Deloitte Haskins+Sells

IICA MARKETING AND AGROINDUSTRY STUDY

PILOT PHASE REPORT

PREPARED FOR:

INTERAMERICAN INSTITUTE FOR COOPERATION ON AGRICULTURE

UNDER FUNDING FROM:

AGRICULTURE CANADA

Deloitte Samson a member of Deloitte Haskins & Sells International

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DELOITTE HASKINS & SELLS
AGRICULTURE AND RURAL DEVELOPMENT DIVISION

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EXECUTIVE SUMMARY

The Pilot Phase of the IICA Marketing and Agroindustry Project consisted of field work undertaken by outside consultants in four selected sample countries in Latin America and the Caribbean (LAC) and in North America. The field data collection was managed by the Prime Consultants, who are also responsible for data analysis and overall conclusions from this phase.

Key findings from the LAC field work include:

- **Both private sector processors and public sector promotion agencies are optimistic about export market opportunities for agroindustrial products but are uncertain as to how North American markets can be effectively exploited.**

- **Despite this optimism, none of the pilot countries studied have managed to increase the value of agroindustrial exports in recent years.**

- **A considerable interest exists in joint ventures as a means to enter export markets, although most processors consider joint ventures difficult to achieve.**

- **Constraints to further exports exist at all levels, including policy, infrastructure, raw material supply, transport and market contacts. Packaging and technology constraints were cited by respondents in all sample countries, while financial restraints were mentioned but not as a key obstacle.**

- **Private firms tend to focus upon immediate and tangible constraints (e.g. high port or packaging material costs) whereas national facilitatory agencies often focus rather upon policy-related factors (e.g. import policies of target countries).**

- **Many facilitatory agencies exist in each sample country, with considerable overlapping of activities and responsibilities. Coordination between agencies is often weak and attention is directed usually to fresh, rather than processed, products.**

- **A clear gap in facilitatory services appears with relation to technology related information. National technical institutes tend to focus on product adherence to regulatory standards and no dedicated information services for new technologies in processing, packaging or storage were identified.**

Key findings from North American work included:

- **In recent years an explosion has occurred in new product introductions. Although this creates opportunities for new supply sources, many new products fail to establish a sustained market niche.**

- **A particularly strong interest exists in exotic/unusual/tropical products but import statistics show that developing country agricultural products have a flat share of the Canadian import market. Plantation products (coffee, cocoa etc.) and fresh produce dominate the import market while processed goods are facing a diminishing overall market share.**

- **New product introductions requires an increasingly sophisticated marketing campaign, unlikely to be available to those selling directly to retail from developing countries.**

- In addition, problems of cultural and geographical distance, market knowledge and linkages with retailing outlets often renders LAC exporters dependent upon representatives or promoters in North America (brokers, distributors, intermediate processors).

- A wide range of technologies developed over the last 10-15 years are now in use in North America for agroindustrial operations. Many of these technologies have not been widely adopted in LAC countries.

- A number of North American firms utilising tropical and exotic products (yoghurts, ice creams, fruit drinks etc.) have expressed interest in exploring further the possibilities of linkages with LAC producers.

These findings provide grounds for both optimism and caution. The poor past performance of LAC agroindustrial exports is disappointing and may be argued to result from a lack of specific attention to agroindustrial export needs, and to a poor understanding of North American market requirements by LAC processors. On the other hand, the strong demand in North America for tropical/exotic products and the high level of interest encountered among private sector distributors and users of these products suggests that considerable potential exists.

Traditional approaches, particularly those applied in the past to fresh produce export systems, are considered unlikely to yield the results sought. Drawbacks to this type of approach include:

- LAC processors frequently are unsure as to the product which they would like to export, due to their poor knowledge of market demand and modern technologies. In reality, these suppliers are selling the ability to collect and handle a range of raw materials - the final product remains to be specified by the customer.

- The market is so splintered that it is unrealistic to attempt to identify any particular category for market study. For example, within jams and preserves, the target market may vary widely, including points of sale as diverse as health food stores, convenience stores, supermarkets and craft fairs, depending upon the image of the product.

- Nor is it possible to quote price ranges for processed products except in a most general and broad range. Using the example of the jams, for instance, prices for the same quantities could easily range from $0.75 to $6.95.

- Due to the lack of competitive markets, such as are common for fresh produce and plantation-based commodities, brokers and other intermediaries have limited usefulness. Each product must be targeted at a specific, selected market niche.

Instead, it is believed that market development for LAC agroindustrial goods must rely on increased contact between North American product users and LAC producers. It is to this function that IICA is recommended to turn their attention. In this manner the markets, rather than the facilitatory agencies, define the products that are sought, and LAC producers can tailor their output to specific needs of individual users.

Joint ventures, in a variety of forms, are seen as a natural extension of this relationship between supplier and user, and may include marketing agreements, technology transfer, help in packaging design, or, occasionally, direct investment.

Key roles that IICA could play in this methodology include:

- Assisting LAC processors in making contact with North American users of agroindustrial products (including manufacturers, retailing chains, bulk to retail repackaging operations etc.)

- Assisting LAC processors in obtaining advice and training on appropriate technologies, packaging design, enterprise management and quality control through linkages to other organizations.

- Providing North American users with information as to available raw material supplies and processing capabilities in LAC countries.

- Assisting both parties in determining necessary information and steps for concluding joint venture arrangements

- Working through national facilitatory agencies in servicing the LAC clients.

To implement this proposed approach to export facilitation and the resultant methodology, it is proposed that a new work plan be considered for both the remainder of the current contract duration and for the subsequent project stages. A tentative Work Breakdown Structure for this purpose is presented in Section 9.

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IICA MARKETING & AGROINDUSTRY STUDY - PILOT REPORT

1. INTRODUCTION

The following report represents a summary of the findings and recommendations arising from the Pilot or 'Rapid Appraisal' stage of the IICA Agroindustrial Export Marketing Promotion Project; one element of a long term programme within IICA supported by funding from the Canadian International Development Agency (CIDA) and implemented through Agriculture Canada.

The prime objective of the Agroindustrial Project has been defined as the development and implementation of a methodology that will permit IICA to assume a useful and important role in contributing to the expansion of agroindustrial exports from Latin America and the Caribbean (LAC) to markets in North America. A key subsidiary objective comprises the identification and facilitation of joint venture opportunities between LAC agroindustrial enterprises and North American firms.

Although Phase I of the Agroindustrial Project is scheduled to occur over a period of approximately 15 months, a decision was taken in December of 1988 (shortly after commencement of the project) to divide the work into two separate components. Under the first component - termed the Pilot, or Rapid Appraisal, stage - an initial survey was undertaken, in both North America and the LAC countries, to determine the following factors:

LAC COUNTRIES

- The current status, in general terms, of LAC agroindustrial exports
- The key constraints to expanded agroindustrial exports as perceived by LAC firms and institutions
- The nature of existing promotion and facilitation services available to agroindustrial exporters
- The identification of any existing potentials for joint venture development

NORTH AMERICA

- The nature and extent of facilitation and promotion services available to LAC agroindustrial exporters
- Current trends and future potentials for agroindustrial products in the North American market
- Newly emerging technologies applicable to the agroindustrial sector and their potential for adoption by LAC enterprises
- Interest in participating in joint venture arrangements with LAC companies

Based upon this work, Deloitte Haskins & Sells would then provide recommendations for the most effective manner of utilizing the remaining resources under Phase I in order to achieve the project objectives.

Due to budgetary and time constraints, the Pilot study was necessarily restricted in scope. Four countries were selected to represent the LAC region; Costa Rica, Ecuador, Jamaica and Uruguay. These countries were considered suitable because of their size, geographical location, relatively open economies and level of agroindustrial development. Through the IICA office in each country, local consultants were contracted to administer a series of questionnaires to local agencies, financial institutions and agroindustrial enterprises.

Although conditions varied in each country, LAC consultants were asked, where possible, to contact and interview the following sources (sample interview forms are provided in Annex I):

- o International and bi-lateral development agencies, with particular emphasis upon CIDA and USAID;
- o Canadian and U.S. embassies, particularly those involved in agriculture or business development;
- o Export promotion organizations, whether government sponsored or independent;
- o Banks and other organizations involved in agroindustry and export financing;
- o Private companies involved in agroindustrial exporting or strongly considering such activity.

In this last category, interviewers were asked to select 10 firms which were (a) of substantial size (artesianal enterprises were judged too small), and (b) involved at least partially in non-traditional products (to avoid interviewing only flour mills and similar established enterprises). Although it proved impossible in most cases to collect 10 full interviews, a number of useful replies were nevertheless obtained.

In North America a separate team of three consultants were contracted by Agriculture Canada to undertake specialized studies in the areas of support organizations, market assessment and technology. Based upon a reasonably open terms of reference provided by the prime consultants, each specialist contacted a wide range of information sources within their area and prepared a summary document containing their findings.

An analysis of the information provided by these consultants, together with material collected independently by Deloitte Haskins & Sells, acting as Prime Consultants, comprises the basis for this report. In addition, the reports of each consultant are attached to this document in the form of annexes.

2. AGROINDUSTRIAL EXPORTS FROM IICA PILOT COUNTRIES

2.1 The Current Status of Agroindustrial Exports

Although agroindustrial production is more important in absolute terms in the industrialized nations - industrialized countries accounted for nearly 60% of world agroindustrial value added in 1980 as opposed to approximately 25% for developing countries - the relative importance of agroindustry to developing nations is much greater. Not only is employment in the sector much more important to developing countries (26% of manufacturing employment in 1979 as against 11% in industrialized countries), but it can account for a major proportion of manufacturing value added (MVA).

Typically, LAC countries derive between one quarter and one third of their MVA from agroindustrial operations (in comparison with 10-20% in industrialized countries), and this figure can be much higher in individual cases. Nicaragua, for example, reported 56% of MVA from agroindustry in 1982. Moreover, agroindustrial activity has been growing much faster in developing than in industrialized nations - approximately double the average annual growth over the period 1975-88.

Yet developing countries are still facing serious problems in turning such growth into a major foreign exchange earning sector. Agricultural product earnings are still often focused heavily on raw materials and basic commodities - coffee, cocoa, beef, bananas, rice etc. In Jamaica, for example, exports of non-traditional processed foods, beverages and tobacco (as good a definition of agroindustry as is available) remained virtually stagnant from 1983-1987 at only U.S.$42 million. Similarly, in Ecuador, although non-traditional exports have grown enormously, much of this increase has derived from unprocessed products - especially shrimp. Thus total non-traditional exports grew from U.S.$327 million (FOB)in 1977 to U.S.$563 million in 1986, an average annual increase of over 7%. However, if only food products are considered, the growth has actually been negative; from U.S.$214 million to U.S.$138 million over the same period, a decline of 3.6% per year.

The same story can be seen in Costa Rica where, during the period 1980-84 inclusive, non-traditional processed agricultural exports declined from U.S.$37 million to U.S.$25 million, an average decline of 6.5% per annum. Even in 1984, however, such products accounted for no more than 9% of total non-traditional exports (valued at U.S.$420 million in that year).

The picture facing the LAC countries, therefore, with respect to agroindustrial exports is disappointing. While other non-traditional exports may have achieved significant and sometimes (as in the case of Ecuadorean shrimp or Colombian cut flowers), spectacular growth, agroindustrial growth has been a purely domestic affair. Exports have even declined over the past 5-10 years. Yet most LAC countries are essentially agrarian-based economies with varying degrees of industrialization. For such nations, agroindustrial development has much to recommend it; raw materials are available locally, considerably more value is captured in country than for unprocessed exports and, finally, large-scale employment is generated (not always a feature of other industrial activity) through work for both field and processing plant staff.

Most disappointing of all, however, is that the poor export performance of agroindustrial products is occurring at a time when the industrialized countries are displaying an unprecedented demand for tropical products in all shapes and forms (see Section 5). The market for such agroindustrial products exists. If LAC countries do not meet it, they risk being left still further behind by Asian nations which will step in to supply that need.

2.2 Suggested Agroindustrial Export Opportunities

As part of the pilot phase field work, respondents in the four selected countries were asked to identify agroindustrial products with potential for export marketing. The largest number of interviews, and hence widest range of replies, occurred with private-sector respondents, although an average of four or five institutions were also sampled in each pilot country.

In all cases, considerable optimism was expressed by survey respondents concerning the potentials for the development of agroindustrial exports in the future. Whatever other constraints that may exist (see Sections 2.2 and 2.3), a lack of product potentials is not one of them.

Although some overlap can be identified between product potentials of the various countries - tropical fruits are, for example, favourites in three of the four responding countries - the offerings of each country can be broken down into one or more general product categories. The most important of these are summarized in Table 2.1 on a country-by-country basis.

Of the products suggested, it is clear that Ecuador can offer the most innovative list, exploiting as it does the indigenous flora of the Andean region. Many of these products are hardly known outside of Western South America and, if established, would provide Ecuador with a relatively competition-free supply niche (at least in the medium term). Furthermore, many of these products are customarily not consumed fresh, but instead are converted into juices, desserts, ice creams and other processed forms, rendering them highly suitable for agroindustrial export development. Key problems faced by these specific products are the creation of overseas markets and the resolution of existing technical problems in storage and shipping (e.g. juices suffer fermentation). With export success, limited raw material supply might also become problematical.

The Uruguayan list is, not unexpectedly, heavily biased towards meat products, although considerable optimism exists for the development of fruit and vegetable based exports. Conventional frozen and chilled beef exports are viewed as an area of low growth and increasing attention has been focused recently upon the development of processed meat exports. Although facing the key disadvantages of competition with North America for product range (Uruguay's climate is temperate, like much of North America), long transport distances and relatively high labour costs, Uruguay does possess some key advantages too. Most importantly, it supports a well developed technological base and is already involved in areas such as the preparation of pre-packaged complete meals (for the Japanese market); a product probably beyond the capability of many other LAC countries. Secondly, it has a counter-seasonal growth pattern when compared to North America (i.e. their summer is the Northern Hemisphere winter). This latter advantage may not be of major use for processed foodstuffs, however.

Costa Rica appears to offer the standard products such as tropical fruits, vegetables and seafood, but does have some areas in which supply competition is less, including several spices and flavourings, nuts, and temperate berries (e.g. blackberries) which no other respondent mentioned, even though they are relatively common in Ecuador and would probably also be suited to Uruguay's climate.

TABLE 2.1: PRIVATE-SECTOR IDENTIFIED POTENTIALS FOR AGROINDUSTRIAL EXPORT DEVELOPMENT

URUGUAY

1. Meat Products
   - Beef Jerky
   - Meat Extracts

2. Portion-Controlled Dinners
   - Meat with vegetables
   - Fish with vegetables

3. Contra-Season Prepackaged/Prepared Vegetables
   - Most temperate & sub-tropical varieties

ECUADOR

1. Exotic Tree Fruits (Largely unknown in N. America)
   - Babaco
   - Naranjilla
   - Tree Tomato

2. Tropical Fruits (Currently sold in N. America
   - Mango
   - Passion Fruit
   - Soursop

3. Exotic Vegetables (Not widely known in N. America)
   - Andean Potatoes (strong flavour, very different from N.Am varieties)
   - Quinoa (high protein mountain grain)
   - Heart of Palm
   - Sweet Cucumber

4. Other Products
   - Baby Foods
   - Shrimp Products
   - Tomato Paste
   - Asparagus

JAMAICA

1. Tropical Fruit Products (Juices, Purees, Nectars, Jams, Snacks, Dried, Crystallized etc.)
   - Citrus
   - Papaya
   - Guava
   - Bananas
   - Mango
   - Passion Fruit
   - Pineapple

2. Ethnic Food Products
   - Ackee
   - Calaloo
   - Breadfruit
   - Irish Moss

COSTA RICA

1. Tropical Fruit Products (Pulps, Juices, Purees, Frozen Slices)
   - Banana
   - Mango
   - Papaya
   - Soursop

2. Temperate Fruits (Frozen, Packaged)
   - Blackberries
   - Raspberries
   - Boysenberries

3. Spices/Flavourings
   - Black Pepper
   - Vanilla
   - Nutmeg/Mace

4. Nuts
   - Macadamia
   - Cashew

5. Other
   - Prepared veg. (incl. cauliflower, broccoli, snowpeas, asparagus)
   - Prepared Seafoods (incl. moluscs, lobster, shrimp)
   - Tomato Paste

Jamaica's list of product potentials is both narrower and more conventional than for the other countries, reflecting its smaller size and more typical tropical climate. Focused heavily upon tropical fruits, Jamaica can offer little that is not available elsewhere in the Americas or the tropical world. Fortunately Jamaica does possess some comparative advantages, including short freighting distances to North American markets and duty free entry for most products. It also has potential for the creation of niche markets in ethnic products such as ackee and calaloo. While markets for these products are likely to remain restricted in the foreseeable future, Jamaica may encounter little supply competition and be able to obtain reasonable returns at moderate production levels.

2.3 Constraints as Identified by Sample Exporters

Unfortunately, the enthusiasm for potential new agroindustrial export products is matched by considerable discouragement over the range and severity of constraints also faced by the industry. As in the case of the potentials, the type of constraints identified tends to vary from country to country. The constraints emphasized by respondents also tended to vary by the type of respondent, however. This will be discussed further below, but in general it can be stated that private sector respondents tended to focus more on 'practical' problems (e.g. transport, packaging) while institutional respondents often were more aware of systemic or regulatory problems (barriers to entry, overall product quality, sanitary/health regulations). This tendency should not be overstressed, as there was considerable conformity in viewpoint between the two groups (within a particular country) but it does, nevertheless, exist.

Before exploring the responses of those questioned in more detail, an important caveat must be issued. As has been discussed in the introduction, it is clear that no universally accepted definition of agroindustry exists. Many confuse it with agribusiness, while others recognize the term but feel that the activities involved in raw material production, on the one side, and secondary processing of output (e.g. clothing from leather) on the other, can conveniently fit within this description. The implications of this confusion can be important to any analysis of constraints to agroindustrial export development. Although all interviews were commenced with a brief definition of agroindustry from the consultants' perspective, respondents frequently returned to their own definition while describing constraints (or even opportunities).

Some examples of this problem can be seen in the frequent claims that lack of adequate temperature controlled storage facilities were a significant problem when respondents were later found to be talking about fresh produce movement.
Other, similar examples, include transport (perishable items at risk), phyto-sanitary regulations (generally only applicable to fresh produce), institutional barriers (sometimes referring to quotas on textiles) and market price information (often referring to wholesale fresh produce trading prices).

Repeated attempts were made to weed out such irrelevant responses but, in some cases at least, it is felt that results given below are significantly influenced by thoughts that encompass not only agroindustry but also fresh produce and industry.

The same list of possible areas of constraint was provided to all private-sector respondents in the four countries. The results, broken down into three primary areas -production, shipping and marketing - are tabulated in Table 2.2.

TABLE 2.2: KEY PRIVATE SECTOR PERCEIVED CONSTRAINTS TO AGROINDUSTRIAL EXPORT DEVELOPMENT

CONSTRAINT	URUGUAY	ECUADOR	JAMAICA	COST RICA
		PER CENT		
Finance	22	44	28	50
Production				
Lack of raw materials	11	45	85	10
Local costs	22	45	56	30
Quality standards	22	22	56	90
Packaging	33	33	85	30
Shipping				
Bureaucracy	11	22	28	20
Transport	67	33	42	40
Sanitary & health regulations	22	22	28	30
Institutional barriers	22	44	0	30
Marketing				
Poor linkages to foreign markets	11	33	0	10
Connections with buyers	0	33	0	0
Lack of market information	0	33	14	10
Export prices	11	44	14	70

Number of Respondents: Uruguay - 9, Ecuador - 9, Jamaica - 7, Costa Rica - 10

A number of interesting patterns emerge from these results, showing distinct differences between differing respondent countries. In no case did finance appear of overwhelming importance although one half of all Costa Rican and Ecuadorean respondents cited it as some form of limitation. It appears that this occurs largely due to the failure of agroindustry to fit into either of the two main credit lines available -agriculture and small industry. There is currently no specific provision for agro-processing operations, packaging or quality testing investment. Finance concerns noted in Jamaica, by contrast, related primarily to foreign exchange availability.

Production related concerns are most evident in Jamaica, where more than half the respondents were worried about every production-related factor mentioned. It should also be made clear that, when cited as an area of constraint, local costs often referred primarily to the cost of packaging materials rather than raw materials. This was true for all pilot countries and demonstrates an issue of importance throughout the region.

Although not concerned about most production factors, Costa Rica registered a very high awareness of the importance of quality in processed output. Some 90% of respondents raised this issue. The explanation for such a strong focus - particularly in comparison with the other pilot countries - probably lies with the competitive situation of Costa Rica, competing as it does with a number of other Central American processors as well as Mexico. This competitive situation would also explain the relatively very high level of concern in Costa Rica about export prices (see the Marketing section of Table 2.2).

In Uruguay production was much less a concern than in other pilot countries - again possibly a reflection of better available technology - with no more than a third of respondents concerned even about packaging standards. In Ecuador production related concerns were moderate, with greatest attention going to raw material supply problems and local costs (in all cases packaging materials).

In the shipping section, the spread of constraints was more even, with all countries expressing moderate worries. Strongest complaints came from Uruguayan respondents, many of whom complained bitterly about transport. Their fiercest attacks were focused on the port system in Montevideo; in particular its cost, lack of adequate storage facilities and heavy bureaucracy. Cost and frequency of external transport was also a problem, however. Transport was also the key concern in this section for the Jamaicans, although it was not as emotive an issue as in Uruguay. However, presumably as a result of the Caribbean Basin Initiative (CBI), Jamaicans expressed no concern at all over institutional barriers, which were a significant concern to the Ecuadoreans.

With the exception of Ecuador, and the previously mentioned area of export prices for Costa Rica, little attention was given to marketing problems. In fact, some possible constraints received zero interest from the other three respondents. In Ecuador, by contrast, marketing appeared to be perhaps the biggest overall worry, with at least a third of respondents selecting every constraint offered under the marketing group.

Areas mentioned by some respondents, even though not listed on the questionnaire, included technology levels themselves (approximately 1 or 2 respondents per country) and the lack of export incentives provided by government (usually several replies per country).

Interestingly enough, as will be seen subsequently (Section 7), neither of the two areas which dominated the interest of the private sector in considering Joint-Ventures are strongly represented here as constraints - technology (reflected implicitly in quality, sanitary/health standards and packaging as well as in direct replies) and marketing. Perhaps many respondents believed that, while present quality and markets were acceptable, future development would call for new approaches in both areas.

2.4 Constraints as Identified by Institutional Groups

A more open format for identifying export development constraints was used with the institutional respondents, largely because, in most countries, insufficient respondents were interviewed in each country to justify tabulation of results. As noted in the previous subsection, although concerns expressed were broadly similar to those from the private sector, some particular differences were apparent.

In the case of Uruguay, for example, institutional barriers were mentioned by 2/3 of the 6 organizations interviewed, as opposed to only 22% of private sector respondents. The reason for this difference is not easily explained but may result from the greater awareness by institutional bodies in Uruguay of the activities of other institutions overseas (e.g. USDA, Agriculture Canada etc.). Product quality and packaging standards were also given more importance by local institutions, while transport and financing, on the other hand, were stressed less, although still mentioned. One concern raised that was not specifically covered in the private sector questionnaire was level of technology. This appeared to preoccupy many of the institutions questioned and included the ability of Uruguayan exporters to meet future health and sanitary regulations.

The same tendency could also be observed in the case of Ecuador. Here, for example, sanitary and health regulations and finance were both mentioned by three of the four respondents; a much higher proportion than in the private sector. Greater attention was also paid by institutions to problems of product quality and packaging. At the same time, local costs and foreign prices were given much less attention by institutional respondents. One unusual result also appeared. All institutional respondents agreed that transport was a severe constraint - an attitude shared by only one third of those questioned from the private sector. It is not known why this should be so, although the difficulties faced in maintaining an adequate definition of agroindustrial products mentioned earlier, may be responsible. References to transport problems may be in reality based on experience of these organizations with cut flower and fresh produce exports.

Considerable differences existed between private sector and institutional responses in Costa Rica. Among institutions only 1 out of 8 respondents mentioned foreign prices, in comparison with 70% of the respondents in the private sector. On the other hand, weak management and inadequate market information were much more strongly represented in institutional responses; 48% and 60% respectively, of institutional respondents identified these factors, as opposed to minimal responses from the private sector. Finally, institutional respondents shared high levels of concern with the private sector over quality standards; 48% of institutional respondents identified this factor

Although not a single respondent in the Jamaican private sector identified linkages to foreign markets or buyers as a problem, local institutions were more concerned. Weak relations with foreign businesses, covering such areas as investment, promotion and marketing were seen as serious problems by most of the institutions. Jamaican institutions were also more concerned about security problems inherent in exporting to North America. The repeated discovery of drugs on Jamaican carriers has already resulted in a number of airplanes being seized and could pose a severe risk to Jamaican exports in the future if continued.

2.5 Summary

Results of the pilot surveys appear to suggest the following:

- o Considerable optimism exists among both private sector exporters and export promotion agencies concerning the range of products which possess potential for export. In the countries examined, these products centred largely on tropical fruits and other little known exotic items, although Uruguayan responses were often focused on meat-based items.

- o Despite this optimism, agroindustrial exports have remained stagnant, or even declined, over the last few years, in sharp contrast to other non-traditional exports which have seen significant growth.

- o Although some commonality does exist, the nature of the key constraints perceived by both exporters and promotion agencies differs from country to country. Although insufficient countries were sampled to make a definite statement, the data suggests that these differences may arise from such factors as the level of economic development and the location of the country relative to North America.

- o Availability of finance, although mentioned by some respondents, was not a major constraint for the majority of enterprises.

- o The cost and availability of local packaging materials, as well as limited availability of local raw materials, comprised a major constraint to most countries.

- o Transport cost, reliability and frequency were common sources of concern to exporters.

- o There appears to be a tendency for concerns about product quality and packaging to increase in more competitive market areas (Caribbean and Central America).

- o Market related problems appeared to be of significant importance only to Ecuador, and even here no single constraint attracted more than 44% of respondents in the private sector. Nevertheless, marketing assistance is one of the most common areas of cooperation sought by those interested in joint-venture arrangements.

- o In all countries, institutional respondents tended to focus more closely upon institutional, quality, and technological constraints than did private sector respondents.

3. EXISTING PROMOTION AND FACILITATION SERVICES IN PILOT COUNTRIES

For the purposes of the pilot study, export related organizations operating within the selected countries were divided into three groups; export promotion agencies, development agencies, and financing agencies. In some cases, however, allocation of a particular agency within one of these groups proved difficult, due to the organization filling more than one role. As a result of this factor, as well as the findings of the field study, it has been decided to group all non-private sector groups within a single analysis, although distinguishing characteristics will be noted where applicable.

As the purpose of the pilot phase was largely to explore the possible nature of an effective methodology for IICA to pursue in promoting agroindustrial exports, an analysis of existing promotion related activities is of key importance. The analysis below, therefore, is divided into two parts - existing services and un-met needs.

3.1 Activities and Assistance Provided by Promotion Agencies

It was confirmed at an early stage in the field work that bilateral and international development agencies played little direct role in providing export related services to the private sector. Instead, participation, where it occurred, was largely mediated through the national and regional agencies discussed under the remaining two categories below. Indirect development agency assistance usually comprised one of two types; general financial assistance for institutional support of national organizations, or, the funding of specific projects with export development objectives. Even in the latter case, however, project implementation often occurs through a local organization.

Development agencies were active to some extent in all four pilot countries, although in the case of Uruguay this assistance was limited to Inter-American Development Bank (IADB) agricultural diversification projects only. In the other three countries, specific export targeted and institutional support projects funded by CIDA and/or USAID could be identified.

The remaining two categories of organization relevant to the pilot study comprise the promotion agencies and the financing institutions. These in turn can be sub-divided into three further categories:

- Government agencies, including national export agencies, credit banks and foreign and trade ministry departments. These often rely on official information sources and usually focus on trade promotion, subsidized credit and lobbying other governments. This group would also include national standards institutes and laboratories.

- Non-governmental, non-profit private institutions. Usually externally financed, these institutions have been heavily supported in many countries by USAID and are often concerned principally with policy, investment and sector studies.

- Representative groups, often formed by exporters, which may or may not operate with government support or financing. These agencies tend to focus on day to day issues including document preparation, market contacts, regulatory requirements etc.

In each of the countries surveyed, it was generally found that 4-5 promotion agencies of the above types existed, with 2-3 finance organizations specializing in investment and/or export promotion (often including specialized departments of the Central Bank). In

addition, most countries possessed one or more specialized laboratories or other technical groups specializing in quality control.

In Table 3.1, a brief survey is presented of the type of services offered by the agencies interviewed in each pilot country. While the field consultants may not have interviewed all participants, due to time and budgetary constraints, it can be claimed that all major players are included.

The pattern of coverage across all countries is quite similar. Activity is concentrated in the area of sectoral development - general studies, policy analysis etc. - and in the area of marketing. By contrast, less attention appears to be paid to the production and shipping sections of agroindustrial exporters' activities. It should be noted at this point that, apart from the planned establishment of an agroindustrial unit within AGRO 21 in Jamaica (now heavily in doubt due to the substantial restructuring of AGRO 21 underway), no specific agroindustrial services can be identified in any pilot country. Instead, agroindustries are generally covered under programs and projects intended to promote non-traditional exports.

Interestingly, only one country could point to an agency established to undertake trading activities directly on behalf of exporters; JETCO in Jamaica. This organization often takes title to export products and sells them overseas. On other occasions it may instead operate on a commission basis. Jamaica is, in fact, well represented in export assistance for a country of its size. JAMPRO, one of the key national agencies, boasts offices in a number of countries including three in North America (Miami, New York and Toronto). Only Costa Rica (CAAP) also has an overseas office purely for export development; that being in Miami. Jamaica also operates a Food Technology Institute and a Bureau of Standards, providing a range of expertise and training in quality standards, packaging design and related fields.

Curiously, however, little attention seems to have been paid in Jamaica to the actual financing of the export process itself, although funds are available through the Agricultural Credit Bank, the Trafalgar Development Bank and the National Development Bank of Jamaica for investment in export oriented businesses.

A similar plethora of promotion and financing agencies exist in Costa Rica. In fact, Costa Rica is probably the best serviced of the four pilot countries in terms of export assistance. At least nine major agencies were interviewed (counting FODEIN and FOPEX, both divisions of the Central Bank, as a single organization). Interestingly, Costa Rica tends to place more emphasis on production related assistance than the other pilot countries, perhaps a reflection of the serious concern in that country over quality and management standards (see Section 2.3 and 2.4). Despite this, however, not a single source of information on new and appropriate technologies was identified. Finally, both production and export related finance needs appeared to be well served in Costa Rica by both public (Banco Central y Banco Nacional) and private (INTERFIN) agencies.

Financial needs also appear to be adequately served in Uruguay and Ecuador. In the former, two financial organizations offer export financing, SURINVEST, a private sector organization, and Banco Pan de Azucar, owned by the Central Bank. Here, however, little direct subsidized assistance for agroindustrial investors appears available. In Ecuador FOPEX, a division of the state-owned National Finance Corporation (CFN) undertakes both investment and export financing, while the National Development Bank (BFN) also provides production related loans (although investment in processing equipment and other post-harvest operations could only be covered under the industrial loan programme).

Market price and trading information needs were relatively well serviced in all countries, although there is considerable doubt as to the use of such data for agroindustrial exporters; many agroindustrial products are not publicly traded at wholesale markets in the same manner as fresh produce. Perhaps surprisingly, a number of promotion agencies also claimed to be active in locating specific buyers for export clients, and almost all engaged in mounting trade shows and similar export promotion exercises.

For Uruguay, Ecuador and Jamaica, production and shipping assistance appeared to be the weakest support areas, with only information concerning regulatory standards appearing well covered. Particularly weak areas included information on agroindustrial technology, packaging and quality control assistance, management assistance and transport and trading operations. By contrast, Costa Rica seems to have a number of agencies involved in technical assistance, training and related areas. In particular, CENPRO, CINDE and the Camara de Comercio all claimed to be active in this area. As pointed out earlier, however, Costa Rica falls down like the others on technological assistance.

Although each of the four countries possessed technical laboratories or research organizations, the burden of undertaking sanitary and other regulatory testing procedures concerned with product quality meant that few resources were available within these organizations to undertake evaluation studies of new technologies. Equally, problems related to transport were largely policy-based or political in nature, and were considered difficult or impossible to deal with by the promotion agencies. Thus, limitations on the number of carriers allowed entry to the country, the frequency of their visits, and the type of cargo carried were generally a matter of government policy and could only be resolved by the ministry responsible for such matters.

Joint-venture development also appears to receive only limited support from promotion agencies, although Costa Rica has paid more attention to this area than the other countries. Even where it is mentioned, there is little evidence that any effective strategy has been developed to identify and foster linkages with foreign firms. Furthermore, few, if any, of the agencies could identify successful examples of their intervention. In fact, those companies interviewed which had developed joint-ventures appeared to have undertaken them largely independently of official sources.

Interviews with agricultural attaches of U.S. and Canadian embassies (where present) revealed that their priorities lay more with establishing markets for North American products in the local country than fostering joint-ventures. In several cases, LAC consultants were told that any inquiries from U.S. or Canadian businessmen concerning joint-venture would be referred as a matter of course to the relevant development agency (CIDA or USAID) for further action.

3.2 Apparent Un-met Promotional Needs in Agroindustry

Un-met promotional and facilitation needs were, surprisingly, poorly addressed by exporters in the private sector, although many expressed opinions concerning the value of services offered by existing agencies. Respondents in Uruguay, for example, seemed generally pleased with available services and made few comments on un-met needs. In Ecuador, satisfaction with existing services was much less common, with many exporters not affiliated to FEDEXPOR on the grounds of high cost and limited usefulness.

Responses in both Costa Rica and Jamaica were mixed. In Costa Rica some exporters were satisfied but there were a number of complaints alleging that the information provided was too general and that more specific information could be obtained more readily from North American sources (although at higher cost). These complaints probably reflect the absence of specific services targeted at agroindustrial enterprises. In the case

TABLE 3.1: PRINCIPAL SERVICES OFFERED BY PROMOTION AGENCIES IN LAC PILOT COUNTRIES

SERVICE	URUGUAY	ECUADOR	JAMAICA	COST RICA
	- Number of Agencies Offering each Service -			
Sectoral				
Sector Studies	2	4	2	2
Feasibility Studies	3	3	3	3
Policy Lobbying	1	1	1	1
Production				
Mgmt. Assistance	1	1	1	3
Training	2	1	2	3
Packaging & Quality Assistance	1	0	2	2
Regulatory Stds.	2	3	3	4
Technology	1	0	1	0
Prodn. Financing	1	2	2	3
Joint Venture Promotion	2	1	1	3
Shipping				
Document Preparation	2	1	2	4
Export Finance	2	2	0	2
Transport	0	0	1	1
Trading Operations	0	0	1	0
Marketing				
General Market Knowledge	1	3	3	5
Trade Shows etc.	2	2	3	3
Individual Market Contacts	2	3	2	3
Price & Trading Information	3	4	3	4

Number of Respondents: Uruguay - 7, Ecuador - 7, Jamaica - 6, Costa Rica - 9

of Jamaica, AGRO 21 appeared generally well respected but the Food Technology Institute, responsible for technological aspects of agroindustrial production, was criticised by several respondents.

A clearer impression of un-met service needs was obtained from the promotion organizations themselves. In Uruguay, comments focused most strongly upon three areas; improved knowledge of N. American market conditions and participants for agroindustrial products, better knowledge of new and appropriate agroindustrial technologies, and assistance in developing joint-ventures and other foreign investment vehicles. Mention was also made of improved credit by one organization.

In Ecuador, responses were more varied and ranged from increased knowledge of available technologies, through technical assistance and training, to feasibility studies and improved credit provision. Interestingly enough, given the responses of the private sector in Section 2 concerning the importance of market related constraints, no mention was made by Ecuadorean organizations of increased assistance in market definition and exploitation.

In Costa Rica, improved information on production/processing technology was mentioned by several agencies, including CENPRO, while the Ministry of Foreign Trade sought improved communications with North American businesses so as to attract increased investment. Surprisingly, CINDE identified improved export credits as its chief area of concern as an un-met need.

In Jamaica, no completed survey forms were returned for the promotional organizations, rendering full analysis difficult. Using the summaries provided, however, it is apparent that JAMPRO, AGRO 21 and UNIDO all have plans to increase services in export promotion. Services targeted for introduction include technology, training and joint-venture promotion in JAMPRO, technology, marketing and management strengthening in AGRO 21, and the development of a packaging materials design centre and joint-venture promotion unit through UNIDO financing.

3.3 Summary

A fairly wide range of promotion services were found to be available in all respondent countries. Commonly, several financing agencies and 4-6 promotion agencies could be identified which were active in the area.

Key aspects of existing and un-met promotional services include the following:

- Financial assistance to agroindustrial exporters appears generally fairly satisfactory, although export financing may be easier to obtain than loans for investment in plant.

- Promotion agencies are generally most active in the two areas of sector and feasibility studies and in providing publicly issued information, including regulatory requirements and market prices. The latter may be of little use to agroindustrial exporters interested in non-traditional items, however, as it largely focuses on trading at major fresh produce markets or on internationally traded commodities such as coffee, cocoa, and edible oils.

- Because of a lack of technical staff, few agencies are in a position to provide assistance to agroindustrial firms with respect to the selection and utilization of new technologies in processing, packaging or shipping. National laboratories are usually fully occupied in undertaking quality and regulatory testing, and seldom have the resources to undertake technology appraisal studies.

- Other facets of the export system frequently quoted by promotion agencies as receiving insufficient attention included management assistance to agroindustrial firms and training courses. Costa Rica was reasonably well serviced in this regard, however.

- Some areas of desired service improvement (e.g. transport, incentives) are essentially policy related and thus lie beyond the powers of a promotional agency to resolve.

- While approving of joint-ventures, and even attempting to assist in their attainment, few agencies possess any strategy to effectively promote increased ties between national and foreign businesses.

4. THE VIEW FROM NORTH AMERICA: PROMOTION AND FACILITATION SERVICES

4.1 North American Agencies and their Activities

There are four types of organizations in the United States which provide export and market development services to foreign entrepreneurs and to potential US traders or investors. These are:

- Government departments and their autonomous agencies;
- Multinational development institutions;
- Non-profit private sector organizations; and
- Profit-oriented private sector organizations.

In Canada, three of the four types of these service organizations exist; there are no multinational development institutions.

In terms of the services they provide, there is no clear delineation among these agencies, and their roles are often overlapping or similar. The services range from information gathering and dissemination, data collection and statistical analyses, to full project appraisal, financing technical assistance, financing, investment, insurance, project supervision and ex-post evaluation. Some of these agencies participate in policy formulation with respect to trade and investment, and others provide technical assistance, trade promotion or assistance in negotiations.

There are several common features among the export market development facilitating agencies. The most common service provided by all organizations -- public or private -- is information. Some provide information free of charge, while others recover costs or generate income by charging fees for their services. The types of information on offer include:

- Technical matters delivered via marketing workshops and/or printed matter;
- Technical information search and sourcing;
- Statistical information on potential exporting countries, trade, economic performance etc.;
- General economic and investment climate data and information " clearing house" facilities;
- Compilation and review of food marketing trade and government periodicals published in North America;
- Conferences on many aspects of trade and private sector development
- Listing of developing country firms seeking technical and/or financial participation by developed country firms;
- Listing of North American firms that have an expressed interest in "off-shore" investments.

The second common feature among these organizations is that they draw on each other's knowledge and facilities, often to improve efficiency, but occasionally in ways which obscure the authoritative source of assistance. Once "in the loop" there is a cycle of interaction. For example:

A trade mission from a developing country may be organized by the Private Sector Relations Division of OICD (within USDA), but the Agribusiness Promotion Council (APC - a non-profit private sector agency) may be made its point of contact in the United States and would provide the foreign mission with information, technical support, tours etc.

TDP, an autonomous public sector agency, may finance studies of investment opportunities undertaken by the American Society of Agricultural Consultants, a private organization. The results of those studies may lead to future investment decisions which are financed, either with loans or grants, from USAID, the US private sector, or the International Finance Corporation, a multinational development agency. These investments, in turn, may be backed by insurance from OPIC or pre-export assistance by the Eximbank.

Finally, the public and the private sector agencies work closely together, and in close cooperation with the prospective trader or investor. As the business prospect becomes more serious and specific, the extent of information, and the confidentiality of that information increases.

Because of the complexity of the information and support network, and its variable quality, most small and medium-sized businesses use the services of brokers. In a counterpart function, similar companies operate in most Latin American and Caribbean countries that have active commercial relationships with the US market. For a nominal fee, the Department of Commerce will provide a list of agents and brokers in a requested country. These firms know how to register businesses, comply with local regulations, identify potential partners, and contend with import and export procedures.

In Canada, similar organizational cooperation exists. There is close cooperation between the CIDA, Industrial Cooperation Branch and the non-profit Trade Facilitation Office, as there is with the importers and exporters associations. Publications listing market opportunities, policies, practices and market research are prepared on a regular basis and disseminated among the interested parties.

4.1 Conclusions

Without exception, staff of the agencies contacted in this survey expressed support for the research effort - there is a strong perceived need to identify "who is doing what?" in the export market development business. However, this survey did not canvass the views of the client base of these service agencies ie. the would-be exporter from a developing country and/or a North American firm seeking an off-shore investment opportunity. The next research step must include a component in which the views of the client are documented (through direct interviews with agroindustrial producers, members of Chambers of Commerce and distributors) to discover what is done well, what is not, what services are lacking etc.

This present research effort has only scratched the surface of the information and support network in the US. Washington's focus is the US Government and, within the Government policy-making and monitoring of programs. Beyond the Washington area, federal offices tend to focus less on inter-government relations and more on fostering commercial trade activity. For the Latin American and Caribbean countries, Miami is a principal commercial centre as are New York and Los Angeles. These centres need to be further explored to balance survey information.

Regional, state and local government are also heavily involved in providing foreign trade and commerce as are regional development authorities and, to a lesser extent, universities and colleges.

There is no category of information or service which is not available to US and Latin American/Caribbean enterprises that want to develop agribusiness relations with the United States market; to a lesser degree, this is also true for Canada. In fact, the volume of information and the intricacy of the service networks themselves present a problem for the prospective investor or trader. To evaluate this information and identify the most effective combination of services required to satisfy a particular need, one must not only know the alternatives available but, also, have some understanding of how the data and support systems function. This points towards a need for a clearing house for trade and investment information, with the capacity to understand how various data bases are constructed and to evaluate their quality with respect to specific user needs. In the case of Canada, additional public sector financial assistance may be appropriate to streamline the development of information and investment services.

The publicly-available information is, generally reliable although less specific than the individual user may require, however, it provides the first step for individuals businesses in the iterative process of sifting technical and market information in the quest for profitable commercial opportunities. This seems to be particularly true for the CBI countries because of initiatives taken during the Reagan Administration, and the additional opportunities available to them. However, to use this information and assistance in the identification of potential partners, and to negotiate relationships with them, requires an intimate knowledge of the players in the game.

In most cases, only large firms have the resources and expertise to exploit these opportunities without assistance. For other investors and traders, third party help in the form of a competent agent or broker is usually required. Despite the importance of this function, it will be readily apparent to the reader who has experience in this areas that it is full of fly-by-night operators. While the Department of Commerce and others can provide lists of agents and brokers, there are limits to their authority to offer qualitative judgements. An investigation is warranted into the need for an independent entity to provide prospective investors and traders with qualitative information concerning agents and brokers serving the international agribusiness sector.

While other studies being conducted under this program are examining specifically issues related to technology, it may be useful to note that this subject came up on a number of occasions during interviews with facilitating agencies. It is evident that trade and investment opportunities exist which are not being adequately developed because sponsors are unable to locate sources of assistance to address technical issues. Processing efficiency, quality control, packaging and transportation and handling are all areas in which innovative developments have taken place in recent years. Many of these have reduced the effective economies of scale in food processing and marketing and, therefore, lowered the entry threshold for enterprises that are suited to establishment in the target countries. An investigation is warranted into means of improving access for prospective traders and investors to sources of technology related to agroindustrial activities.

5. THE VIEW FROM NORTH AMERICAN: MARKETS

5.1 Marketing Overview

By any measure, the market for food products in North America is dynamic; new food product introductions numbered 6,100 in 1986 and were close to 8,200 for 1988. The dynamic nature of the market place in a double-edged sward for the potential market entrant, viz.: consumers are receptive to trying new and exotic food products; but most new product introductions fail, in the longer-term, to establish the food product as a regularly purchased item.

Two major forces are fuelling the pace of change in North American food markets - consumer "pull" and technological "push".

Consumer Pull

- Working women - An ever-increasing percentage of women are working outside the home, either full-time or part-time.
- Aging population - The age distribution of our population is skewing towards the 50+ and 60+ segments as people live longer, healthier lives and birth rates stabilize and decline.
- Smaller households - The average size of household is declining and the number of one and two personal households is increasing.
- Baby boom - the post-war baby boom is reaching an affluent and more discriminating middle age.
- Travel - More people are travelling and experiencing the food and lifestyles of others.
- Food away from home - The percentage of meals consumed away from home (eg. in restaurants and at work) is increasing.
- Time poverty - Today's consumer is better educated, especially as the baby boom moves through the system.
- Media exposure - The exposure to current events around the world has increased as well the ability to make the california raisins overnight sensations.
- Income - More households have dual incomes and more money to spend on convenience.
- Image - The food one eats and the beverages one drinks are becoming important image issues along with the clothes one wears and the car one drives.

Technology Push

- Food processing - Processors such as aseptic UHT and sous-vide (vacuum cooking) are adding shelf life to products with less damage to flavours, colours and textures than traditional retorting and freezing methods.
- Plastic packaging - Development in plastics that are microwaveable and squeezable are changing the foods being launched.

- Aseptic packaging - an increasing variety of containers are now aseptically packaged with resulting quality/shelf life improvements.

- Controlled (and modified) atmosphere packaging - Again added shelf like with less quality damage.

- Microwave - The re-heating revolution that is now trying to become a cooking revolution is providing unprecedented convenience and some new formulation issues.

- Distribution systems - Becoming more able to handle refrigerated foods (as opposed to frozen) safely through the cold chain from the supplier's storage to the in-store display case.

- Retail store strategies and formats - Not exactly a technology issue but a major factor driving the innovation that consumers are being offered daily.

- Food industry consolidation - Again, not technology but a key factor in the moving of innovations around the world with global marketing strategies.

The interaction of these "push" and "pull" forces is influencing the shape and nature of new food products being introduced onto the North American market. While the range of new food products is enormous, several major trends are discernible:

- Freshness - real and processed - a complex concept in the mind of the consumer (eg. a processed product can meet the required freshness criteria if it is perceived to be made from "fresh"ingredients);

- Convenience - easy to prepare, portable, accessible etc.;

- Light - ingredients excluded (eg. fat, caffeine, sodium, sugar-related products);

- Nutrition - ingredients added (eg. vitamin-fortified, whole wheat, natural bran, pack in fruits juice etc.);

- Quality - increasingly higher expectations (eg. chilled main course meals are displacing frozen dinners as a convenience product that has a "fresh meal" taste;

- Seeking change - consumers expect and look forward to experimenting with a vast array of new food products. Produce life cycles, or many food products, are becoming shorter and shorter;

- Indicator of social status - what food the consumer eats is increasingly perceived as a means of labelling oneself socially and professionally and claiming identification with a particular life-style group;

- Eating "on-the-run" - the proportion of meals that are <u>not</u> consumed in a traditional setting (eg. characterized as the "knife and fork plus serviette family lunch") is growing quickly, requiring a wide range of food products that have all the attributes of traditional food stuffs (taste, nutrition etc.) but can be hand-carried and eaten while doing something else (eg. working, playing);

5.2 Marketing of Imported Foods

Imports of agricultural products into Canada has exceeded $6 billion in every year since 1984 and, generally, about two-thirds of these imports emanate from the USA and the EEC. Mexico and Brazil are the most significant LAC sources, accounting for 5 percent of all agricultural product inputs into Canada and 1987 (Table 1). Imports of agricultural products into Canada from developing countries amounts to $1.3 billion in 1987, giving this group a 19 percent agricultural product input market share (Table 2 and 3). Plantation crops (in particular, coffee) comprise over 40 percent of developing country agricultural imports, followed by fruits and nuts with over 30 percent of total (Table 4).

Analysis of Statistics Canada import sales is useful to the extent that it provides guidance on general trends in import volume, movements in the relative importance of import value for major commodity groups etc. However, it is at a level of aggregation that masks the interesting trends that have been developing the food product imports in recent years. Key trends include:

- The growth of gourmet food interest and consumption.
- The growth of travel outside North America.
- The growth of institutional involvement (including government) in the promotion of trade.
- The relatively new support for specialty food products from the mainstream grocery trade beyond the traditional gourmet trade.
- The growth in demand for products based on largely imported ingredients such as exotic fruit.
- The impact of national debt and the counter trade that has developed around this.
- The role of the restaurant industry in setting food trends, particularly for imported specialty products.
- The seasonability of crop readiness compared to North America that provides contra-seasonal method opportunities.
- The multinational companies, both on the manufacturing and supply sides, building technological capability in subsidiary manufacturing plants in developing countries with relatively large population and an existing export base.
- The economics of cheaper labour combined with sea-freight that are allowing the production base for some traditional products (eg. pasta making in Mexico from USA Durum wheat that is sold back to the USA.

Marketing of food products in North America has become increasingly sophisticated over the past decade. There probably never has been just one mass market but, now, the food market is becoming increasingly segmented to satisfy the very specific requirements of target groups such as children, "seniors", diet-conscious, health-conscious, and self-indulgent nouveau riche. As a result, the manufacturer of a food product must know more about the target consumer (the "wants" that he/she seeks to satisfy) and the physical product itself (food value, chemical compositions, packaging etc.) than was the case in even the recent past. A cursory review must be capable of answering when presenting a product to the buyer for a supermarket chain gives a flavour of such information requirements.

CHECKLIST OF QUESTIONS FOR SELLING DIRECT TO RETAIL

- What sales category is the product (eg. specialty, delicatessen, dairy etc.)?;
- What is happening to this category at retail (eg. growing/stable)?;
- What other products are in the category (eg. are there clear market leaders)?;
- What are the unique features of the product (eg. spicier, additive-free, etc.)?;
- How is the product quality relative to other in the category?;
- What impact will souring sales of the product have on competitive and complementary products?;
- Are there test market results that indicate likely level of product sales take-off?;
- Is the packaging consonant with consumer wants (eg. is it tamper-proof, convenient)?;
- Is the product formulation appropriate?;
- What is the target market?;
- Does the distributor have a customer trial promotional strategy?;
- Are retail competitors carrying the product and what have been the sales results?;
- What is the reputation of the product manufacturers/broker/distributor for quality/price/consistency of supply?;
- What, if any, is the promotional strategy ex-store (eg. T.V./newspapers/ magazines/direct mail)?;
- Does the distributor guarantee a certain level of sales?;
- What are the recommended pricing points, ie. how should it be priced against other products in the category?;
- What is the expected level of profit for the retailer?;
- What credit terms are offered?;
- Are the significant in-store labour requirements to retail the product?;
- Does the product and its sales programme fit the supermarket merchandising plan?;
- Has the distributor taken out public liability insurance at an adequate level?;
- Has the imported product satisfied all regulatory requirements (eg. FDA approval for the USA)?;
- Does the product have a Universal Produce Code (UPC) for ease of price-scanning?;

5.3 Some Implications for LAC Food Product Exporters

The rapid increase in the rate of new food product introduction onto the North American market provides LAC exporter with enhanced market opportunities but, concomitantly, the risks associated with product launch and sustained market penetration at very high, particularly if the budget market is the retail supermarket base. Competing successfully in such a dynamic market environment required that the food product manufacturer have consistent contact with the final consumer; viz, monitoring consumer response to own and competitive product purchase and use, and anticipating changes in consumer wants and needs. It is difficult for LAC firms to gain the required proximity to the North American consumer, given the geographical and cultural distance that separates the parties.

As more new products are launched at the supermarket level, gaining access to retail shelf-space becomes more difficult and more expensive. A retail supermarket chain has only very limited product line with comprehensive support from both in-store and media promotion. This underscores the need for the exporter to work closely with a broker/agent/distributor who has a thorough understanding of the target market and carries a product range that complements the would-be exporter's product. Identifying such a broker can be difficult and time-consuming, particularly for the manufacturer located a continent away from the market place.

The history of launching imported specialty products and, subsequently, establishing them in the mainstream of food products has been that, initially, the market is tested by the imported product with domestic manufacturer looking-on to measure the success of

the launch. If successful and if the product is perceived to have sufficiently wide appeal, then, domestic manufacturers launch "me too" products or, frequently, improved versions of the imported product. Head-to-head competition, particularly for an exporting firm with limited resources, is generally commercially unwise. Better alternatives are to seek licensing arrangements (access to the original recipe) or, defending on the market strength of the domestic manufacturer, provide process raw materials or bulk finished product for final packaging in the importing country.

The food service sector - in particular, the restaurant sub-sector - is the first pint of market entry for many specialty imported food products. Success in this market can lead to wide product launch in the retail food sector. As per the retail business, the challenge for the would-be LAC exporter is to identify a broker/agent/distributor that focuses on merchandising specialty products to the hotel and restaurant trade and carries a complementary, rather than competitive, range of products.

TABLE 5.1: IMPORTS OF AGRICULTURAL PRODUCTS FROM PRINCIPAL COUNTRIES AND COUNTRY GROUPING, HISTORICAL SUMMARY

CALENDAR YEAR	TOTAL	UNITED STATES	AUSTRALIA	EEC	NEW ZEALAND	MEXICO	BRAZIL	OTHER COUNTRIES
				MILLION DOLLARS				
1980	5,128	2,916	338	338	134	84	133	1,185
1981	5,610	3,264	278	388	129	92	184	1,275
1982	5,056	3,060	231	379	122	78	201	985
1983	5,185	3,118	181	427	141	76	198	1,044
1984	6,112	3,610	185	564	105	79	228	1,341
1985	6,017	3,431	190	608	138	84	283	1,283
1986	6,607	3,638	266	740	144	102	247	1,469
1987	6,767	3,891	246	768	166	96	240	1,360

SOURCE: Agriculture Canada

TABLE 5.2: TOTAL IMPORTS AND IMPORTS OF AGRICULTURAL PRODUCTS FROM DEVELOPING COUNTRIES BY MAJOR GROUPING, AVERAGES 1978-82, 1983-87 AND CALENDAR YEARS 1985-87

COMMODITY	AVERAGE 1983-87	1985	1986	1987
		THOUSAND DOLLARS		
AGRICULTURAL PRODUCTS				
Grains	6,827	6,563	10,332	8,238
Rice	6,805	6,522	10,304	8,208
Grain Products	9,215	8,322	10,223	11,930
Bakery products	2,271	1,974	2,599	3,170
Cereal grain products	1,247	964	1,373	1,791
Animal Feeds	1,353	2,150	1,697	1,296
Complete feeds	1,300	2,128	1,574	1,219
Oilseeds	4,848	13,838	2,320	3,275
Peanuts, green	531	66	541	1,141
Soybeans	2,213	10,952	24	8
Oilseed Products	40,453	54,723	24,417	26,967
Oil and fats	40,123	54,391	24,058	26,627
Live Animals	787	360	2,022	630
Red Meats	18,716	17,392	13,235	19,360
Beef and veal fresh, chilled or frozen	7,550	4,424	3,734	8,883
Canned Meats	9,395	10,989	7,161	8,195
Other Animal Products	5,646	5,464	5,575	5,059
Raw wool	725	1,043	914	359
Dairy Products	1,402	587	1,851	2,091
Cheese	1,309	488	1,827	1,960
Poultry and Eggs	683	581	684	641
Fruits and Nuts	404,835	421,692	438,097	479,637
Apples, fresh	7,955	6,412	8,578	13,865
Bananas, fresh	135,625	135,292	152,090	146,346
Grapes, fresh	41,574	44,671	44,916	47,571
Melons and cantaloupes	7,698	7,596	8,439	9,625
Oranges, mandarins and tangerines, fresh	15,668	13,100	16,243	28,047

COMMODITY	AVERAGE 1983-87	1985	1986	1987
		THOUSAND DOLLARS		
AGRICULTURAL PRODUCTS				
Fruits and Nuts (cont'd)				
Peaches, nectarines and plumbs, fresh	7,317	8,206	9,429	9,138
Dried fruit	15,007	13,947	16,439	20,028
All fruit juice	96,734	110,601	91,488	114,521
Canned fruit	24,527	28,253	25,499	28,103
Nuts	30,356	30,687	38,199	33,346
Vegetables and Potato Products	70,707	70,748	73,146	68,331
Peppers, fresh	5,821	7,422	6,222	5,178
Tomatoes, fresh	12,717	16,205	11,948	9,992
Other fresh vegetables	16,319	15,056	17,906	17,988
Mushrooms, canned	7,289	6,447	4,709	1,327
Other canned (inc. juices)	10,098	8,139	9,155	11,891
Dried vegetables	5,207	5,562	5,405	5,163
Seeds for Sowing	1,103	357	872	3,525
Sugar	45,165	36,658	41,981	40,000
Raw Sugar	44,177	35,356	41,189	38,077
Tobacco, Raw	1,478	178	1,537	933
Vegetables Fibres	6,225	5,901	5,276	2,009
Cotton, raw	4,181	3,865	2,869	358
Plantation Crops	530,421	504,859	647,053	526,360
Coffee and products	342,922	318,641	474,609	345,927
Cocoa and products	46,149	47,459	46,736	48,197
Tea and products	33,410	32,715	30,585	24,509
Crude natural rubber and latex	107,845	106,029	95,040	107,728
Other Agricultural Products	60,381	51,470	69,652	70,790
Molasses, syrups and confectionery	15,141	13,259	19,065	16,597
Spices	15,477	13,570	21,188	19,929
Food and food preparations	10,389	8,646	11,507	14,323
Nursery products	11,239	7,885	9,679	10,783

SOURCE: Agriculture Canada

TABLE 5.3: DEVELOPING COUNTRIES SHARE OF THE CANADIAN MARKET FOR IMPORTED AGRICULTURAL PRODUCTS

	1985	1986	1987	Average 1983-87
	- million dollars-			
Total Agricultural Product Imports	6,017	6,607	6,767	6,137
Agricultural Product Imports from Developing Countries	1,202	1,305	1,271	1,210
Developing Countries Agricultural Product Import Market Share	20.2	20.0	18.9	19.7

Source: Derived from Agriculture Canada data sources.

TABLE 5.4: RELATIVE IMPORTANCE OF SELECTED FOOD PRODUCT IMPORTS INTO CANADA FROM DEVELOPING COUNTRIES, 1985-1987

		1985	1986		1987
			- Percentage -		
Fruit and Nuts		33.7	32.4		37.8
of which:					
Fresh fruit	48.1		54.7	50.6	
Dried fruit	3.3		3.8	4.2	
Fruit juices	26.3		20.9	23.9	
Canned fruit	6.6		5.8	5.9	
Nuts	7.3		8.7	6.9	
Vegetables and Potato Products		5.9	5.4		5.4
of which:					
Fresh Vegetables	54.7		49.3	48.5	
Processed Vegetables	45.3		50.7	51.5	
Plantation Crops		44.1	87.9		41.4
of which:					
Crops	63.1		73.3	65.7	
Cocoa	9.4		7.2	9.2	
Tea	6.5		4.7	4.7	
Rubber	21.0		14.7	20.5	
Other Agricultural Products		16.4	14.3		15.4
All Agricultural Products		100.0	100.0		100.0

6. THE VIEW FROM NORTH AMERICA: TECHNOLOGY

6.1 Selection of Agroindustrial Technologies

Advances in food processing technologies have accelerated the flow of new food products that entered the North American market over the past decade (See Chapter 5). Some of these proven, but still new, technologies offer greater potential for uptake in LAC countries than others. Of curse, within the LAC region, there is an enormous range of technological sophistication and capability both between firms in the same country and between the processing sector in one country compared to another.

As an integral component of this project, recent commercial development in food processing technology have been established in the light of their suitability for uptake by processing firms in the LAC regions (See Annex 7: American Technology Study). Twenty commercial processors have been identified that seem to offer particularly strong potential for LAC firms. In winnowing the alternative processes, several key criteria sere utilized to direct process selection, such as:

- perceived success of process in meeting the requirements of consumers for new food products;
- current and potential availability of agricultural raw materials in sufficient quantities and quality to justify adoption of new technologies in the four country pilot area;
- processes that provided long-life shelf stability, reduced weight, enhanced ease of handling and shipping, and maximum value-added were given particular emphasis;
- processes that offered a degree of technological sophistication that could be extended to firms in the pilot countries without the requirement of upgrade substantially the technical skills of present personnel along the production and marketing chain were given high weightings;
- as were processes that could maintain product qualities on a consistent basis that are consonant with the requirements of the North American market.

The twenty process technologies that were selected as best fitting the needs of the LAC food product exporter are listed below. Interestingly, they can be classified into three groups: the first includes processes that leave the commodities whole such as the three packaging and irradiation processes. The second transforms commodities, or parts thereof, into new components such as the processes listed in the texturization and drying. The third and by far the largest group includes the use of commodities for new food products via the extraction or fermentation processes. Some of them even utilize waste products such as bagasse, citrus and apple pomace and may represent interesting opportunities for both human and animal food products.

SHORT LIST OF PROMISING TECHNOLOGIES FOR LAC COUNTRY FOOD PROCESSORS

PROCESSING AREAS	SPECIFIC PROCESSING TECHNOLOGIES
Packaging	Aseptic Packaging Modified Atmosphere Packaging Vacuum-Cooking Technology
Drying	Freeze-Drying Technology
Concentration	Membrane Processing
Irradiation	Gamma and Electron Beam Technology
Texturization	Surimi Processing Extrusion Technology Restructured Meat Technology Microencapsulation Technology
Extraction	Essential Oils Vegetable Protein Technology Natural Food Colour Extraction Citrus and Apple Pomace Technology Super Critical Processing
Fermentation	Flavours and Aromas Enzyme Production Yeast Production Lactose Hydrolysis Monosodium Glutamate

6.2 Technologies of Potential Interest to LAC Enterprises

Below are provided short descriptions of a number of technologies finding increasing acceptance within the agroindustrial sector in North America. While such a list can not be all inclusive, it does provide an indication of the sort of processing, storage and packaging technologies currently available. While some of these processes have already found limited adoption in LAC countries (e.g. aseptic packaging), the majority are still little known among most LAC enterprises working in this area.

Aseptic Packaging Technology

Aseptic packaging is the newest development in the area of packaging as it permits the production of high quality products which are shelf stable. The technology offers many advantages over hot-fill and retort techniques, and it applies to particulates as well as to liquid products. In Latin American countries many products need to be sterilized for facilitating transport, exports and distribution of fruits and vegetables, dairy and meat products.

Modified Atmosphere Packaging Technology

Although modified atmosphere principles have been known for a long time, new interest has been stimulated in recent years with advances make in the design and manufacture of polymeric films which have a wide range of gas permeability characteristics. There are features in which Latin American countries wishing to export exotic fruits and vegetable to temperate countries will have particular interest.

Vacuum-Cooking Technology

The technology of "cuisson sous-vide" has been developed in France during the last decade. It had a rapid development in Europe and is now being introduced in North America. It is a technology for epicures, gastronomic professional of food preparation and quality restaurants and institutions. Latin American countries surely have a market for this new technology for various food products.

Freeze-Drying Technology

The dry form is recognized as the best method to protect foods over long periods and it offers many advantages for storage, transport and utilization. Freeze-drying is among the rare processes which do not use heat for drying and, consequently, offers a better protection to nutritional and eating qualities of foods. The technology has now become feasible for large-scale operations and could find applications in Latin American countries to export high quality exotic products such as fruits, vegetables and particularly wide variety of shellfish.

Membrane Technology

Membrane filtration is a new separation technology for liquids which has been associated with a large number of applications in food processing, pure water production and processing waste treatment and recovery. It has become a must in most food processing plants for reasons of economics, better quality products and ingredient production. This technology can be applied in Latin American processing of such items as fruits, vegetables, dairy, meat and fish products, beverages and citrus oils.

Irradiation Technology

Irradiation of food has four major objectives:

- to ensure the microbiological safety of foods;
- to contribute to reduction in food losses by spoilage;
- to facilitate the trade of insect-free foods between countries;
- and to lengthen the shelf-life of fresh foods.

It is axiomatic that these objectives are of great interest to Latin American countries wishing to increase their exports of many fresh, as well as processed food products, to North American and other markets.

Surimi Process Technology

The food industry of North America has discovered only recently and advantages of the old Japanese surimi or fish de-boning technology. It is an excellent way to ad value to under-utilized fish species and to produce a wide selection of similar food products. The fishing industry of Latin American countries has an interest in picking up the surimi technology with all the latest improvements.

Extrusion Technology

The potential of the extrusion-texturization technology is enormous. The composition of the products can be adapted to consumer preference in terms of flavour, texture and nutritive value. Being in low moisture form, the products have long life properties without refrigeration. It is a technology quite appropriate to Latin American countries to produce low cost nutritious foods for domestic use as well as for exports.

Restructured Meat Technology

The manufacturing of steaks from cuts traditionally used for ground meats or stews or roasts is an excellent way to add value to cheaper meat cuts while providing boneless steak meats at relatively low prices. The meat industry in Latin American countries would benefit from the restructurization technology in creating higher-value products from trimmings and poor cuts.

Micro-Encapsulation Technology

Microencapsulation of minute food particles is a more recent development. Good techniques have been developed and tested on the industrial scale. The potential to produce unique foods is tremendous. Latin American countries likely beneficiaries of this new technology because of their resources of food ingredient, such as spices, vitamins, oils as well as raisins and nuts.

Essential Oils Technology

Food flavourings are among the most essential ingredients used in the fabrication of foods at the industry, institutional and home levels. The food flavour and fragrance industry is an ever prospering industry. Natural flavourings have currently greater consumer appeal than artificial flavourings. Since Latin American countries are a good source of aromatic materials, such as citrus, tropical fruits, spicy herbs and vegetables and even food processing wastes including citrus peels, etc. essential oil production could become an increasingly flourishing industry.

Vegetable Protein Technology

World protein requirements could be met easily if consumers expressed a greater preference for an would learn to use more the plant proteins in their diet. Since Latin American countries have access to several proteinaceous crops such as cereals, oilseeds, legumes, etc., the development of a vegetable protein industry would be appropriate primarily for domestic consumption but also for exports.

Natural Food Colour Technology

There is a growing interest in North America, as well as in the world, for the utilization of natural colorants in food processing. This has come about since the banning of several synthetic colorants for safety reasons. The list of synthetic or certified food colours is getting shorter with time and their production is subject to strict control by federal agencies. As a result of this, natural colour technology is developing at a rapid rate and this could well be the time for Latin American countries to exploit the industry of colorants from exotic crops, fruits, flowers, leaves and many other products as well as even insects.

Citrus and Apple Pomace Technology

Citrus peel and apple pomace usually are embarrassing wastes from the juice industry. They are costly to dispose of and often are a source of pollution. The trend is toward technologies to salvage and add-value to those residues. Latin American countries could benefit from technologies aimed at waste reclamation.

Super-critical Fluid Technology

This technology has a great future in the food industry where the trend is to seek high value components in plant and animal materials. It is likely to replace the conventional methods of separation utilizing organic solvents or heat. Since the basic materials of interest (coffee, tea, exotic fruits, herbs and vegetables) are found in large supply in Latin American countries, it is appropriate to consider the application of this technology for those countries.

Flavours and Aromas by Fermentation

The flavour and aroma of many food products are developed by microorganisms and enzymes present in or added to them. They should be used in biological models for the production of flavours and aromas. The field is wide open for any country to select appropriate systems utilizing their respective food processing residues such as molasses, bagasse, cheese whey, etc.

Enzyme Production Technology

The use of enzymes in the food industry is developing at an accelerating rate. There are some twenty enzymes which are currently used in food. The need is for thermo-stable enzymes and also for a greater variety. There are some 70 manufacturers of enzymes in the world. The success belong to those who can produce them at the lowest cost. Latin American countries have an abundance of raw materials such as papayas, pineapple, figs and animal materials appropriate for enzyme production.

Yeast Production Technology

The use of years in food is as old as bread making. Yeast is virtually synonymous with fermentation for the production of both alcohol (wine making, brewing, distilling) and carbon dioxide (bread making). Today, yeast production technology is becoming attractive for additional purposes, as a source of protein and vitamins, as contributor and enhancer of flavours, and for its functional textural properties. Since Latin American countries have abundant supplies of yeast substrates, the development of the yeast industry in those countries represents a sound potential.

Lactose Hydrolysis Technology

A new technology of immobilizing lactose to produce hydrolysed lactose has been developed in recent years. The technology is of interest for those countries where there is a high incidence of lactose intolerance or where the volume of whey available could make the process attractive.

Monosodium Glutamate Technology

There are two types of substances which are produced on a large scale to enhance the flavour of foods, the nucleotides (inosine 5' - monophosphate, guanosine 5' - monophosphate) and salts of glutamic acid. The monosodium glutamate is by far the most in demand. Since substrates (eg. molasses, bagasse, sulfite, liquor, etc.) used for its production are abundantly available in Latin American countries, it would be appropriate that the manufacturing be close to the source of raw materials.

7. PRELIMINARY JOINT-VENTURE POTENTIALS IDENTIFICATION

As part of the pilot survey process in the four selected LAC countries, private sector respondents were asked to indicate their interest, if any, in joint-venture development with North American firms. Where interest was expressed, the exporter was further asked to define both the potential product involved and the nature of joint-venture assistance sought.

Using this information, the same consultants in North America who had undertaken the preliminary assessment of market potentials and new technologies were asked to return to some of their key contacts and obtain a reading of the North American attitude to these product/assistance potentials.

Before examining the information resulting from this two step process, however, a few brief comments should be made. Firstly, it became clear at an early stage that considerable interest existed among LAC exporters in strengthening ties to North American firms. Joint-ventures, although seen as probably the most difficult manner of achieving these ties, were also seen as potentially the most rewarding.

Secondly, and more importantly, it also became clear that the vast majority of LAC firms had little clear idea of the exact product type which they would wish to market through a joint-venture. In fact, it was obviously the hope of these firms that the joint-venture would assist them in identifying such a product. The responses received, therefore, focus far more upon the raw materials available to the LAC firms, and to some extent on the current product range, than on the final output.

A typical case, for example, might involve a company manufacturing jams and nectars from a range of tropical fruits. The company sells primarily domestically but has some overseas sales, including North America. The firm would like to expand its export sales, particularly into the North American market, but is aware that its present product line will have limited appeal outside of its existing narrow, possibly ethnic, market. It recognises that its production processes are antiquated, and its packaging unexciting, while the product range itself is lacking in individuality.

The company is interested in developing new products but faces a number of problems. It is not sufficiently knowledgable concerning state-of-the-art processing technologies or, for that matter, the items that they can produce (fruit leathers, yoghurt blends, filler for fruit-flavoured cereals etc.) to evaluate the best opportunities. It lacks confidence in its abilities to market new products beyond its existing narrow clientele. It is unsure of how best to package the output so as to reach the new markets. It is not even sure what new markets it is trying to reach.

The company hopes, therefore, that some form of linkage with a North American firm will assist it in coping with these uncertainties. If a North American partner with a good grasp of the market and its requirements can be identified, the LAC firm faces far less uncertainty. If, besides, that company can assist the LAC firm in selecting appropriate technology in processing and packaging, the advantages become significant indeed.

While this scenario is not always true, it certainly represents a majority of the respondents. These LAC firms are thus more concerned about guidance in developing their products, packaging and marketing strategy than they are in a simple cash investment.

7.1 Potential Products for Joint-Venture Development

Not unexpectedly, meat and dairy products are strongly represented on the Uruguayan product list, although contra-season fruits and vegetables are also seen as distinct possibilities. One difference between the Uruguayan animal product firms and other LAC respondents is their size and level of sophistication. The three meat-based firms interviewed all had annual sales in excess of U.S.$30 million per year and employed more than 1,000 workers, while CONAPROLE, the main dairy company, sells more than U.S.$80 million per annum. Their level of technological expertise and capital resources are impressive. Nevertheless, they are attempting to move into an area in which they have little experience, despite a long familiarity with the basic material (cattle).

These companies are also distinct from many LAC exporters in that they have a clear idea of the products which they wish to target and the manner in which to do so. FMC S.A., for example, has already initiated a joint-venture with Japanese interests to produce and ship portion-controlled prepackaged meat and vegetable dinners for the Japanese market. Such firms would be appropriate for large-scale, capital intensive joint-venture programs with a North American partner, should a potential be perceived.

Uruguayan vegetable and fruit producers, on the other hand (with the exception of Monte Paz, the tobacco producer), fit far closer to the typical LAC pattern. None exceeds U.S.$1 million in sales and all are heavily dependent upon the domestic market. Exports currently account for only a small proportion of their income. Furthermore, they have little concept of the product which they wish to produce or market. Nevertheless, they believe that with a high quality supply of contra-season horticultural products, some type of Northern Hemisphere market should be obtainable. That market may be in fresh produce, but it may also lie in some form of limited-life processing technique that maintains their Southern Hemisphere seasonal growing advantage. They seek a North American firm with ideas and markets that they can supply the product for.

A similar situation exists with regard to Ecuadorean firms expressing interest in joint-venture opportunities. Although several firms were able to suggest specific product ideas (including baby foods and yoghurt flavourings), the interest was, for the most part, in contacting North American companies which could assist in defining commercially viable products for their markets. In Ecuador, however, both marketing and processing expertise become of even greater importance than in Uruguay. This is due to the preponderance of raw materials that are virtually unknown as export items (naranjilla, taxo, babaco, Andean potatoes, sweet cucumber, etc.).

In order to effectively exploit these items, and develop them beyond their current export levels of no more than a few hundreds of thousands of dollars per year, Ecuadorean processors must have access to North American expertise in both marketing and technology. Marketing is important because of the need to define and create new markets for essentially unknown products. Technology is equally important because many of these fruits and vegetables face processing and packaging problems that are a substantial impediment to export development (e.g. the tendency for juices and nectars to ferment after packaging, or the rather unattractive colour of naranjilla juice; a dirty green). Few, if any, of the Ecuadorean exporters has the capital resources or technical skills to overcome these problems alone.

Jamaica faces a similar set of problems with regard to its ethnic products. These products, such as ackee, calaloo and breadfruit, provide a small-scale but steady export sales to centres of Caribbean immigration in North America. In order to expand that market, however, Jamaican exporters face similar problems to those in Ecuador. Non-ethnic markets would have to be created, products that suit the tastes of caucasian or asian palates determined, and appropriate technologies introduced to manufacture the desired

items. All of this runs beyond the capacity of the small exporters currently active in the business. Joint-venture partners are an essential prerequisite to expansion in this field.

For some Jamaican exporters the creation of new markets is not a major problem, however. These exporters are dealing principally with well known tropical products (papaya, mango, passion fruit, banana etc.) that are already in good demand in North America. The problem faced by this group, therefore, focuses more on developing products that can be differentiated from their competitors, and utilizing processing and packaging technology that ensures an up-market or gourmet image for their output.

To meet these needs, Jamaican fruit processors could be well suited to the custom production of products to specifications, technology and packaging provided by a North American wholesaler or retailer. Thus, companies in North America looking to produce an own-label range of items (e.g. gourmet jams and preserves), and willing to oversee quality standards, might find Jamaica an attractive proposition for joint-venture activity - especially given its proximity to North America and its privileged status under the Caribbean Basin Initiative (CBI).

Costa Rican firms involved in agroindustrial exports are also predominantly involved in fruit-based products, although the specific respondents interviewed appear to concentrate on bulk shipment of intermediate products - pulps, concentrates etc. Costa Rica, however, has a far more active agroindustrial sector than does Jamaica; a recent University of Costa Rica study identifies 85 agroindustrial processors. This provides a greater range than in Jamaica including liquors, seafoods, spices, and nuts. Nevertheless, the range of joint-venture assistance sought is strikingly similar to that in the other pilot countries. Costa Rican exporters seek North American firms which can help them identify specific market opportunities and the processing/packaging technologies needed to exploit them.

7.2 Private Sector Response to Joint Venture Potentials

This section offers a structured approach to moving forward on the types of product/market opportunities specified in Section 7.1 as being available to the four client countries, ie. Costa Rice, Jamaica, Ecuador, and Uruguay.

Responses have been developed through conversations with private sector agroindustrial firms in North America and through evaluation of material held by Gorman Publishing Co. Ltd. of Chicago, among other sources. The recommendations focus upon fruit-driven opportunities for product development, however, the same approach is seen as suitable for the meat-driven and other opportunities.

Marketing Versus Technology

Most of the companies are seeking both kinds of assistance and partners. It's important that the marketing drive the technology.

1. Identify specific product opportunities first (primary and secondary), such as selling fresh babaco through supermarket produce departments and creating a naranjilla-driven segment of yoghurts and coolers through the Ault Dairies and Labatts.

2. Identify and deliver the technology required to execute these opportunities (often resident with the partner chosen).

TABLE 7.1: POTENTIAL PRODUCT DEVELOPMENT/JOINT VENTURE AREAS

URUGUAY

Product Areas:
Meat Extracts
Beef Jerky and other Dried Products
Portion-Controlled Meat and Fish Based Dinners
Processed Cheeses
Contra-Season Prepackaged/Prepared Vegetables

J-V Interest:

FMC S.A. (Portion-Controlled Dinners/Meat Products)
- Technology & Marketing [Already active with Japanese]

CALAGUA (Packaged Fruits & Vegetables)
- Technology, Marketing & Transport

PRELEX S.A. (Packaged Fruits & Vegetables)
- Marketing

CONAPROLE (Meat Products & Extracts)
- General

ECUADOR

Product Areas:
Exotic Tree Fruits (Babaco, Naranjilla, Tree Tomato, Taxo)
Tropical Fruits (Mango, Passion Fruit, Soursop)
Andean Potato Varieties
Quinoa (High protein indigenous grain)
Baby Foods
Shrimp Products
Heart of Palm
Tomato Paste
Asparagus
Sweet Cucumber

J-V Interest:

SIPIA (Exotic Tree Fruits, Potatoes)
- Technology & Marketing

PROCECONSA (Exotic Tree Fruits, Asparagus, Sweet Cucumber)
- Technology & Marketing

ALIHUERTA (Heart of Palm, Yoghurt Flavourings)
- Processing Equipment

ECUAVEGETAL (Baby Foods, Fruits, Shrimp, Tomato Paste)
- Technology

CAPACIF (Passion Fruit, Frozen Fruit Slices)
- Technology & Marketing

TABLE 7.1 (CONT.): POTENTIAL PRODUCT DEVELOPMENT/JOINT VENTURE AREAS

JAMAICA

Product Areas: Tropical Juices & Purees (Citrus, Mango, Papaya, Passion Fruit, Guava, Pineapple)
Banana & Plantain Products
Gourmet Jams, Jellies & Sauces
Ethnic Products (Ackee, Calaloo, Breadfruit, Irish Moss)
Dried & Crystallized Fruits

J-V Interest: BRICO (SUCCS) Ltd. (Fruits, Ethnic Products)
- Drying and Processing Technology
- Marketing & Packaging

SCOTT'S PRESERVES (Jams, Jellies, Sauces, Nectars)
- Packaging and Marketing

NEGRIL PRIDE (Banana & Plantain Products)
- Packaging & Marketing

DA COSTA BROS. Ltd. (Jams, Jellies, Sauces)
- Production & Marketing

COSTA RICA

Product Areas: Processed Tropical Fruits (Soursop, Passion Fruit, Coconut, Plantain, Bananas, Pineapple)
Processed Temperate Fruits (Blackberry, Raspberry, Melons, Strawberries, Tomatoes)
Spices, Nuts and Flavourings (Nutmeg, Vanilla, Black Pepper, Cardamom, Macadamia, Cashew)
Other (Moluscs & Seafood Products, Heart of Palm, Honey, Liquors, Vegetables, Chochos)

J-V Interest: Laboral de Fruta (Fruit Pulps, Tomato Paste, Sliced Frozen Fruit, Juices)
- Technology & Marketing

Fabrica Nacional de Licores (Liquors, Rum etc.)
- Technology & Marketing

Multifruit (Bulk fruit concentrates)
- Marketing, perhaps technology

El Angel (Bulk fruit pulps)
- Marketing, perhaps technology

Primary and Secondary Demand

The primary demand for a given exotic or tropical fruit is its consumption as a fruit or as a juice of that fruit.

The secondary demand is the demand for value-added products containing the fruit, such a yoghurts, complex beverages, fruit snacks, cereals, ice cream, frozen novelties.

1. Primary and secondary demand should be approached separately but simultaneously. The partners and technologies are different. A good example is creating the demand for New Zealand Lamb and the demand for meals, pies and sausages containing New Zealand Spring Lamb.

2. If a big enough partner decided to promote the secondary product (example, if Yoplait agreed to launch a soursop yoghurt in Canada and the United States), the secondary demand can proceed the primary demand.

Priority by Market Potential

The primary and secondary demand of the fruit should be assessed with consumers with respect to flavour, texture, colour, imagery, etc.

1. This allows setting priorities that relate to export potential.

2. This allows the participating countries and companies to understand the potential primary and secondary demand of the fruits. They are then in the position to sell potential partners the idea of launching and promoting new products.

Information Requirements

The least three areas of information flow will be critical to broad success. Gorman Publishing of Chicago (the largest food and beverage industry publisher in North America) are very interested in being information partners to any ongoing project of this kind.

1. Ready access to answers on operational issues such as ingredients allowed, legal requirements, quotas, etc. will be needed.

2. Gorman's dedicated publication for South America (Alimentos) can disseminate information developed by this project back to the client countries and companies.

3. Gorman's North American publications (e.g. Prepared Foods, 71,000 circulation) are interested in printing articles from this project that promote the potential of these fruits with specific value-added examples to essentially all of the potential partner in North America.

4. Gorman would be interested in sponsoring a conference with this project along the lines of Encuentro (see attached).

Interested Partners and Related Opportunities

The following companies should be considered as starting points for the various primary and secondary opportunities for tropical and exotic fruits.

1. **Merchandising exotic fruits and vegetables:**

   World Variety Produce Inc. of Los Angeles develop merchandising programs for exotics through supermarkets and import. They would work with our clients to sell fruits and vegetables through the supermarkets (see attached).

2. **In-store juice programs:**

   Automatic Orange Juicer Corp. of New York provide in-store squeezing of oranges to supermarkets and mall locations. Exotics can be added to their line and create awareness and demand in addition to export volume (see attached).

3. **Juice marketers:**

   Ault Foods and Rideout Beverages (both of Toronto), Lassonde et Fils (Oasis branch in Montreal), and Johanna Dairies of New Jersey are interested in working with our clients to produce new juice blends that incorporate the exotics.

4. **Yoghurts, ice cream, frozen novelties marketers:**

   Ault Foods and Johanna Dairies are interested in adding exotics to the above categories.

5. **Fruit snack marketers:**

   Lipton and General Mills are doing most of the successful innovation in fruit-based snacks and should consider moving more exotic and potentially more adult.

6. **Commodities brokers:**

   Cema International Trading Inc. of Toronto (back by Mitsui Trading Co.) are interested in assisting our clients in selling juices, concentrates, pulps, pastes, etc. to the above partners and others. They have significant experience in the LAC countries.

7. **Retailers and distributors:**

   President's Choice (Toronto) and Fleming Companies (Oklahoma), a major retailer and a major distributor respectively and known for their innovation with new foods, are interested in working with our clients to develop merchandising programs and value-added products under control label contracts.

8. **Food service:**

   Radisson Hotels and Hilton of Canada are interested in additional exotics and tropicals within their food service operations.

Conclusions

The next steps should focus on bringing specific partners together to discuss specific opportunities and the technologies will flow from this.

Gorman Publishing represents a considerable information partner to this project and the information requirements of the clients will be significant.

Development of primary and secondary demand can be planned to work together with several parties spending on consumer awareness and trial.

A significant amount of free PR support is available from newspaper food writers and publishers of magazines aimed at women and food.

This approach is also valid for the meat-driven opportunities

7.3 Technological Aspects of Joint Venture Potentials

Due to the fact that most LAC respondent companies were not in a position to specify the exact product intended for export marketing (see Section 7.1), it is only possible at this stage to present a possible range of technologies which would be likely to be applicable to the raw material/product types specified. These technology potentials are given in Table 7.2

In order to move further towards specific joint venture products and the resulting technologies in subsequent stages of this project, the following steps are recommended from the technological standpoint:

1. Further information should be collected from respondent LAC companies with regard to their existing technical capabilities, particularly in such areas as type of processing operations in use, volume throughput, seasonality of raw materials, specific packaging technologies (and packaging materials available in country), storage and transport facilities accessible by the firm, existence of R&D staff (if any), ability to absorb new technologies.

2. LAC companies should review the matrix provided in Table 7.2 and the technology descriptions provided in Section 6.2, to assess their likely interest and ability to adopt any of the potential technologies.

3. Once specific product potentials have been identified, and technological capabilities assessed, discussions can be held with representatives of the various manufacturing firms building and supplying the technologies likely to be appropriate in order to determine their possible interest in participating in any form of technology transfer, licensing or joint venture agreement. The major Canadian firms already identified are described in Table 7.3.

4. Initial results from stages 1-3 would provide suitable material for the planned seminar in Costa Rica later in the current contract period.

5. Formal negotiations, where applicable and useful, could be monitored by the consultants during the second contract period of the project.

IICA - CIDA MARKET AND AGRO-INDUSTRY PROJECT

MATRIX OF IDENTIFIED LAC PRODUCTS, COUNTRY ORIGIN, PROJECT UTILIZATION AND PROPOSED APPLIED PROCESS TECHNOLOGIES

PRODUCTS	COUNTRY	UTILIZATION	PROPOSED PROCESS TECHNOLOGIES (SEQUENTIAL OR ALTERNATIVES)
A. Product Groups			
Tropical Fruit Juices, Nectars and Fruit Juice Concentrates (citrus, mango, papaya, passion fruit, guava, pineapple).	JA	Bulk shipments for export; dehydrated shipments for wholesale rehydration or retail sale; rehydrated retail sale	. Membrane technology for concentration. . Tetrapack (e.g. aseptically transferred bulk quantities to tetrapack). . Irradiation (EB or Gamma) depending on quantity, season, throughput. . Essential oils technology for citrus only. . Citrus pomace technology. . Enzyme production (selected fruit).
Tropical Fruit Purees, Concentrates and Pulps (citrus, mango, papaya, passion fruit, guava, pineapple, bananas, etc.)	JA, CR	Desserts, pie fillings, yoghurt and ice cream flavourings, etc.	. Membrane technology for concentration. . Aseptic packaging. . Irradiation (EB or Gamma) depending on quantity, season, throughput, etc. . Citrus pomace technology . Essential oils technology for citrus only. . Enzyme production (selected fruit).
Tropical Fruits; assumed processed whole or partial (soursop, passion fruit, bananas, pineapple, coconut, plantain).	EQ, CR	Consumption as whole fruits, additions of parts in trail mixes, breakfast cereals, etc.	. Freeze-drying. . Modified atmosphere packaging (bulk and retail).
Exotic Tree Fruits; assumed processed whole (babaco, naranjilla, tree tomato, taxo)	EQ	Consumption as whole fruits?	. Modified atmosphere packaging (bulk and retail). . Freeze-drying. . Irradiation?

PRODUCTS	COUNTRY	UTILIZATION	PROPOSED PROCESS TECHNOLOGIES (SEQUENTIAL OR ALTERNATIVES)
Temperate Fruits, Processed (blackberry, raspberry, strawberries, melon).	CR	Desserts, pie fillings, etc.	. Membrane technology for concentration. . Aseptic packaging for berries.
Gourmet Jams, Jellies, sauces	JA	Bulk or retail export shipments	. Membrane technology for concentration. . Aseptic packaging. . Freeze-drying for sauces only.
Special Vegetables, assumed processed and Contra-Season Prepared and Packaged Vegetables (identify?)	EQ, UR	Bulk or retail export shipments	. Modified atmosphere packaging (bulk and retail)
B. <u>Special Products</u>			
Meat Extracts (bouillon etc.?)	UR	Seasoning in meals, soups, etc.	. Membrane technology for concentration. . Restructured meat technology for residuals if any?
Beef Jerkey and Dried Meat Products	UR	Direct consumption snack foods.	. Regular drying process? . Freeze-drying process? . Restructured meat technology for residuals?
Portion-Controlled Meat and Fish-Based Dinners	UR	Direct consumption as meals.	. Vacuum-cooking technology for fresh or frozen.
Processed Cheeses	UR	Direct consumption	. Membrane technology for concentration. . Aseptic packaging. . Flavours and aromas by fermentation.

PRODUCTS	COUNTRY	UTILIZATION	PROPOSED PROCESS TECHNOLOGIES (SEQUENTIAL OR ALTERNATIVES)
Banana and Plantain Products (dried flaked, semi-dried etc.)	JA	Snack foods, health foods, additions in train mixes, breakfast cereals.	. Freeze-drying (for dried consumption or rehydration).
Spices and Flavourings	CR	Wholesale or retail sales	. Irradiation for spices only (EB or Gamma) depending on quantity, season, throughout, etc. . Micro-encapsulation technology for spices and flavours. . Freeze drying for flavourings only. . Essential oils technology for herbs. . Supercritical fluid tech. (extraction of oleo resins, etc.?)
Shellfish Products, Shrimp Mollusks, and Other Seafood Products.	EQ	Dried consumption	. Freeze-drying technology (rehydration?) . Electrol Beam or Gamma irradiation (depending on volume, season, throughput requirements). . Surimi process for residuals?
Baby Food	EQ	Direct consumption	. Membrane technology for concentration . Aseptic packaging.
Liquors, Rum, et.	CR	Direct consumption	. Membrane technology for concentration and blending. . Flavours by fermentation from molasses, bagasse.
Quinoa, or High Protein	EQ	Direct health food consumption and/or vegetable protein extraction for compounding.	. Vegetable protein technology.

TABLE 7.2 PRINCIPAL CANADIAN COMPANIES INVOLVED IN SPECIFIC PROCESSING AND PACKAGING TECHNOLOGIES

PROCESSING TECHNOLOGY	COMPANY NAME & ADDRESS
Aseptic Packaging	Tetra-Pak, Toronto, (416) 865-9480 Alfa-Laval, Toronto, (416) 299-6101 Lassonde & Fils, Rougemont, Que., (514) 469-4926
Modified Atmosphere Packaging	Dupont, Kingston, (613) 544-6000 Hoechst (Markus Stamm), 4045 Cote Vertu, Montreal (514) 333-3522 Air Liquid, 1155 Sherbrooke Ouest, Montreal (514) 842-5431 (M. Lozon) Bilopage, 485 Rue Lavoie, Ville de Vanier, Que., (418) 687-2840
Vacuum-Cooking Technology	Cuise-France, Bois Brilliant, Montreal (514) 437-4003
Freeze-Drying Technology	Lyosan Inc. Lachute, Que., (514) 562-8525
Membrane Processing	Memtek (Sydor), 87 Bentley, Nepean (613) 226-8381 Zenon Corporation, Burlington, Ont., (416) 825-1492
Gamma and Electron Beam Technology	Nordion, GPI, Atomic Energy Canada Ltd.
Surimi Processing	Terra Nova Fishery, Saint Johns, Nfld.
Extrusion Technology	General Foods (Glen Nelson), 220 Yonge St., Toronto, (416) 484-5498
Restructured Meat Technology	Canada Packers (Bern Schnyder), 2211 St. Clair Ave.W., Toronto, (416) 761-4046 J.M. Schneider (Gail Holland), 321 Courland Ave.E. Kitchener, (416) 231-2286 Labatt Co. London, Ont., (519) 667-7500
Essential Oils	Huiles Essentielles Cedarome (Claude Cusson), 200 St. Francois Xavier, Local 115, Delson, Que., (514) 638-3337 Flavour Manufacturing Assn. of Canada, Weston, Ont., (416) 233-0007
Vegetable Protein Technology	Griffith Laboratories, Scarborough, Ont., (416) 288-3050
Natural Food Colour Extraction	Hoffman-La-Roche, 401 West Mall, Suite 700, Etobicoke, Ont., (416) 620-2896 Chemical Dye Co. Ltd., Kingston, Ont.

Super Critical Processing	Norac Technology (Abe Leron), 4222 97th St., Edmonton, Alt., (403) 401-7163
Flavours & Aromas	Food Pro National, 2610 Deschamps Blvd., Lachine, Que., (514) 636-3121
Enzyme Production	Diversified Lab, Weston Foods (Ross Lawford), 1047 Yonge St. Toronto, (416) 922-5100
Yeast Production	Lallemand Inc. (Pres. Chagnon), (514) 522-2133
Lactase Hydrolysis	Agropur, Granby, Que., (514) 375-1991

8. PILOT PHASE CONCLUSIONS FOR IICA AGROINDUSTRIAL EXPORT FACILITATION METHODOLOGY AND ACTIVITIES

In the following section a summary is presented of the key findings of the Pilot Phase survey work, with particular emphasis upon the implications of these findings for the definition of a methodology and approach for agroindustrial export development on the part of IICA.

While considerable further work is needed to provide the detailed elements of any such approach and methodology, it is believed that the Pilot Phase results have contributed significantly - both through their rejection of a number of "standard" methods of attempting to promote export development (e.g. sector studies), as well as through their highlighting of avenues which deserve further exploration (e.g. closer links with private sector participants).

8.1 Supply Point Constraints and Requirements

Although the actual constraints identified often differed from country to country - and even from respondent to respondent in the same country - it was clear that a degree of commonality existed between conditions in all surveyed locations. The following summary provides a brief overview of some of the most important factors:

- o Processors are optimistic about export potentials but generally lack any clear idea of how to exploit this opportunity. Data suggests that agroindustrial exports from Pilot countries have actually declined in recent years.
- o Joint-Ventures, although generally viewed as valuable aids to export development, are considered very difficult to achieve. Even agencies claiming to promote J-Vs have no specific approach and could claim few, if any, recent successes.
- o Identified constraints to export development are widespread, and tend to vary from country to country, although some, e.g. packaging, appear to be universal
- o Although mentioned by some respondents, financing appeared to be a less significant constraint than many other factors considered
- o Market information services were widespread, but often provided information irrelevant to the agroindustrial sector (e.g. fresh produce prices)
- o Export market prices were generally not a major concern to processors, although there was variation from country to country
- o Considerable concern was expressed by both private sector firms and promotional agencies with regard to lack of knowledge of new technologies and resulting problems of product quality and saleability
- o On the whole, private sector firms tend to focus upon immediate impediments to export development (e.g. port costs, shortage of packaging materials), while promotion agencies took a more policy related view (e.g. identifying institutional barriers, regulatory standards)
- o Each country surveyed possessed a number of promotional or facilitatory agencies, often offering a similar range of services to exporters. In no case, however, was there a specific service targeted at agroindustrial exporters.

8.2 Market Point Considerations and Requirements

In a similar manner, it is possible to draw some broad generalities from the results of the three North American field studies undertaken.

- o Recent years have seen an explosion in new product introductions in the North American market, many of which fail to establish a long term position or market share and are eventually withdrawn.

- o There is a strong and growing interest in exotic, unusual and tropical products, previously largely unknown to the average North American consumer. These products are being utilised in an ever increasing range of foodstuffs, including breakfast cereals, drinks, ice-creams, yoghurts, candies and health foods.

- o Despite this interest, agroindustrial product imports as a whole appear to have remained stagnant or even declined over the last few years, with most growth being attributed to traditional plantation crops - coffee, cocoa, rubber.

- o Buyers are becoming increasingly sophisticated and demanding with regard to the products they purchase. Quality standards, ingredients, packaging and marketing are all of increasing importance.

- o In particular, few effective mechanisms appear to be in place to bring LAC exporters into direct contact with interested buyers in North America, although traditional trade shows can be important in this regard.

- o A considerable number of North American import facilitation agencies were identified but their services are often characterised by lack of coordination, restricted input from the private sector, and little specific attention to agroindustrial needs.

- o A substantial number and variety of new and recent technologies are in use in North America which appear to be largely unknown in many LAC countries. Use of this technology is likely to become more and more important in order to remain competitive in the future.

8.3 Conclusions for Methodology Development

While it is not possible to define a detailed methodology at this point in the development of the project, a number of clear lessons can be learnt from the results of the Pilot Phase. These lessons will be discussed in this sub-section and the resulting implications for future project activities dealt with below.

Export development programmes have become popular approaches to agricultural and rural development in recent years. In particular, USAID has engaged in a large number of such projects, including ROCAP (Regional Office for Central America and Panama), NTAE (Non-Traditional Agricultural Exports) in Ecuador and HIAMP (High Impact Agricultural Marketing Programme) in the Eastern Caribbean. Many have also included provision for joint-venture promotion.

The future involvement of IICA in agroindustrial export promotion should draw lessons from these projects, but also acknowledge the considerable differences that exist between these projects - usually focused for a specific duration on a very limited area or territory - and the long term responsibilities of IICA to its more than 25 member nations. In particular, no project that the consultants are aware of within the LAC region has had a

specific agroindustrial focus, resulting in respondent concerns quite different from those predominant among fresh or perishable produce exporters.

This means that impediments such as phyto-sanitary standards, which are of such importance, for example, to fresh fruit shippers, have limited applicability to IICA clients. Similarly, availability of temperature controlled storage facilities, although occasionally useful for processed products, are not critical factors in the manner that they might be to cut flower exporters. Equally, concerns that are of major importance to agroindustrial producers may have been largely unexplored by previous projects; packaging materials for example.

Key lessons, both negative and positive, are discussed below:

a) LAC Processors are Selling Raw Material Supplies and Processing Capabilities NOT Products

The great majority of processors have only a limited knowledge of the type of products that the North American market is seeking. This is not surprising in the light of the rapid changes occurring in market behaviour in recent years and the limited contact that many LAC enterprises have with that market. Most processors fully recognize this limitation; survey respondents, for example, repeatedly listed their raw materials rather than any specific output, as an indicator of their capabilities. The old conception that processors have a specific product for sale is thus generally incorrect. Instead, such companies are usually selling their ability to collect, handle, process, and ship a certain set of raw materials. In fact, in most cases, not even the processing technology itself is defined, as this must depend upon the end product required.

b) Existing Promotion Agencies in LAC Countries Must Play a Role in Export Development

All Pilot countries surveyed possessed a number of promotion and facilitation agencies working on behalf of local exporters. While it is fair to say that their efforts on behalf of agroindustrial firms have been of limited value up to now (a statement that many agencies themselves would accept), this is not generally the result of lack of agency interest or poor quality staff. Rather, the limitations arise from the inability of such agencies to tap useful and relevant sources of information to assist their clients. Despite these problems, however, such agencies possess a detailed knowledge of conditions within their own territories and enjoy support from governments and development organizations.

It is believed that to attempt to bypass existing national promotion agencies would be a serious error. Any policy of this type would probably result in conflict with local groups as well as demands upon IICA staff that would exceed the resources available to them. Instead it is recommended that IICA attempts to fulfil its role by working through these groups and attempting to strengthen the effectiveness of their current efforts. IICA would thus be filling a "wholesale" role, in comparison with the local agency's "retail" function.

c) Sector Studies for Agroindustrial Processors are of Limited Value

Unless a potential exporter is of a size so as to have a major impact on national or regional markets, sector studies for specific commodities or commodity groups are of limited value. Brazilian orange juice producers may need to understand global market movements in light of the percentage of world juice demand filled by Brazilian

produce, but the majority of LAC processors are a negligible influence on the market, even within their own specialized niche. Thus, to the average producer of Soursop pulp in Jamaica, for example, the behaviour of the overall juice and pulp market is of very little relevance.

The value of sector studies is still further reduced when it is remembered that many LAC processors do not even have a clear idea of the end product that they wish to produce. While it may be argued that sector studies could guide these enterprises in making an intelligent choice, based on demand and price trends, this knowledge is in reality far less important than the identification of a committed buyer. Few processors will wish to undertake major investments in equipment and packaging for a new product based only upon encouraging sector studies.

d) Specific Market Contacts Provide the Best Opportunities for Export Development

The corollary of the above is that exporters, and potential exporters, need to establish contacts with buyers interested in a specific product that the processor could supply. Assistance to processors in this area is rather poorly served within the agroindustrial sector at the moment. Two problems have contributed to this neglect.

- Firstly, promotion agencies, being generally nationally based, have tended to start investigations with the processor rather than with the buyer. Attempts are often made to define the product before buyers and market contacts are sought. Furthermore, few agencies have direct contacts with private sector buyers in North America, relying instead on feeding information through official contact channels.

- Secondly, agroindustrial products, by definition, tend to be more diversified and uniquely identifiable than fresh and unprocessed products. No clear market categories exist for such products in the way that have developed for fresh produce in wholesale trading centres. The focus developed by promotion and facilitation agencies in the past, therefore, emphasizing brokers and central markets, is inapplicable to the agroindustrial sector.

e) Little Coordination or Intercommunication Exists Between Promotion & Facilitation Agencies

Responses to the surveys undertaken among both LAC and North American promotion and facilitation agencies indicated clearly that no coordination or intercommunication network existed which was able to ensure an effective flow of information between these groups. An LAC exporter seeking assistance in North America, therefore, must undertake a wide range of enquiries and investigations in order to determine which agency is providing which service, and in fact may be unaware of assistance offered by less well--known or publicised organizations.

In addition, there appears to be a significant gap between publicly funded agencies and those organizations working directly within and on behalf of private sector firms. Any effective export development methodology must ensure adequate access to, and communication with, organizations within the private sector.

f) Support Organizations May Play an Important Role in Export Development

While much of the attention of the Pilot Phase has been upon attempting to identify methods for establishing direct contacts between producers and buyers, it should not be forgotten that considerable assistance can also be provided to potential exporters through support organizations. IICA could play a valuable role in the identification and coordination of groups willing to assist in such support functions. Examples of these groups might include:

- Retired executive service organizations (operating in both Canada and the U.S.A.) for on-site training in technical operations
- Management training organizations, for assistance in financial and administrative control of new product lines
- Machinery and input manufacturers, for courses or materials explaining new processes and their applications
- Canadian and U.S. Government representatives, to explain implications of current and future regulatory controls on ingredients, treatment methods and quality standards

g) The Scope and Nature of Potential Joint-Ventures Requires Further Consideration

Many companies, in both LAC countries and North America, remain pessimistic over the chances of establishing joint-ventures, even though they acknowledge their value in establishing successful commercial relationships. Often, this pessimism arises from the belief that joint-ventures must involve the investment of large sums of capital in LAc countries by North American firms, involving high levels of risk for the investor and loss of control by the recipient.

It is apparent from the pilot surveys, however, that investment is not among the highest priorities of many LAC exporters. Rather they are seeking to establish stable commercial relations that will permit them to make their own investments (often funded by local financing agencies) without unacceptably high levels of risk. These stable relations are seen in most cases as arising from cooperation with North American firms in identifying products tailored specifically to the buyers needs, defining and installing processing and packaging technologies appropriate to these needs, and agreeing upon a supply volume and pattern that permits both firms to plan their activities in an intelligent manner.

Relationships of this type are still not easy to establish, of course, but can be developed over time with relatively low levels of risk to both parties. Once confidence has been established between supplier and buyer, the relationship may move towards more traditional joint-venture patterns in future years. Even so, successful joint-venture based export development could occur without major foreign investment ever taking place.

9. PROPOSED FUTURE ACTIVITIES

The promotion of agroindustrial exports as a specific category of assistance is a relatively new and untried approach. In entering this area, therefore, IICA are inevitably feeling their way towards an approach that has not previously been defined. While valuable lessons can, of course, be learned from past experience in export promotion gained by agencies such as CIDA and USAID in regard to fresh produce, the differences between processed and perishable goods are significant. One major purpose of the Pilot Phase was to examine those assumptions underlying the type of activities required for successful export promotion under fresh produce systems and assess their applicability to processed goods. This was achieved through means of the pilot surveys and field work in North America.

As was put forward in Section 8, it is clear from these pilot studies that many of the assumptions applied to fresh produce export development have little relevance to agroindustrial items. The approach and methodology anticipated in the early stages of the project, as well as the structure of the work require to put the methodology into operation, must therefore be adapted to reflect these findings.

The revisions can be divided into two stages; (a) revisions in the overall structure of the project itself, and (b) revisions to the activities anticipated for completion during the remainder of the current contract between Agriculture Canada and Deloitte Haskins & Sells, acting as Prime Consultants. Each of these areas is dealt with below:

9.1 Redefining Project Objectives and Activities

Under the original invitation for Prime Consultant proposals, the IICA Marketing and Agroindustry Project (Activity 700 within the overall IICA-CIDA project) comprised four components as follows:

Activity 710: Market Study of Selected Non-Traditional Agroindustrial Products

Activity 720: Agroindustrial Export Projects Presented for Financing to Development Institutions

Activity 730: Identification of Specific Market and Marketing Requirements and Conditions

Activity 740: Joint Venture Identification and Promotion

Under the tasks within the Pilot Phase, a number of these activities have already been rearranged or set aside. For example, Activity 740 has already been commenced through the preliminary identification of firms (both in LAC countries and North America) with an interest in joint venture arrangements. Equally, it is now clear that areas such as those specified under Activity 730, involving market studies of 8-10 products or product groups, would contribute little to the successful promotion of LAC agroindustrial exports.

While the selection of revised Activities must of course rest with IICA and Agriculture Canada, it has been suggested that it would be useful at this juncture to put forward a number of general suggestions as to the form in which the project might successfully develop following the Pilot Phase. In addition to the largely completed Pilot Phase, therefore, preliminary proposals for new Activities are as follows (described in more detail in Table 9.1):

Remainder of Contract Duration:

Activity 715: Detailed Specification of IICA Export Facilitation Methodology and Activities
Activity 725: Further Analysis of Joint Venture Potentials & Requirements
Activity 735: Prepare and Present Regional Seminar

Remainder of Project Duration:

Activity 745: Establishment and Training of IICA Export Facilitation Unit
Activity 755: Brokering of Joint Venture Agreements

The new Activities proposed above would result, therefore, in a significant shift in the manner in which IICA attempts to promote agroindustrial export development. Rather than attempting to pick probable "winners" through market studies, and then sell those winners to processors in LAC countries and buyers in N. America, the focus lies instead in attempting to ensure that both key parties (processors and buyers) are able to communicate with each other effectively. A subsidiary role involves assisting LAC processors by facilitating access to support organizations that can help them in increasing the efficiency and technical capability of their operations (training, management systems etc.).

Under this scenario, the selection of desirable products is viewed as being best undertaken by the N. American buyers, who are active in the market on a daily basis, and whose profits depend on accurate judgement of market trends. Equally, the LAC processors must ultimately judge for themselves, based upon the product demand information from N. American firms, which technologies and investments are worth considering under the conditions which they face in their own countries.

Facilitation and not direct promotion thus becomes the key element of the methodology. If companies can be identified in N. America which are actively seeking new or expanded supplies of certain agroindustrial products, and if those companies can be linked to producers in LAC countries which are actively seeking to develop new product ranges, success is highly probable. This success may be in the form of simple sales agreements, but may often involve (or lead to) some form of joint venture arrangement. Here IICA can assist by facilitating processor access to services that will better enable the enterprise to meet its responsibilities under the joint venture agreement.

9.2 Work Breakdown for the Remainder of the Current Contract

As for the overall direction of the project, selection of the detailed activities to be undertaken by the consultants for the remainder of the current contract is ultimately the decision of IICA. Following on from the proposed new approach discussed above, however, a simplified Work Breakdown Structure (WBS) has been prepared for the remaining 9 months or so of the current contract.

Before turning to this WBS, it is important to stress that a number of outstanding issues still remain to be addressed. A key issue involves the amount of resources to be made available to the Principle Consultants during this period. A possible transfer of some resources to the Principle Consultants, from the pool made available for outside consultants, has already been discussed, but no firm agreement has yet been reached.

Below are provided comparative estimates of the original total contract allocation to the principal and outside consultants, as well as the approximate level of effort expended in completing the pilot phase.

Principal Consultants	Original	Expended	Remaining
Aidan Gulliver	96 days	63 days	33 days
David Hughes	41 days	30 days	11 days
Paul Muller	10 days	7 days	3 days
Outside Consultants			
LAC Countries	198 days	65 days	133 days
North America	185 days	60 days	125 days

As can be seen by comparing remaining resource allocations and proposed future resource usage (as given in Table 9.2), it is recommended that some balancing of resource usage be undertaken. North American outside consultants, under the scenario proposed, would require only an additional 93, compared with a total availability in that category of 125 days. By contrast, the Prime Consultants are proposed at a further 77 days of input, compared with an availability of 44 days. LAC consulting availability, at 133, days is considered more than sufficient for planned needs, at 104 days.

It should be noted that the above resource allocations do not include expenses. No fully current data is available at this point for expense expenditure (invoices are still outstanding for some North American field expenses), but consideration will have to be given to an analysis of project related cost requirements for the remaining contract duration.

TABLE 9.1 PROPOSED REVISED ACTIVITIES UNDER THE IICA MARKETING AND AGROINDUSTRY PROJECT

Completed:

Activity 705: Pilot Phase Review of Current Status of Agroindustrial Exports

- 705a - Review private and public sector perceptions in LAC countries of constraints to agroindustrial export development
- 705b - Assess current promotional activities underway in LAC countries with respect to agroindustrial exports and identify unserved needs
- 705c - Identify areas of interest for agroindustrial and joint venture development in LAC countries
- 705d - Identify current facilitation services offered by public sector organizations in North America to LAC exporters and assess their value and applicability
- 705d - Analyze trends in N. American market patterns and behaviour with regard to agroindustrial products in recent years and determine interest of private sector firms in products of LAC origin
- 705e - Assess the extent and type of new processing and packaging technologies in use in N. America and their potential for use in LAC countries
- 705f - Assess the applicability of existing approaches to export promotion to the agroindustrial sector and suggest modifications as necessary

Remainder of Contract Duration:

Activity 715: Specification of IICA Export Facilitation Methodology and Activities

- 715a - Identification and description of private sector groups involved in agroindustrial sector in North America
- 715b - Using direct contact, as well as existing organizational listings (e.g. OPIC) identify North American firms active in the agroindustrial sector
- 715c - Identify those agroindustrial products which have achieved success in North American markets within the last 5 years and attempt to identify reasons
- 715d - Specify information sources which would provide useful information for export facilitation activities
- 715e - Identify support organizations that may be available to participate in promotion related activities (training etc.) and determine their interest in participating
- 715f - Determine relationship between national promotion agencies and IICA activities
- 715g - Prepare preliminary specifications for IICA Export Facilitation Unit structure, staffing and activities

Activity 725: Further Analysis of Joint Venture Potentials & Requirements

- 725a - Identify requirements of N. American companies in terms of knowledge of LAC processors
- 725b - Gather further knowledge of operations and interests of LAC companies expressing desire to investigate joint venture arrangements
- 725c - In concert with N. American firms, identify potential specific products
- 725d - Determine appropriate technologies for production and packaging of specific products identified as having joint venture potentials.

Activity 735: Prepare and Present Regional Seminar & Final Report

735a - Prepare seminar to discuss agroindustrial export promotion and joint venture potentials in LAC
735b - Present discussion papers on proposed IICA approach and methodology, as well as joint venture prospects
735c - Prepare Final Report for current contract, including seminar report

Remainder of Project:

Activity 745: Establishment and Training of IICA Export Facilitation Unit

745a - Establish information gathering and dissemination systems
745b - Establish contact mechanisms with other organizations
745c - Training of Unit staff
745d - Define LAC training needs and establish LAC training programmes

Activity 755: Brokering of Joint Venture Agreements

755a - Make arrangements for meeting of LAC/N. American firms
755b - Assist, as required, in discussions between the two groups
755c - Coordinate with national agencies in obtaining necessary financing for LAC firms expanding capital investment
755d - Provide assistance in technology and management training for new production and packaging processes
755e - Assess progress of joint venture arrangements and monitor activities undertaken

TABLE 9.2 WORK BREAKDOWN STRUCTURE FOR REMAINDER OF CONTRACT DURATION

Activity 715: Specification of IICA Export Facilitation Methodology and Activities

715a - Identification and description of private sector groups involved in agroindustrial sector in North America.

Contacting, listing and assessing capabilities and activities of private sector organizations active in the food and agroindustrial sectors, particularly in Canada and outside of Washington. Some further detail on public agencies in areas such as Miami and Los Angeles may also be sought.

Duration: 2 months
Resources: Outside Institutional Consultant - 15 days
Outside Private-Sector Consultant - 3 days
AG - 2 days
DH - 2 days

715b - Using direct contact, as well as existing organizational listings (e.g. OPIC) identify North American firms active in the agroindustrial sector

Using trade directories, files held by organizations such as Gorman Publishing, OPIC and Canadian Government agencies, identify key companies involved in the utilisation and sale of tropical agroindustrial and food items, divided into retail, intermediate and HRI categories. Preliminary assessment of interest in possible new products/product channels.

Duration: 2 months
Resources: Outside Private Sector Consultant - 15 days
Outside Technology Consultant - 5 days
AG - 2 days
DH - 1 day

715c - Identify those agroindustrial products which have achieved success in North American markets within the last 5 years and attempt to identify reasons

Using OAS and other available data, identify products which have met success in North American markets (preferably LAC products). Interviews would be conducted with importers/users of the products concerned to determine reasons for their success, where applicable, interviews would also be conducted with LAC producers of these products.

Duration: 4 months
Resources: Research Staff - 15 days
Outside Private-Sector Consultant - 10 days
LAC Consultants - 10 days
AG - 3 days

715d - Specify information sources which would provide useful information for export facilitation activities

Working with listings and data provided by outside consultants, as well as other sources including LAC processors, define requirement and suitability of different types of information for facilitation process.

TABLE 9.2 (Cont.) WORK BREAKDOWN STRUCTURE FOR REMAINDER OF CONTRACT DURATION

Duration: 3 months
Resources: Outside Private Sector Consultant - 3 days
Outside Technology Consultant - 3 days
LAC Consultants - 16 days
AG - 2 days
DH - 4 days

715e - Identify support organizations that may be available to participate in promotion related activities (training etc.) and determine their interest in participating

Prepare listing of LAC and North American organizations capable and willing to participate in assisting LAC processors in developing necessary skills and obtaining necessary services.

Duration: 3 months
Resources: Outside Institutional Consultant - 2 days
Outside Private-Sector Consultant - 3 days
Outside Technology Consultant - 3 days
LAC Consultants - 16 days
AG - 2 days
DH - 4 days

715f - Determine relationship between national promotion agencies and IICA activities

Assess the extent and nature of relations between IICA operations and activities of LAC national promotion agencies, including IICA regional offices.

Duration: 2 months
Resources: LAC Consultants - 24 days
AG - 5 days

715g - Prepare preliminary specifications for IICA Export Facilitation Unit structure, staffing and activities

Through discussions with IICA, identify extent and nature of resources available for the proposed facilitation unit, both in San Jose, and in regional offices, and define appropriate activities and structure.

Duration: 3 months
Resources: AG - 6 days
DH - 2 days

TOTAL RESOURCE OUTLAY - ACTIVITY 715:

AG	-	22 days
DH	-	13 days
O/C Institutional	-	17 days
O/C Private Sector	-	34 days
O/C Technology	-	11 days
LAC Consultants	-	66 days

TABLE 9.2 (Cont.) WORK BREAKDOWN STRUCTURE FOR REMAINDER OF CONTRACT DURATION

Activity 725: Further Analysis of Joint Venture Potentials & Requirements

725a - Identify requirements of N. American companies in terms of knowledge of LAC processors

Through interviews with North American firms which have expressed interest in accessing expanded supplies of LAC agroindustrial products, determine the type of information required to advance joint venture possibilities.

Duration: 1.5 months
Resources: Outside Private-Sector Consultant - 5 days
AG - 2 days

725b - Gather further knowledge of operations and interests of LAC companies expressing desire to investigate joint venture arrangements

Utilising the requirements determined under Activity 725a, interview potential LAC joint venture suppliers to gain a more detailed knowledge of their operations.

Duration: 1.5 months
Resources: LAC Consultants - 24 days
AG - 3 days

725c - In concert with N. American firms, identify potential specific products

Based upon both market demand and apparent LAC supplier capabilities, identify specific product potentials for potential joint venture development.

Duration: 1 month
Resources: Outside Private-Sector Consultant - 7 days
Outside Technology Consultant - 3 days
AG - 3 days
DH - 1 day

725d - Determine potential technologies for production and packaging of specific products identified as having joint venture potentials.

Through discussions with technology manufacturers and users, based upon LAC supplier capabilities, determine specific technologies best suited to the production and packaging of the identified products.

Duration: 1 month
Resources: Outside Technology Consultant - 10 days
AG - 3 days
DH - 1 day

TOTAL RESOURCE OUTLAY - ACTIVITY 725:

AG	-	11 days
DH	-	2 days
O/C Private Sector	-	12 days
O/C Technology	-	19 days
LAC Consultants	-	28 days

TABLE 9.2 (Cont.) WORK BREAKDOWN STRUCTURE FOR REMAINDER OF CONTRACT DURATION

Activity 735: Prepare and Present Regional Seminar & Final Report

735a - Prepare seminar to discuss agroindustrial export promotion and joint venture potentials in LAC

In cooperation with IICA, arrange date and location for seminar and submit list of invited participants from LAC countries and North America. Determine seminar agenda and make all necessary logistical preparations.

Duration: 3 months
Resources: AG - 5 days
DH - 1 day

735b - Present discussion papers on proposed IICA approach and methodology, as well as joint venture prospects

Papers will be presented by key participants in the IICA Marketing and Agroindustry Project concerning the development of the approach and methodology, as well as the role of private sector firms and new technologies in export development.

Duration: 3 days
Resources: Outside Private-Sector Consultant - 4 days
Outside Technology Consultant - 4 days
LAC Consultants - 16 days
AG - 4 days
DH - 4 days

735c - Prepare Final Report for current contract

Prepare a report summarizing all activities under the first contractual period for the IICA Marketing and Agroindustry Project and providing recommendations for future project activities.

Duration: 1 month
Resources: AG - 10 days
DH - 5 days

TOTAL RESOURCE OUTLAY - ACTIVITY 735:

AG	-	19 days
DH	-	10 days
O/C Private Sector	-	4 days
O/C Technology	-	4 days
LAC Consultants	-	16 days

TOTAL PROPOSED RESOURCE OUTLAY FOR REMAINING CONTRACT DURATION

AG	-	52 days
DH	-	25 days
Outside Consultants	-	93 days
LAC Consultants	-	110 days