rural development strategy for the region involves increased investment in telecommunications, electricity, and roads.

While there have been some steps in this direction, they are not well coordinated, are not sufficiently widespread, and still often continue to encourage the production of traditional sensitive crops for which the region’s agriculture cannot be sustainably competitive in the new freer trade economic environment. In other words, there is too much tendency for the region’s countries to continue their programs as individual countries.

Reaction Panel and Open Discussion: Mario Amador, NI, Sugar Association; Bernardo Vargas, CR, Ornamentals; Ana Cristina Rodas, GT, Ministry of Agriculture

Amador emphasized the need to support those sectors that are doing well and to encourage the establishment of open markets.

Vargas indicated that transition policies must recognize the diversity and comparative advantages within CAFTA-DR. Nontraditional products are the star products from the perspective of their potential for production, value added, and export expansion. Transition policies must focus on these products by encouraging their production and by adding value to them. These governmental policies must be long term, not just for the term of a minister. They need to involve the development of public-private partnerships such as the certification of laboratories, the establishment of laboratories that cover more than one country, and related research and technical assistance programs that include disease protection strategies.

Rodas indicated that it is important to have interaction of the public sector and the private sector in developing transition policies. This includes investments in laboratories and programs to eradicate animal diseases. In addition, there must be a provision for expanded credit required by producers in the transition.

Open discussion emphasized the need for more uniform policies across the CAFTA-DR countries. Most Central American countries and the Dominican Republic currently depend on protective tariffs that do not encourage adjustment. DFI must be encouraged. There is need to ensure that agricultural interests are included in all general economic initiatives. Pest eradication is a major concern. The role of agriculture in infrastructure development, including irrigation, is very important. It was pointed out that 80 percent of the barriers to trade are SPS barriers. As a result, there is need to harmonize SPS regulations across all CAFTA-DR countries.

Rural Development in CAFTA-DR: Hans Jansen, IFPRI, CR and Maximo Torero, IFPRI, Peru

An unsolved challenge for the modernization of small agricultural producers in the CAFTA-DR countries is a very high rural poverty rate. The majority of the poor rural population consists of small farmers. High rates of rural poverty persist despite the structural reforms, market’s liberalization, and many rural development projects and programs.

The main reason the rural poverty rates remain high is the low profitability of traditional agriculture. On a country and commodity basis, the greatest Central American competitive opportunities were found to be in the following areas:

- Costa Rica – horticultural crops, particularly Red Edge Dracaenas and African Palm (ornamentals), milk, and poultry.
- El Salvador – pork, beans, and sugar cane, particularly sugar cane candy manufactured by small producers.
- Nicaragua – beans, pork, and beef.
- Guatemala – mangos, flowers, yellow corn, and potatoes.
- Honduras – beef, melons, watermelons, and palm oil.

For all of these countries, the most serious problems in realizing these opportunities are disease control and marketing.

The most productive rural development strategy for the region involves the need for increased investments in infrastructure. Except for Costa Rica, the highest payoff was determined to be from investments in telecommunications, electricity, and roads received. In Costa Rica the greatest return was from electrical network improvements.
There is need to invest more in rural education because higher returns are obtained from rural than from urban education.

infrastructure investment priorities with high payoffs included:
• Honduras – pork production,
• Guatemala – chicken production,
• Costa Rica – beef production,
• El Salvador – beef production.
In other words, while export opportunities in the areas on fruits, vegetables, ornamentals, and coffee justifiably receive attention, it is important not to forget about animal agriculture.

Aside from infrastructure policy, the major needs to jump start rural development policy and to attract DFI include:
• Marketing – small farmers need to get organized to compete, to obtain the necessary volumes, to add value, and to make links to supply chains.
• Public sector research needs to be rejuvenated, and private sector development needs to place emphasis on materially increasing manpower productivity, to focus on products with high aggregated value, and to give more attention to disease prevention.
• Education increases the impact of other investments in the agricultural sector such as research and development, managerial skills at the local level, and the ability to perform both agricultural and nonagricultural jobs.
• Rural financing involving the evolution of financial institutions with innovative programs that value credit as much as savings.
• Risk reduction through means such as production by contracts.
• Land security, including establishing efficient land markets, is indispensable for encouraging the adoption of new enterprises, practices, and conservation measures.
• Public investment in training for the development of managerial skills, technical assistance, and incubators to stimulate the transformation from traditional agriculture to a portfolio of more diversified economic activities.

**Mexico: Human Capital and Income: Returns to Education, 1994-2005: Juan Luis Ordaz – MX**

Since public sector capital is scarce throughout the region, one of the key issues involves the comparative returns to education versus infrastructure. This study provides insight into the levels of returns from education and in particular the comparative returns between education investment in the rural and urban areas and by gender. As a general rule, the rural sector’s education quality and educational levels are much lower than the urban sector. For example, Mexico’s, rural educational levels were found to be inferior to the levels that existed in the urban sectors more than 10 years ago. The greatest rural-urban education gap is in rural women. Not surprisingly, it was found that higher levels of education are associated with lower levels of poverty in both urban and rural areas.

It was found that investing in Mexican education is profitable. Even with the big differences in terms of educational quality between the rural and urban sectors, higher rates of return were found in rural areas for all education levels. Over time, the rates of return from education were found to have increased in favor of the rural sector in the 1990s. In both sectors it was found, contrary to what happened in the first half of the 1990s, the rates returns are greater with higher educational levels. This suggests that the labor market is rewarding more qualified workers.

When separating by gender, it was found that women in the rural sector obtain higher education returns than the urban sector. Similar results were found for men. It was also found that women tend to self-select not to participate in the labor market more than men do. In the rural sector, the basic education levels for women tend to obtain higher returns. As years of education rise, men obtain higher education returns than women. In the urban sector, education of men has higher returns in the most basic level (elementary) and in college, but in the levels in between, women obtain higher return.

The results of this study suggest the need to invest more in rural education because it is economically efficient in that higher returns to education are obtained. It is important to increase the education levels of the rural women since they have less education, on average, and they obtain the highest returns from basic education. In addition, the education of women is essential to improving the standard of living, including the health and nutrition of their children.

Many questions are not answered by this study. For example, a central issue involves whether these results are transferable to the Central American countries and to the Dominican Republic. Also the study does not provide insight.
into the comparative returns for various infrastructure investments, which help to develop rural areas and create jobs, versus investments in education.

**Reaction Panel and Open Discussion:**

*Dennis Lesnick, SV, FINTRAC; Guilleramo Alvarado, HN, MILLELIUM; Norberto Quezada, DR, Consultant*

Lesnick indicated that an important education and technical assistance function includes training in HACCP to improve the food safety including the implementation of GAP and GMP. Such training needs to identify the chemicals approved for use by the U.S. Food and Drug Administration and the basics of Integrated Pest Management strategies. An integral part of this training involves setting up traceback systems to know the origins of products.

Alvarado indicated that since CAFTA-DR reinforces the customs union that was already in place, there should be more market and economic integration than is evident. This lag was attributed to the continued existence of SPS barriers. In addition, the lack of clearly defined property rights discourages development and market integration.

Quezada agreed that substantial regional SPS and quota barriers are the major problem. The public costs associated with facilitating the transition will be high, and the lack of priority setting across the countries is a major problem. Policies to stimulate local rural development are very important.

Open discussion picked up on the Quezada point that there was a need for the CAFTA-DR countries to set priorities and develop an action plan for future development.

**Conclusions**

In the concluding session of the workshop, the members of the Planning Committee were asked to present their conclusions regarding the greatest needs for changes in public policy and the most important topics for discussion at the second workshop. The results are presented in outline form and then briefly summarized.

Luis R. Rodríguez, Dominican Republic

- *Priority policy changes*
  - Reform of existing public institutions
  - Adoption of tools to promote exports and bring about uniform SPS measures

- *Priority topics for future discussion*
  - Needed institutional reform
  - Policies to support market integration
  - Credit to finance conversion to nontraditional crops

Amy Angel, El Salvador

- *Priority policy changes*
  - Adoption of bloc-wide SPS policies
  - Adoption of policies that encourage diversification
  - Establishment of a regional technical animal health center
  - Establishment of a small producers’ safety net

- *Topics*
  - Assessment of needed bloc-wide policies
  - Case studies of where trade barriers have been overcome

Tullo García, Guatemala

- *Priority policy changes*
  - Actions to diversify production in areas of comparative advantage
  - Unify CAFTA-DR SPS regulations for crops and livestock
  - Provide competitiveness in transportation and energy
  - Closer private sector and government collaboration

- *Priority topics*
  - SPS inspection procedures
  - Status of bloc-wide transitional agricultural policies to expand trade
  - Forming effective lobbying teams
  - Bioenergy

Sergio Navas, Costa Rica

- *Priority policy changes*
  - Adoption of bloc-wide SPS policies
  - Adoption of a uniform SPS network
  - Development of a CAFTA-DR secretariat
  - Place agricultural trade issues in the agriculture ministries

- *Topics*
  - Status, meaning, and role of a regional agricultural policy
  - Creating uniform SPS measures
  - Bioenergy
  - Financing agricultural enterprises

Medardo Galindo, Honduras

- *Priority policy changes*
  - Need long-term government policies
  - Develop capacities for technological development and change

- *Topics*
  - Need for a regional agricultural policy
  - Creating uniform SPS measures
  - Bioenergy
  - Financing agricultural enterprises
The workshop participants want to see regional agricultural policies adopted that result in expanded trade, the starting point for which is uniform SPS regulation.

- Encourage crop diversification
- Encourage DFI

Priority topics
- How each country is dealing with integration issues
- Potential for CAFTA-DR collaboration with IDB to deal with transition issues

Jorge Brenes, Nicaragua
- Priority policy changes
  - Need CAFTA-DR secretariat
  - Adopt uniform SPS policies

Priority topics
- Invite decision makers to react to workshop conclusions
- Development of regional policies

Robert Hoff, United States
- Priority policy changes
  - Harmonization of policies to streamline trade
  - Higher profile for CAFTA-DR as an institution to bring about reform
  - More financing for training programs

Priority topics
- Promoting long-term institution building
- Presentation by individual U.S. regulators on SPS requirements
- Steps in U.S. regulatory rulemaking process

Open discussion
- Policies
  - Adoption of regional policies that are complimentary
  - Public spending geared to productive activities
  - Developing an institutional framework for implementing CAFTA-DR

Topic
- Sustainability of policies
- Regionalizing production of high quality products
- U.S. policies and institutions that could be adopted by the region
- Developing a bloc-wide approach
- Accounting for what has been accomplished from year to year

Summary
The participants in the workshop want to see the adoption of regional agricultural policies that yield results in terms of expanded trade. The starting point for regionalization lies in uniform SPS regulations. There is a desire to know more about U.S. SPS regulatory procedures, which may be a logical starting point. However, this must rapidly transition to the need for policy and regulatory uniformity among the Central American and Dominican Republic countries. It was recognized that accomplishing this requires discussion of the potential for strengthening the existing regional institutions to provide more leadership in initiating change and developing longer-term policies. Any action that is taken must consider the impacts on small producers and be developed as a public-private partnership.
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