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**AN ASSESSMENT OF THE INDUSTRIAL
SECTOR IN CENTRAL AMERICA:
CURRENT SITUATION AND FUTURE NEEDS**

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ACRONYMS

- BLADEX - Latin American Export Bank
- CABEI - Central American Bank for Economic Integration (also known under its Spanish acronym BCIE)
- CACM - Central American Common Market
- CATIE - Tropical Agricultural Research and Training Center
- DICA - Derecho de Importacion Centroamericano (a dollar denominated instrument issued by the Central Bank of an importing country in lieu of hard currency to liquidate foreign trade transactions among CACM countries)
- FEDEPRICAP - Association of Private Businesses of Central America and Panama
- GDP - Gross Domestic Product
- GOB - Government of Belize
- ICAITI - Central American Research Institute for Industry
- IDB - Inter-American Development Bank
- INCAE - Central American Business Administration Institute
- INCAP - Nutrition Institute for Central America and Panama
- LAAD - Latin American Agribusiness Development Corporation
- SIECA - Permanent Secretariat of the Central American Economic Integration Treaty

I. EXECUTIVE SUMMARY

The industrial sector in Central America is in transition. It developed in the 1960s through import substitution policies fostered by the creation of the Central American Common Market (CACM), and grew rapidly. By 1985, the industrial sector accounted for 28% of GDP. At the same time, intra-regional trade increased from \$135 million in 1965 to \$1.2 billion in 1980.

In 1979-80, however, the Central American Common Market collapsed. The industrial sector, whose principal market was regional, faced potential failure. Various factors accounted for CACM's collapse. Very adverse external factors (declining commodity prices, oil price increases, high interest rates, and increasing foreign debt obligations) combined with regional ones (poor economic policy management and political instability) to undermine the foundations of the CACM. The main reasons for the decline were:

- ** Sharply lower per capita incomes which reduced demand for intra-CACM manufactured trade.
- ** Overvalued exchange rates and misaligned currencies among CACM members which led to regional trade imbalances and the inability to clear transactions in hard currencies.
- ** Trade imbalances among the countries which created political difficulties, and led to artificial trade barriers.

The CACM, and the industrial strategies it fostered, were able to flourish in the past because they were supported by overall economic growth and expansion due to extra-regional trade. However, the financial and economic crisis which gripped Central America in the early 1980s reduced sharply the region's export earnings (particularly from the agricultural sector) while at the same time debt service obligations and imports of essential products increased the need for hard currency. As a result, the financial cushion which supported the CACM evaporated, and governments in the region began increasingly to call into question the integrationist movement and the policies which supported it.

Central American governments are rethinking their industrial policies. Inward-looking strategies based on import substitution and the CACM are progressively being modified in favor of export-led growth, including the provision of incentives for non-traditional exports. As a result, the industrial sector has begun to change significantly in the last seven years -- products have been diversified and markets have been expanded. While the CACM-

spawned industries continue to exist (at low levels of capacity utilization), clearly the economic future for the region depends on the development and aggressive export promotion of new products that have a comparative advantage, such as the maquila and drawback industries.

There are encouraging signs that both Central American governments and industrialists are forging a consensus on a new industrial strategy. Leading indicators of this new approach include:

- ** Passage of very favorable legislation for maquila and drawback industries in most countries in the region.
- ** Approval of incentives for, and the reduction of bureaucratic barriers to, non-traditional exports.
- ** Recognition on the part of Central American Presidents at Summit Meetings that traditional industrial policies must be complemented by an expansion of non-traditional exports.
- ** A willingness on the part of CACM institutions to consider and plan for a different role in the future development of the industrial sector of Central America.

The economies of Central America, and the economic institutions created by the CACM (SIECA, CABEI, ICAITI), will require substantial technical assistance to transform the industrial policies of the region. The constraints to export competitiveness, increased productivity, inflows of productive investment, and the reactivation of the industrial sector are formidable. The most significant obstacles are (in order of priority):

- ** A policy and regulatory environment, although moving towards providing incentives to non-traditional exports, still discourages investment due to cumbersome administrative regulations and unfavorable foreign exchange and tax policies.
- ** The lack of knowledge of foreign markets -- especially U.S. markets -- is a serious constraint to Central American exports. This is a region-wide problem, bilateral USAID Mission responses notwithstanding.

- ** The production processes/quality control of Central American manufacturers are seriously lacking. To penetrate markets outside the CACM, goods must be produced at internationally competitive prices and must meet international standards.
- ** Inadequate management and training programs -- particularly at the middle management level -- plague the development of internationally competitive industries. Industry specific and hands-on training are in particularly short supply.
- ** Lack of investment capital and medium-term financing was repeatedly mentioned as a crucial impediment to industrial reactivation. However, it appears that there is both an availability of investment funds, a willingness to invest, and several working capital credit lines for the industrial sector. The issue is how to best mobilize these resources.

Most multinational donors, including USAID bilateral missions, are working actively to reduce the above mentioned constraints. USAID has been the major donor in this region, and has focussed a considerable portion of its efforts on providing credit (mainly working capital), export promotion advice, and limited technical assistance in training and production processes. In evaluating these activities, it is clear that major lacunae exist in the following areas:

- ** No regional forum exists to discuss/act upon artificial and policy barriers to increased intra-regional trade.
- ** There is no regional institution devoted to the technical assistance, training, and management requirements of the maquila and drawback industries.
- ** Marketing information networks within the region -- regarding U.S. and overseas requirements and products available for export -- are seriously inadequate.
- ** Regional institutions to provide venture capital to non-traditional exporters are almost non-existent.

Given the fact that the industrial sector is in transition towards a focus on non-traditional exports to non-CACM markets, and that the institutions created by the integration process must evolve to take account of this new reality, ROCAP needs to refine its approach to supporting regional economic development. Among the key aspects to a new approach are the following:

- ** A redoubling of ROCAP's efforts at policy reform/policy dialogue, focussing on the creation, funding, and staffing of a Central American businessmen's roundtable. The thrust of this effort -- which probably should be organized and staffed by SIECA -- should bring together private sector and government decision-makers to resolve, in a practical, case-by-case manner, problems constraining both intra-regional and non-traditional export trade.
- ** Support for institutional efforts at strategic planning/redefinition of mission on the part of SIECA, CABEI, and ICAITI. These institutions, created for the integrationist purposes of CACM, need to redirect their activities to support the emerging non-traditional export sector. However, while these institutions can be funded to carry out new projects, this should occur only in a context which allows a thorough on-going assessment of the goals, objectives, and programmatic functions of each institution. It is not enough to have these institutions accept new tasks; rather, strategic planning exercises must be conducted to modify the "corporate cultures" of these institutions to move them toward a new industrial policy strategy. ROCAP can accomplish this either through a contractual arrangement to supply strategic planning, or by including this requirement in any new grants to these institutions.
- ** Support for region-wide projects to assist the development of non-traditional exports. This endeavor could take a variety of forms, and two are recommended: (1) establishment of an export marketing information project (possibly through FEDEPRICAP) which would provide potential Central American exporters information on U.S. and other developed country market entry requirements and would also serve as a "one-stop shop" of information for potential importers of Central American products; and (2) establishment of a regional technical assistance center for maquila and drawback industries.

ROCAP has a potentially important role to play in assisting the transformation of the industrial sector in Central America. Although the bilateral USAID Missions are active in many aspects of non-traditional export promotion (especially involving credit) there is a significant need for regional mechanisms to address critical issues, and economies of scale can be achieved through the provision of regional technical assistance. Elaboration of these project ideas should be a high priority for ROCAP.

II. OVERVIEW OF THE INDUSTRIAL SECTOR

A. Introduction

Over the past decade, but especially since 1979, the economies of Central America have been hard hit by a series of economic and political shocks. Many of these have come from outside, revealing the region's vulnerability to world economic conditions. They included: declining commodity prices, rising oil prices, high interest rates, and global economic stagnation. In addition, regional government policies contributed significantly to the economic decline. Such policies included government spending oriented toward consumption rather than productive investment, external borrowing to maintain standards of living, inappropriate economic policies, and overvalued exchange rates. Finally, political conflict seriously disrupted economic activity, undermining investor confidence and contributing to capital flight. In fact, very low levels of investment combined with capital flight suggest strongly that a process of decapitalization has occurred throughout the region.

Every country in the region is heavily dependent on imports to sustain economic activity, particularly manufacturing activity. There is a critical need for export earnings to finance imports and meet high debt service requirements. Traditionally, Central America relied on agricultural and mineral exports to generate foreign exchange and on protection to develop an industrial sector oriented towards domestic and regional markets. In recent years, however, highly volatile and declining commodity prices, increased competition from new sources of production, and protectionism reduced foreign exchange earnings at the very time trade deficits and debt service obligations increased the need for hard currency. As a result, Central American governments have been forced to reassess their economic development strategies, particularly the emphasis on import substitution policies and export incentives geared for regional trade.

Thus, the economies of Central America are now in transition. Inward looking strategies are being rejected in favor of export promotion, and most countries have initiated policies to provide incentives for investors in non-traditional exports. While results thus far have been modest, including exports under CBI provisions, there is little question that the region's prospects for economic recovery hinge on the development of non-traditional exports.

This will require a sustained effort to provide the appropriate economic policy framework, encourage private investment, develop access to markets, install or better utilize the capacity to produce goods, and increase the competitiveness of Central American goods.

Any assessment of Central America's industrial sector must be placed within this evolving context. The main factors, both positive and negative, which will condition prospects for industrial reactivation over the next five years are:

- Per capita GDP, currently at 1977 levels, is not likely to recover significantly, restricting demand for manufactured products.
- Foreign exchange earnings will remain in short supply. The current account of the balance of payments for the region (excluding Belize and Nicaragua) amounted to a deficit of \$1.1 billion in 1984.
- Investment rates, as a percentage of GDP, are likely to continue at rates significantly lower than the 19.6 percent recorded in the 1971-1978 period.
- In the context of low rates of economic growth, the expanding labor force, particularly the increasing participation of women, means rising rates of unemployment and underemployment among men. However, the work force will be fairly well-educated.
- The share of non-traditional exports in the group's total exports which increased from 23 percent in 1970 to 39 percent in 1984 is likely to continue to rise. Also, the destination of exports will probably continue to shift from regional markets to the U.S. and other countries.
- Government policies will continue to evolve in favor of providing incentives to exporters, including a strong push toward the "maquila" and drawback industries.

B. Historical Background

Until recent years, most Central American manufacturing exports were sold to neighboring countries. Trade within the region was based on the development of the Central American Common Market (CACM), founded in 1960 and subscribed to by all five countries by 1965. The goal of the CACM was regional economic integration, which it planned to achieve by creating a large enough market to achieve economies of scale for manufacturing firms, and by aligning foreign exchange and monetary policies. In essence, the CACM undertook to establish three mechanisms to achieve regional integration:

1. a free trade zone, to allow manufacturers to lower unit costs;
2. the assignment of industries to countries on a case-by-case basis to eliminate inefficient operators; and
3. a Central American Clearing House to facilitate payments for trade debts in national currencies.

The CACM was successful in establishing a free trade zone and in clearing multilateral payments. However, no real industry specialization was achieved. The Clearing House succeeded in clearing 95 percent of all payments. Although each country fought to protect its own industries, intra-CACM exports rose from \$135.5 million in 1965 to \$1.2 billion in 1980.

In the 1980s, the CACM collapsed. While there are several reasons for this, three stand out. First, real per capita incomes in the region have fallen sharply, reducing demand for intra-CACM trade. Second, the benefits of integration were unequally distributed among the members (El Salvador and Guatemala, the most advanced industrially, were the largest beneficiaries, followed by Costa Rica in recent years), and countries who were disadvantaged tended to withdraw. Third, the misalignment of currencies created chronic trade deficits. The overvalued currencies of some countries vis-a-vis those of others in the region resulted in a large fluctuations in real exchange rates. This led to unsustainable regional trade imbalances, and a corresponding sharp reduction in intra-CACM trade.

C. Central America Today

1. Economic Indicators

Available data suggest that Central America continues in the economic doldrums. Table I presents comparative macroeconomic indicators for the region for the years 1977, 1979, and 1984. In almost all categories, results for 1984 are below or just equal to those for 1977. In every country, exports are lower in 1984 than in 1979 while the region's external debt has continued to mount. In terms of investment, gross levels have fallen as has the percentage of private investment.

Projections for GDP growth in the region for 1987 are not encouraging. Costa Rica's growth rate is estimated to be 2.5 percent, down from 4.2 percent in 1986. Guatemala is expected to grow 2.5 percent, the same as Panama, although the latter's estimate may be lowered considerably due to political disturbances of recent months. Honduras is expected to show little or no growth, and Nicaragua and El Salvador will probably suffer reverses in economic production. When compared with regional birth rates, it becomes obvious that economic activity is failing to keep pace with population growth.

2. Financial Situation

The external debt grew at alarming rates between 1977 and 1984, doubling, tripling and quadrupling for countries in the region.

The difference in currency valuation policies and in foreign exchange controls severely limits intra-regional trade. Some Central American countries continue to support overvalued exchange rates (especially Honduras and Nicaragua), and most maintain rigid interest rate policies. Several financial mechanisms have been tried as solutions to this situation such as stabilization bonds and, recently, the DICA (Derecho de Importacin Centroamericano). None has had great success.

Access to credit is a major constraint for industrial development. The commercial banks in the region are generally quite liquid but conservative in their lending policies, lending to a few well-known and dominant economic groups at virtually no risk. Collateral requirements on medium term loans are usually quite high -- often 100 percent with only real estate accepted as collateral.

Table 1

CENTRAL AMERICA: MACRO ECONOMIC INDICATORS

	Guatemala			El Salvador			Honduras			Nicaragua			Costa Rica		
	1977	1979	1984	1977	1979	1984	1977	1979	1984	1977	1979	1984	1977	1979	1984
- GNP (1970 US\$ mill.)	2983	3280	3136	1480	1548	1287	943	1120	1167	1136	790	937	1612	1692	1600
- Gross Investment (1970 US\$ mill.)	463	471	314	300	260	183	220	249	228	241	53	186	413	476	314
- Exports (1970 US\$ mill.)	576	633	492	308	506	306	255	322	271	302	384	248	491	514	461
- External Debt (US\$ mill.)	302	427	1348	458	N/A	1829	538	864	1881	874	1131	3778	812	1463	3311
- Int'l Monetary Reserves	628	663	-192	206	126	70	111	116	-117	29	-151	-139	232	117	-164
- Private Investment as % of Total Investment	72.3	69.2	59.4	63.0	62.6	51.6	61.6	62.6	49.3	50.4	55.7	15.8	63.6	66.2	66.6
- Private Sector Credit as % of Total Credit	86.8	90.4	79.6	82.0	82.2	50.2	87.1	81.1	70.3	94.1	71.2	45.5	74.5	62.8	50.0

SOURCE: Revista INCAE. Vol. No. 2. II Semester 1987. Based on information provided by CEPAL, SIECA and Interpress Centroamericana.

The development banks such as the World Bank and the Inter-American Development Bank (IDB) are traditional sources of medium and long term loans. Their loan programs are channelled through the government to commercial banks and state development banks which actually provide the credit. Governments have tried to establish their own quasi-independent lending operations for medium and long term loans to the private sector -- COFISA in Costa Rica, CONADI in Honduras, COFINA in Panama and BANDESA (for agriculture) in Guatemala -- but none has had very much success. The financial houses, "financieras", such as FIASA in Guatemala, provide long-term financing but have high collateral requirements. Institutional sources of equity investment and venture capital are virtually non-existent.

The financial system makes it difficult to mobilize resources for investment outside of closely held economic groups. Businessmen feel that tax policies favor the public sector over the private sector and debt financing over equity financing.

3. Population and the Labor Market

The dynamics of population growth have dramatically changed the characteristics of the labor force in Central America in the last decade (Table 2). A recent study of the labor force and population statistics in Latin America prepared by the IDB indicates four emerging trends in the labor force, now being recognized for the first time.

First, the population is highly educated. Enormous progress has been made in school coverage, particularly for the 18-23 age group, i.e., university and equivalent institutions. For example, school enrollment for this age group more than quadrupled in the period 1970-1985 in Costa Rica, El Salvador, Honduras and Panama and more than tripled in Guatemala and Nicaragua (Table 3). Enrollment at the first and second levels of education also increased substantially in most of the countries of the Central American region (Table 4). At the first level of education, enrollments stabilized or followed population growth trends of about 3 percent per annum.

Table 2

CENTRAL AMERICA: LABOR FORCE ANNUAL GROWTH BY SECTOR
1970-1980

	Total Labor Force (Thousands)	Agricultural (Percentage)	Total	Non-Agricultural (%) Industry Services	
				(Percentage)	
Costa Rica					
1970	531	43	57	20	37
1980	777	31	69	23	46
El Salvador					
1970	1,183	56	44	14	30
1980	1,586	43	56	19	37
Guatemala					
1970	1,587	61	39	17	22
1980	1,967	57	43	17	26
Honduras					
1970	790	65	35	14	21
1980	1,079	61	34	16	23
Nicaragua					
1970	619	51	49	16	33
1980	825	46	54	16	38
Panama					
1970	515	41	59	17	41
1980	657	32	68	18	50

SOURCE: IDB: Economic and Social Progress in Latin America: 1987 Report
Tables VII-1 and VII-6

Table 3

STUDENTS ENROLLED AT THIRD LEVEL OF EDUCATION,*
BY COUNTRY, 1970-1985

(Thousands)

	1970	1980	1985
Costa Rica (1)	15.5	55.6	60.3
El Salvador (2)	9.5	16.8	57.4
Guatemala (3)	15.6	50.9	47.4
Honduras (1)	4.0	25.8	33.7
Nicaragua	9.4	35.3	29.0
Panama (1)	8.2	40.4	52.2

- * Only universities and equivalent institutions.
(1) For 1985, data corresponds to 1984
(2) For 1985, data corresponds to 1983
(3) For 1985, data corresponds to 1982

Table 4

ENROLLMENT OF FIRST AND SECOND LEVELS OF EDUCATION
1970-1985

(Thousands)

	1970		1980		1985		Current Duration Grades per Level	
	First	Second	First	Second	First	Second	First	Second
Costa Rica	349	61	349	136	351	117	6	5
El Salvador	510	88	834	73	883	85	9	3
Guatemala	506	76	803	457	980	175	6	6
Honduras	382	40	601	127	737	165	6	5
Nicaragua	285	51	472	140	534	162	6	5
Panama	255	79	338	171	339	182	6	5

Second, the growth rate of women in the labor force has increased dramatically, and will continue to do so until the end of the century. While the labor force as a whole is expected to follow population trends around 3 percent, the growth rate for female participation in the labor force was recorded at over 5 percent for Costa Rica and El Salvador in the period 1970-1980, and is expected to be well over 5 percent for Honduras and Nicaragua and 4.7 percent for Guatemala in the period 1980-1990 (Table 5).

Third, population growth is slowing down and the agricultural work force is stabilizing. Up until now demographers had projected population growth to be much higher than recent trends indicate. Costa Rica and Panama will not have to plan for as many people in the labor force in the 1980s. The remaining countries in Central America also will feel lessened population pressures over the next decade.

This has led to a fourth phenomenon noted by the IDB: a change in unemployment. Workers are now unemployed for longer periods of time, urban underemployment is increasing, and unemployment has spread to groups heretofore protected in the past from unemployment -- prime-age men, professionals and qualified technicians.

Although Central America will not be faced with such rapidly growing populations as in the past, the declining agricultural sector will not be able to absorb new entrants to the labor force. As a result, migration to urban areas will probably increase. Economic stagnation, however, will mean insufficient jobs in the urban industrial sector to meet growing demand. These new urban residents will probably enter the services sector or face open unemployment. Furthermore, the economies will not be able to utilize all the professionals and technicians produced by the educational system. This is because while school enrollments grew, simultaneous budget cuts in education resulted in diminished classroom teaching quality and the inability to update learning materials. As a consequence, while more members of the current work force may be more educated than their predecessors, their training may nevertheless be at a level that is insufficient or inappropriate for current and future industrial needs.

Table 5

AVERAGE GROWTH OF THE LABOR FORCE BY SEX
1970-1990

(Percentage)

	1970-1980			1980-1990		
	Annual Rates of Growth Total	Male	Female	Annual Rates of Growth (1) Total	Male	Female
Costa Rica	3.89	3.47	5.63	2.79	2.72	3.03
El Salvador	2.98	2.38	5.05	3.12	3.09	3.21
Guatemala	2.17	2.09	2.68	2.95	2.64	4.70
Honduras	3.16	2.98	4.21	3.86	3.47	5.78
Micaragua	2.92	2.68	3.83	3.85	3.36	5.45
Panama	2.47	2.35	2.82	2.88	2.73	3.29

(i) Growth rates for 1980-1990 were calculated as the simple average of the rates for 1986-1985 and 1985-1990 periods shown in the ILO projections.

SOURCE: IDB, Table VII-3

D. The Industrial Sector

The contribution of the manufacturing sector to the GDP of CACM countries decreased slightly between the periods of 1970-1979 and 1980-1986 as may be observed in Table 6. The slight decline is attributed to the region's reduced liquidity and high costs of imported inputs and capital. The level of contribution of the sector remained relatively stable from 1980 to 1986 in every country in the region.

The industrial sector has substantively changed character in the last ten years -- products have been diversified and marketing areas expanded. There is evidence of a structural change in the economies as a whole, away from the import substitution strategies of 1961-1978 and toward traditional and non-traditional agricultural products and market diversification.

Institutional changes in 1980-1987 tend to support the theory that Central America is beginning to develop new economic and market strategies. The rector of INCAE points to the following factors as indicative of this process: new laws favoring exports or new products; simplified procedures; tariff reductions; new export organizations; increased efficiency and clearer rules. In the private sector new products are appearing, training is taking place or being requested, new private sector organizations are appearing, new investments are taking place and productivity is increasing.

An estimated 90 percent of Central American industries are classified as "small" and "medium", having under 50 employees, and accounting for 60 percent of the income of the sector. Most of these small and medium industries sell strictly to the local market. The majority are working with technologies twenty years old, according to INCAE. The transfer of appropriate technology to the small scale industrial sector in Central America falls behind that of many other countries, including other developing countries such as Colombia and India. New or appropriate technology is, however, being introduced by a relatively small group of investors, comprised of industries geared toward the export market, such as the "maquila" or drawback industries of the region.

Central America's comparative advantage in exporting manufactured goods and agro-industrial products is based primarily on the utilization of natural resources. A March 1983 study prepared for ROCAP indicated that in at least three of the countries of the region the comparative advantage was high for the following products:

Table 6

MANUFACTURING SECTOR:
VALUE ADDED, DISTRIBUTION AND GROWTH
1970-1986

(Percentages)

COUNTRY	PROPORTION OF GDP											GROWTH RATE				
	AVERAGE			ANNUAL								AVERAGE (1)		ANNUAL		
	1960- 1969	1970- 1979	1980- 1986	1980	1981	1982	1983	1984	1985	1986*	1961- 1970	1971- 1980	1984	1985	1986*	
Costa Rica	16.2	23.3	21.0	22.0	22.4	21.4	21.2	21.5	22.1	22.0	8.8	7.4	10.4	3.2	2.7	
El Salvador	17.0	21.0	17.3	17.8	17.4	16.9	17.1	16.9	17.2	17.4	8.8	3.0	1.3	3.7	2.4	
Guatemala	14.4	17.8	16.0	16.7	16.0	15.7	15.9	15.9	16.0	16.0	7.6	6.2	0.5	-0.2	0.3	
Honduras	11.7	14.9	13.0	13.2	12.8	12.6	13.1	13.2	13.1	12.9	7.1	4.5	3.6	2.4	1.6	
Nicaragua	19.0	24.6	25.7	25.6	25.1	25.3	25.5	26.0	25.9	26.4	10.0	2.4	0.4	-4.7	1.6	
Panama	11.6	13.0	9.4	10.4	9.7	9.4	9.2	9.2	9.0	8.9	10.0	3.6	-0.5	1.8	2.2	

* Preliminary estimate.

(1) Compound growth.

SOURCE: IDB: Economic and Social Progress in Latin America: 1987 Report
Tables IV-4

- Food processing, fabrication of chocolate and cacao
- Yarn and textiles
- Clothing manufacture other than shoes
- Pharmaceuticals and medicines

The study further indicated that at least two countries in the region would have comparative advantage in:

- Canned fruits and vegetables
- Edible oils
- Shoes
- Chemicals
- Soaps and cleaning preparations
- Basic metals and steel fabrications

Today all of the above products are being produced to varying degrees in the region. All could be more efficiently produced and marketed internationally provided certain constraints mentioned in Section III are resolved.

Intra-regional trade is at an all-time low since the creation of the CACM. It continues to decline, as may be observed in Table 7. A significant realignment of exports from the CACM to the U.S. and other countries has taken place. The change is shown in Table 8.

E. The Industrial Sector by Country

The following major industries have been established in the various Central American countries:

BELIZE	Processing of agricultural products, especially rice; garments manufacture
COSTA RICA	Food processing; beverages; chemicals; pharmaceuticals; textiles; wood; leather
EL SALVADOR	Textiles; wood; leather
GUATEMALA	Food processing; beverage; tobacco; printing and publishing; textiles; clothing
HONDURAS	Industries related to light consumer goods; wood industries; sugar mills; dairy products

Table 7

CACM: INTRA-REGIONAL TRADE, BY COUNTRY
1985 and 1986 (1)

(Millions of Dollars)

Importing Countries	Exporting Countries					
	Central America	Costa Rica	El Salvador	Guatemala	Honduras	Nicaragua
<hr/>						
Costa Rica						
1985	99.8		33.0	49.3	7.8	9.6
1986	95.0		33.4	50.6	5.6	5.3
El Salvador						
1985	216.7	54.1		149.6	10.5	2.3
1986	145.3	33.6		101.6	8.2	1.7
Guatemala						
1985	99.4	37.2	49.4		5.1	7.6
1986	98.4	39.8	51.7		4.5	2.2
Honduras						
1985	74.8	33.0	7.0	32.7		1.9
1986	53.6	21.9	6.6	23.6		1.3
Nicaragua						
1985	56.7	15.1	9.0	25.5	7.0	
1986	28.4	11.7	5.8	8.3	2.5	
Central America						
1985	547.6	139.5	98.6	257.2	30.5	21.5
1986	420.9	107.2	97.6	184.3	21.0	10.6

(1) Estimated.

SOURCE: SIECA, El Comercio Intracentroamericano en el periodo 1980-1986
SIECA/ESC/87/01, January 1987

TABLE 8

CENTRAL AMERICA: CHANGE IN EXPORT MARKET DESTINATIONS
(Percentage of Exports)

	1979	1985
Central American Common Market	20	13
USA	36	39
Others	<u>44</u>	<u>48</u>
	100%	100%

SOURCE: INCAE compiled from IDB, Economic and Social Progress in Latin America and Colindres, Lindenber and Valverde, Economic Trends in Central America and Panama since 1900.

1. The Industrial Sector in Belize

Belize's main industries process agricultural products. The two sugar mills that comprise Belize Sugar Industries are privately owned (Tate and Lyle), though the government is to acquire a 75 percent holding. Aside from the main rice mill, there is no major state involvement in industry. Garments are the only manufacturing product to contribute significantly to exports. The remaining industries cater mainly to the domestic market, and include feed milling, woodworking, soft drinks, brewing, distilling, cigarette manufacture, fertilizer blending and quarrying. Of the two citrus processing plants, one is owned by a subsidiary of Nestl and the other by a Trinidadian-led consortium which includes the Belize Citrus Growers' Association. The majority of consumer and capital items are imported.

2. The Industrial Sector in Costa Rica

The structure of the Costa Rican economy has changed fundamentally since Costa Rica joined the CACM in 1963, when there was little industrial production. While food products, beverages, and tobacco, together with textiles, leather, and wood products, accounted for over four-fifths of total manufacturing production in 1960, they accounted for only about two-thirds in 1982. The sectors that expanded the most were chemicals, rubber and plastics products and metal-mechanic industries.

Manufacturing production is oriented basically for the domestic Costa Rican market, which now absorbs about four-fifths of the gross value of production. About one-fifth is exported, accounting for about one-third of total exports. By 1980 import substitution supplied about 10-15 percent of total domestic needs for food products, beverages, tobacco, clothing, wood products and furniture. It has limited potential for increasing further.

Exports, including both industrial and processed agricultural goods, have grown at a high rate during the last 20 years, averaging 20 percent per annum in real terms during 1962-1982. Manufactured exports were about equally divided between Central America and the rest of the world in the 1980s, but recently have shifted away from the limited possibilities of CACM and toward outside markets. Costa Rica's manufactured exports are concentrated in a few key sectors; the main exporting groups are: (1) foodstuffs, beverages, and tobacco; (2) chemical, rubber, and plastic products; (3) metal mechanic products; and (4) textiles,

clothing, and leather goods. These sectors are expected to provide the bulk of new exports for new markets, partially through a reorientation of existing plants and partially through new investments, both local and foreign, particularly in agro-industries and "maquila" operations.

3. The Industrial Sector in El Salvador

El Salvador is more highly industrialized than the other Central American countries. The most important industrial activities are textiles, clothing and food processing. Industries in general are small and usually concentrated in the capital. The civil war and balance of payments problems have taken their toll on manufacturing; production and value added in real terms have fallen. Importers are continuing to be hard hit and companies selling to the country are rethinking their terms. The 1986 reunification of official and parallel exchange rates ended effective subsidies of about 50 percent on about 40 percent of all items, including gasoline.

The October 1986 earthquake severely damaged basic services, trade, industry and housing. It further weakened the country's productive capacity and forced the government into unforeseen emergency spending.

In summary, the manufacturing sector has been faced with escalating production costs, especially for labor and inputs imported after currency devaluation in 1986, the lingering crisis of the Central American payment system, which limits sales to the region, and the October 1986 earthquake damage to manufacturing facilities.

The government passed an export development law in October 1984 which offers generous incentives to companies involved in exporting semi-manufactures, non-traditional manufactures, agro-industrial products, etc. In November 1974 the country's first free trade zone was opened at San Bartolo. The Zone covers 134 acres and was planned to house 73 light industries by 1978. In 1983, however, the Zone only had four firms in operation employing 650 workers and has grown very little since then.

4. The Industrial Sector in Guatemala

The manufacturing sector is dominated by food, beverage and tobacco products, although other industries such as printing and publishing, textiles and clothing, and, for a time, building materials, have done well. In the past, Guatemala's industrial sector benefited highly from the CACM.

Guatemala has a steel plant, producing steel plate, bars, sections and sheet, and a petrochemical plant. In 1972 Kellogg opened a new operation in Guatemala from which it supplies all of Central America. In the late 1970s industrial development focussed heavily on the production of building materials, especially due to the 1976 earthquake, the tourist trade and infrastructure improvements which created strong demands for them. Value added in manufacturing grew at an annual average rate of 9.2 percent in 1976-78, 5.3 percent in 1979 and 6.3 percent in 1980. In 1980 Guatemalan industry was able to benefit from the weakness of the other Central American countries and exported to them goods worth \$400 million. Since then, however, the region's economic and political difficulties have adversely affected Guatemala, which was already experiencing a recession in the construction industry, and industrial production has fallen off. Manufacturing is increasingly becoming export oriented. Non-traditional exports to the USA are now valued at over \$100 million a year.

5. The Industrial Sector in Honduras

Honduras' manufacturing sector is relatively undeveloped. It accounts for about 13 percent of GDP, produces less than 15 percent of total exports and employs less than 8 percent of the economically active population. So-called "traditional" products, of which food and beverage products, refined sugar and sugar by-products, textiles and garments, and wood products are the most important, account for nearly 80 percent of sectoral value added. Manufactured exports include consumer goods; of which the most important are processed foods; intermediate goods, half of which are wood products; and a small percentage of consumer durables. Available data on the size distribution of the sector's establishments portray a clear picture of an atomized, traditional manufacturing sector. Reportedly, about 37,000 enterprises, including some 30,000 self-employed artisans, employ fewer than five people; about 1,100 firms employ between 5 and 100 employees; and fewer than 90 firms could be classified as large-scale, employing more than 100 persons.

Import-substitution policies have been pursued in Honduras, though not as aggressively as in other countries in Central America. As a result, Honduran manufacturing is relatively efficient (i.e., most industries produce at or near international prices), though with considerable intra-sectoral variability. A recent study shows that about 59

percent of Honduras' industrial output is concentrated in sub-sectors in which the country has a medium-term comparative advantage, about 28 percent in sub-sectors in which its comparative advantage is "questionable", and only 13 percent of the output comes from sub-sectors in which the country has no comparative advantage.

6. The Industrial Sector in Panama

The ready availability of imported consumer goods in the Canal Zone has held back industrial development in Panama. Price controls and trade restrictions have also dampened incentives and efficiency in the industrial sector. The establishment of a manufacturing base largely has been undertaken by the government with the construction of iron and steel works, a cement plant and sugar mills in the 1980s. The World Bank structural adjustment loan is expected to assist in increasing production, particularly by the private sector in export-oriented activities. Manufacturing accounts for just 10 percent of the GDP.

In order to compete effectively, the industrial sector needs to increase productivity and quality. Some industries are expected to be adversely affected by recent measures, such as the dismantling of protective measures, or by the higher cost of imported inputs due to tariff valuation shifts from an FOB to a CIF basis and eventually to a uniform rate.

Panama's leading non-traditional industrial exports have been in textiles, food processing, paper products, chemicals (particularly pharmaceuticals) and non-ferrous metals. Manufactured exports have been growing rapidly and there is significant potential for further expansion if a variety of serious obstacles can be overcome.

III. CONSTRAINTS TO INVESTMENT AND GROWTH IN THE INDUSTRIAL SECTOR

A. Introduction

The development of Central America's industry over the past two decades has been closely tied to the CACM. While there continues to be academic debate over whether the CACM was a success or an example of high costs and inefficiency under protectionism, there is little question that regional political strife and adverse external conditions have undermined the bases for significant increases in Central American intra-regional trade. Thus, it is increasingly necessary to turn to exports for the survival of the sector. This will not be easily accomplished. The industrial sector will have to be restructured within both macroeconomic and country-specific frameworks, which will pose serious problems.

The general macroeconomic problems which inhibit the growth and change of the industrial sector in Central America may be summarized as follows:

- reduction of the external sector of the regional economy;
- deterioration of the terms of trade for the region's basic export commodities;
- limited growth potential of import substitution;
- low growth of the world economy, and protectionist measures instituted by other countries;
- delays and bottlenecks in structural changes required to improve the industrial sector in Central America;
- enormous acceleration of technological change in the industrial sector.

Internally, a restructuring process is required to allow the economies of the region to exploit fully the benefits of specialization and trade. National economies will have to adjust to external markets and their special characteristics (about which businessmen in the region know very little), the high costs of imported inputs and equipment, and the high cost of working and investment capital. Internally, the

economies will have to improve efficiency in the production processes of the manufacturing sector and readjust policy and regulatory laws (such as tax, banking and company laws) that tend to perpetuate the status quo.

B. Political Strife/Business Climate

Clearly the major constraint to economic activity in Central America is the political violence engulfing the region. The Sandinista revolution in Nicaragua, the ensuing war with the "Contras," the use of Honduran territory as both a staging area and a war zone, the guerilla struggle in El Salvador, and the sporadic outbreaks of guerilla activity in Guatemala -- all have had a chilling effect on the region's economic growth and development. As a result of this highly negative political and business climate, capital which would have been available for investment or for financing essential imports of raw materials and intermediate goods, has fled to safe havens offshore. Moreover, foreign investors have also kept their own financial commitments low. Political strife has also led to sabotage and economic destruction, and the exodus of managers, professionals, and technicians. In El Salvador, for example, the level of violence has had both direct effects (i.e., the need to undertake elaborate steps to protect factories, provide back-up sources of electricity, and manage overland shipments) and indirect effects (declines in growth rates and income levels) which have crippled the industrial sector.

C. Policy and Regulatory Environment

Throughout the region, the most fundamental constraint to investment and trade is the policy and regulatory environment. These problems, which were documented in our interviews and supported by other research findings, range from exchange rate issues (valuation and availability) to highly cumbersome administrative requirements. The general picture is that governments still have not taken sufficient steps to adopt policy frameworks which promote investment in the industrial sector, particularly that oriented towards exports.

The government policies and legal mechanisms promoting and regulating the behavior of industry are the most comprehensive in Costa Rica and Guatemala, two countries which have among the most advanced industrial bases. The least number of laws and regulations affecting the industrial sector may be found in those countries which have the least developed industrial bases, such as Honduras and Belize. While in the first case these laws often trip up the investor and exporter, in the second case the lack of a cohesive policy is even more serious because it also means a lack of comprehensive incentives.

Every country in the region has tried to promote exports of traditional and non-traditional products through the provision of formal and non-formal incentives. The degree to which these incentives have proved successful varies widely among countries. And the degree to which they have also impeded investment varies widely.

The general and common constraint to industrial development in Central America stems from the policy of import substitution pursued in the 1960's and 1970's. This protectionist policy is reflected in:

- price controls
- tariffs
- licensing requirements

This is manifested in various ways. In Costa Rica, government statutes allow the Central Bank to oversee and in some cases set price controls. In Panama serious price distortions imposed by the government affected the agro-industrial sector up until they were removed in 1985 (price distortions still exist but they are believed to be a result of market-determined monopolies). The overvaluation of currencies in Central America has also been a form of protectionist control, which is being removed only slowly. Honduras, El Salvador, Costa Rica and Guatemala all have instituted monetary and exchange rate reforms in the last four years, but central bank regulations regarding foreign exchange convertibility continue to trouble importers and exporters.

In some countries, such as Costa Rica, the tariff structure up until 1986 was all but prohibitive. At the insistence of international agencies such as the World Bank, IMF and USAID the 1986 Reform dropped tariffs from the 50-1600% range to the 50-150% range. In other cases governments have taken steps to promote the industrial sector at the general policy level but have yet to adjust tariff and licensing requirements. Guatemala is a case in point. Guatemala has been "micro-managing" its economy with

government policies reaching down to control business with minute details -- a policy that was appropriate for import substitution but which is inappropriate for new directions of export promotion. Regulations affecting the business and industrial sector have yet to be overhauled to match more export-oriented policies. In addition to Guatemala, Honduras and Panama are two other cases where the official policy at the political level does not match regulatory behavior.

Laws and regulations are not considered a constraint to industrial and export development by businessmen in Honduras and Belize according to research done by SRI International on export industries in March 1987. Although laws stand on the books in both countries (though much less so in Belize), the real constraints are perceived to be the people who implement the laws. The cultural phenomenon of "risk-avoidance" is considered to be so strong in Honduras that it is practically impossible to get any licenses and documents out of government hands in any reasonable time frame. Government bureaucrats are universally considered to be slow and petty in processing documents. In Belize the laws and regulations are applied in a discretionary manner to companies in the same industries.

Panama has an exceptional constraint to industrial development in its Labor Code of 1972. The Code makes it difficult and expensive for businesses to fire workers for any reason. The businesses' lack of ability to dismiss workers is a disincentive for workers to perform, thereby diminishing productivity. There appear to be no programs or policies underway to correct or ameliorate this situation.

D. Finance

Second to the policy and regulatory framework, finance is the most frequently cited constraint to investment in productive activities. The most frequently cited problems in the financial area are:

- The lack of equity financing, both for the start-up of new ventures and the recapitalization of existing firms.
- The absence of "development" financing to provide medium term loans at reasonable rates of interest.
- The need for trade finance, particularly dollar credit lines for imported inputs. Existing special windows for pre-export and export financing apparently are too expensive, too complicated, or unavailable for many activities, especially in the agribusiness sector.

- Access to credit due to excessive collateral requirements, legal restrictions, or conservative banking practices.

The financial constraint is perceived as a serious problem throughout the region, but it is difficult to assess the degree to which the problem is one of availability, access, or investor confidence. For example, a significant amount of flight capital left the region (an estimated \$1.5 billion in Guatemala alone) which should and could be available for investment given changes in the political situation and the policy/regulatory climate. Furthermore, existing lines of medium and long-term financing credit (e.g., IDB and World Bank lines of \$17.5 million and \$30 million for Honduras and Guatemala, respectively) are not being fully utilized.

E. Labor Market

The most important labor issue facing Central American countries will be the creation of off-farm employment. The agricultural labor force is expected to stabilize at present levels. New entrants to the labor force will seek off-farm employment, putting increasing pressures on the industrial and service sector for job creation, especially in the urban areas.

Unemployment and underemployment will also be a very important labor issue in the next ten years. Time spent unemployed will lengthen for most job-seekers. For the first time, unemployment will affect two groups who have been protected from unemployment up until now: prime-age men and professionals/qualified technicians.

The labor market offers no foreseeable constraints in terms of size or cost. It will also offer an educated work force with more than adequate numbers of secondary school and university graduates. The quality and technical knowledge of this highly educated work force, however, may not be appropriate to the requirements of the industrial sector.

F. Marketing

The consistent and persuasive complaint of Central American businessmen (SIECA, INFORPRESS, INCAE surveys) is the lack of knowledge of foreign, especially U.S., markets. Most industries are too small to afford to purchase marketing expertise overseas and therefore are highly vulnerable in preparing non-traditional products for export markets. In some cases where businessmen have contracted market consultants in the U.S., or have networked through maquila (drawback) industries, the success of Central American products has been good.

On the positive side, this major constraint for Central American products has been recognized by both the private and public sectors. An example of the attempt to address the problem has been the contracting of a consultant firm by USAID to provide market information and concomitant product development. On the whole, however, more solutions must be found.

G. Technical/Production Process

Among the 280 enterprises surveyed by SIECA for its industrial reactivation proposal none mentioned problems of a technical nature constraining their further development. Their concerns were expressed primarily in terms of financial, market and bureaucratic problems (Table 9). Thus, technical constraints seem to be of a lower priority, at least for industries serving the intra-regional and extra-regional export markets. The reason for this is probably because export industries are generally medium sized and larger size companies with easy access to technical assistance from abroad.

With regard to access to technology, three different segments may be recognized within the industrial sector: (a) subsidiaries of multinational corporations and joint ventures with foreign partners; (b) large industries established by local entrepreneurs; and (c) small to medium size enterprises. Subsidiaries of multinational companies and joint ventures receive technical assistance from their parent companies or foreign partners on a formal (royalty agreement) or informal basis thereby assuring their competitiveness in the market environment. Industries employing 100 or more workers are considered large by Central American standards. They have usually the foresight and means to acquire technology through either international licensing agreements, equipment and material suppliers, or applied research conducted in-house or by some local research institution.

TABLE 9

CENTRAL AMERICA: FACTORS WHICH INTERFERE WITH
INTRA-REGIONAL COMMERCE

(SIECA Survey 1987)

	<u>Number of Companies</u>
<u>Monetary Problems</u>	<u>109</u>
1. Foreign exchange controls	23
2. Exchange rates	34
3. Payment problems	49
4. Lack of credit	2
5. Exchange measures	1
<u>Marketing Problems</u>	<u>103</u>
6. Unequal competition	20
7. Reduced demand	15
8. Reduced supply	2
9. Market closings	8
10. Uncertain Markets	6
11. Contraband	2
12. Third country import preferences	3
13. Production costs	2
14. Lack of primary materials	6
15. Border closings	24
16. Protections and measures	15
<u>Warehousing Problems</u>	<u>7</u>
<u>Administrative Problems</u>	<u>33</u>
17. Bureaucratic red tape	26
18. Sanitary restrictions	2
19. Customs red tape	5
<u>Other Problems</u>	<u>28</u>
20. Bilateral treaties	5
21. Partial agreements	2
22. Political problems	20
23. Lack of communication facilities	1
Total Responding	<u>280</u>

SOURCE: SIECA: Propuesta para Reactivar la Produccion Industrial y el Intercambio de Bienes Complementarios en la Region Centroamericana.

Small and medium size enterprises are the ones which experience the greatest difficulties in accessing technical know-how. They often lack the sophistication to recognize the benefits that may be derived from technical improvements. Furthermore, their limited financial resources often will not allow them to implement recommendations even if technical assistance were available to them.

Technical constraints fall in the areas of production efficiencies and quality. Central American industries were developed largely in the 1950s and 1960s to serve a non-demanding regional market. By and large, these were import substitution industries protected by a high external tariff. Production efficiencies and quality were not a major concern. As a consequence, the industrial sector is ill prepared to face a changed environment and to meet the challenge of 1980s and 1990s.

Reactivation of Central American industry depends on its ability to penetrate new markets outside the region. To accomplish such penetration, goods must be produced at competitive prices and meet international standards of quality. Production efficiencies must be improved to reduce costs. Efficiency improvements most likely will require new investments for which a favorable climate must be created.

Productivity improvements involve the implementation of one or more of the following items, some of which will require outside technical assistance:

- Adequate manufacturing process
- Appropriate equipment selection
- Investment in auxiliary equipment and quality control instruments
- Efficient plant layout
- Scheduled equipment maintenance
- Process controls
- Production planning and controls
- Cost controls
- Cost reduction programs
- Production incentives for labor
- Good labor relations
- Pleasant working environment
- Training of operators, supervisors and management
- Quality assurance practices
- Management attitude changes
- Review of product mix
- Design of new products and/or reformulation of products
- Reduction of number or diversity of items produced

Collapse of the CACM has resulted in a significant manufacturing overcapacity situation from which only the most efficient operators will survive. Overcapacity may either constrain or improve production efficiencies. It will improve production efficiencies if the excess equipment can be utilized to streamline production and/or install parallel lines to produce different types or sizes of widgets, eliminating down-time occurring upon equipment or line changeovers when switching production from one widget to another. More likely, however, is that overcapacity will constrain management from investing in more modern and efficient equipment capable of producing better quality widgets.

Since 60 percent of the factories and 39 percent of the equipment were installed prior to 1970, equipment age and state of maintenance may be constraining factors in today's environment. Inadequate and/or poorly maintained equipment impacts on product quality.

Quality must be built into a product. It cannot be inspected into it. Quality control serves for early identification and correction of problems as well as for preventing defective products from reaching the distribution chain. Products manufactured for export outside the region must meet international standards or customer's specifications. Consistency of quality is as important as achieving quality standards.

H. Management and Training

Most Central American industrial managers are competent to carry out their jobs. However, many lack the vision and follow-up to effectively organize and direct the complex organizations which they manage. In many cases managerial performance could be improved by a more entrepreneurial mentality.

The effectiveness and comprehensiveness of training in Central America varies widely. As in most areas of the world, insufficient attention is given to training, evaluation and follow-up. Also, there are not enough programs providing trainees with "hands-on" production experience. There is a need for more awareness of the importance of on-the-job and in-service training. English language training and training for the drawback industry need to be more extensive.

Those are but a few of the human resource constraints in the industrial sector. There is a wide variety of training institutions in the region attempting to deal with the constraints. At the regional level are INCAE, CATIE and ICAITI. Nationally, training institutions range from universities such as the Francisco Marroquin School of Business Administration in Guatemala; to private sector programs such as CINDE in Costa Rica; and to government and private sector-supported vocational programs such as INFOP in Honduras.

In the area of management training, INCAE does an outstanding job; but its graduates can meet only a small percentage of the need, and only at the top levels. More "hands-on", middle-level management training is needed, especially in technical areas such as quality control and maintenance. International marketing is another area of management training need.

At the vocational level, constraints include inadequate academic preparation (especially in mathematics) to enter vocational school; inferior teacher preparation; traditional and ineffective teaching methods; insufficient physical facilities and equipment; and, perhaps most important, shrinking budgets due to national austerity programs.

I. Infrastructure

The physical infrastructure system in Central America is good. The constraints that do exist -- lack of timely and sufficient air cargo service and lack of well-maintained and adequate port facilities -- probably can be resolved rather easily. The primary road network linking all of Central America is now complete. Major highways within each country and many secondary highways are paved. Hydroelectric power is the main source of power generation for every country and the intra-regional electrical grid lacks only one linkage in order to be complete. With the primary elements of these systems in place, it is now a question of extending their benefits to all the small villages and hamlets of the region.

The constraints of air transport and port embarkation on a country-by-country basis are as follows:

BELIZE. Most of Belize's exports are shipped by road through Mexico to the United States which is the most reliable transport mode, or are shipped by sea. The Belize port is not deep enough to accommodate bulk transport vessels or large ocean going ships. As a result, agricultural exports must be transshipped.

COSTA RICA. Although the situation is not grave and is improving, Costa Rica's infrastructure for international sea and air transport still leaves considerable room for improvement. Maritime shipping costs for most products are high, above the rates for larger ports in the region, due to uneven volume and demand. Air freight is made difficult by the inadequate cargo handling facilities at the San Jose airport. Moreover, air cargo service is inadequate and irregular. The Costa Rican Aviation Board has restricted cargo carrying by foreign air lines. LACSA lacks the capacity to handle current demand.

EL SALVADOR. El Salvador has one major port with access only to West Coast shipping which is far less frequent and more expensive for reaching US East Coast markets.

GUATEMALA. Guatemala has four major ports, two on each coast. Transport costs are high but not out of line. Air freight capacity is unreliable and therefore inhibits exports of fresh products.

HONDURAS. Air cargo service is unpredictable and maritime container service is expensive. Only the government air line TAN-SAHSA can carry cargo in and out of the country and its schedule is erratic. Although several international shipping companies serve Honduras the costs are very high due to low volume.

PANAMA. All transportation -- land, air and sea -- is expensive, inefficient and inadequate. International maritime shipping through the ports of Balboa and Cristobal have excessively high port charges and unreasonable delays, due primarily to high labor costs and inefficiencies. Moreover, the ports are very poorly maintained and are now outdated in terms of crane service and container crate capacity.

IV. INSTITUTIONAL ACTIVITIES

This section will briefly examine Central America's continuing efforts to achieve economic growth, both through the CACM and through non-traditional exports. As noted earlier, the economies of the region are in transition, and this is reflected in changing institutional responses.

A. Central American Governments

The history of Central America is characterized as much by efforts of cooperation and integration as it is by nationalism of individual countries. Since the 19th century, the nations have endeavored to strengthen their political and economic positions by collective action. For the purposes of this study, the most relevant example of this collaboration was the establishment of the Central American Common Market (CACM) in the 1960's.

The creation of the CACM spawned other entities supportive of regional integration. These include: the Central American Bank for Economic Integration (CABEI), the Central American Research Institute for Industry (ICAITI), the Nutrition Institute for Central America and Panama (INCAP), the Tropical Agricultural Research and Training Center (CATIE), the Central American Business Administration Institute (INCAE), the Latin American Agribusiness Development Corporation (LAAD), and the Latin American Export Bank (BLADEX).

The mandates of the regional institutions reflected the economic realities and theories of the day. Based on the studies of Raul Prebisch and the newly created U.N. Economic Commission for Latin America (ECLA/CEPAL), the countries of Central America began to pursue economic policies based on a strategy of import substitution industries. The objective of these policies was to decrease dependence on the industrialized nations and to strengthen the industrial base of the region. For reasons of economies of scale, a regional approach seemed most practical. Paralleling pursuit of import substitution industries, whose market was regional, was reliance on the export of traditional agricultural and mineral products as the primary earners of foreign exchange.

Exemplifying the importance of regionalism is the recent meeting of the Central American Presidents and the adoption of the Arias Peace Plan. The decision taken by the Central American presidents to pursue their own political solution to the region's conflicts, and to override American efforts to influence the process, illustrates the depth of regional identity.

On the economic front, the recent meetings in Esquipulas produced recommendations to continue support of regional institutions and economic integration. Among the measures recently agreed to are those that support increased regional commerce; increased extra-regional trade; industrial reactivation; strengthening and integrating regional agricultural policy; and strengthening SIECA.

Among the recommendations in the area of intra-regional commerce were:

- Adopt a more flexible payment system between countries that would allow use of the DICA, local currencies, the U.S. dollar, other hard currencies, or other means approved by the Directors of the Central Banks.
- Endeavor to eliminate trade imbalances that exist among countries.
- Eliminate tariffs and administrative or other protective practices that pose barriers to free trade.
- Reduce customs and immigration procedures to facilitate the flow of people and goods across regional borders.
- Study the creation of a Guaranty Fund for regional export credit, perhaps supported by international finance.

In order to increase extra-regional trade, recommendations were made to coordinate export promotion activities pursued by the various national government agencies.

The Ministers agreed that regional industrial reactivation should be pursued in various fronts by:

- Selective support to industries that produce primary and intermediate goods, especially production inputs;
- Establishing credit lines to provide working capital to the aforementioned industries;
- Promoting investment in complementary industries;
- Creating an Industrial Transition Fund to finance basic and regional industries that have the potential to modernize and operate at world standards.
- Supporting the production and marketing of handicrafts and other goods produced by the region's small and medium size businesses.

In the area of Agricultural Policy the Ministers proposed a special effort aimed at self-sufficiency in the production of basic commodities and the free exchange of goods region-wide to ensure that national needs are met.

Finally, the group recommended strengthening SIECA by establishing within it an information unit to examine and promote economic policies supportive of regional trade and industry.

Thus, while individual governments are adopting new economic strategies and policies geared to non-traditional export-led growth, there remains a sense of regional economic identity. Rather than abandoning the CACM and the institutions it fostered, there exists a desire to resuscitate and modify them to reflect new economic realities. In essence, the governments of the region are searching for ways in which to merge a strategy of regional integration and export-led growth.

B. Region-Wide Entities

1. SIECA

As the Permanent Secretariat of the Central American Economic Integration Treaty, SIECA promotes integration and makes policy recommendations to the treaty signatory governments. SIECA's current aim is to revitalize the integration process, which has been interrupted in recent years by the economic crisis gripping the region and by political conflict in Nicaragua and elsewhere.

SIECA believes that the impressive economic progress experienced by the region as a result of the creation of the common market can be rekindled through reactivation of industrial production and intra-regional trade. In an attempt to determine the stimuli needed to effect such reactivation, SIECA (in conjunction with CABEI and ICAITI) conducted an 18-month long survey of 280 industrial enterprises in the five CACM countries. An analysis of the findings, conclusions, and recommendations of this survey may be found in Section VI.

On the basis of the above survey, SIECA proposes a three-pronged approach to accomplish the desired reactivation: (a) a financial program; (b) a technical assistance program; and (c) a trade program.

The financial program would rehabilitate, expand and start new projects in existing industrial enterprises. Investments required for this program were projected to amount to \$250 million based on a \$120 million capital need of the 280 companies surveyed. The bulk of proposed funding (63 percent) would come from banks and financial institutions in the region, 23 percent would be financed through supplier credits and less than 14 percent would be contributed by investors.

The technical assistance program visualizes for the medium term the local development of "intermediate" technology more appropriate for the Central American environment than the more advanced technology imported from abroad. For the short term, the emphasis is on quality and productivity improvements and the establishment of quality standards. The cost of this program is estimated at \$5 million over a four-year period.

The trade program proposes the organization of round table discussions between private businessmen and government officials to resolve the various obstacles currently constraining trade among the nations. A budget of \$1.5 million over a three-year period is proposed for this program.

2. ICAITI

ICAITI is the region's foremost research institute for industry. Its principal activities are in laboratory analysis and other technical services in the areas of industrial development, applied technology, and energy. It carries out consulting, technical assistance, training and research activities for both private and public sector institutions. ICAITI's specific services are:

- General studies and consultations on economic and industrial issues
- Applied research on the region's natural resources
- Market studies
- Development of new technical processes or adaptation of existing processes
- Feasibility studies for industry
- Preparation of product and raw material standards
- Analyses and certifications of products and raw materials
- Financial appraisals
- Microbiological studies
- Special tests on the raw materials, processes and products of the leather, textile, food and beverage, and wood industries
- Training
- Geologic and mining studies

ICAITI has carried out the following projects for ROCAP, all related to industrial reactivation:

- Rural Electrification
- Fuelwood and Alternate Energy Sources
- Regional Industrial Energy Efficiency
- Central American Energy Resources

Training courses related to industrial reactivation have included the following:

- How to carry out energy audits and energy savings
- Design and use of computerized data base
- Food research technology
- Solar energy applications
- Quality control and productivity

The institute provides technical assistance and managerial and technical training to micro-enterprises. It also provides training and technical assistance in possible industrial uses of agricultural wastes. ICAITI has a complete scientific and technical library.

ICAITI has initiated an examination of its progress to date, and recognizes the need to undertake long-term planning. Its most pressing task is to diversify its financial base, most of which is now provided by ROCAP. It must increase sharply its services to industry in order to capture more revenue from this source. Other sources of revenue come from feasibility studies, and from technical assistance in energy efficiency and agricultural waste utilization programs. ICAITI is also currently considering creating a promotion and sales division to help meet its financial needs.

Despite its 32 years of existence and the technical assistance it has provided to numerous private firms, ICAITI is not very well known, especially in the private sector. Those who do know it have a generally good impression of the institution. ICAITI is said to have worked well with INCAE on energy audit training programs. However, it does have the reputation among some observers of being slow and bureaucratic.

3. CABEI

The Central American Bank for Economic Integration (CABEI) was established to fund the industrial growth of Central America. Its functions include the identification of investment opportunities within CACM, the preparation of feasibility studies, the financing of private sector projects, and the provision of technical assistance and brokering services for joint venture projects.

About 85 to 90 percent of CABEI's loans have been granted to member governments and public agencies. Its loans to the private sector for industrial, agro-industrial and tourism projects currently total about \$110 million. This portfolio is badly in arrears. In fact, poor repayment performance has been experienced with loans to the public as well as to the private sector, and has seriously affected the bank's lending capacity. Annual lending has been reduced from an average of \$200 to \$250 million in the late 1970s to only about \$10 million in 1984.

ROCAP and other donors have been working with CABEI on a comprehensive program to reorganize and recapitalize the bank. Private sector loans to a group of 32 companies in four Central American countries are currently being reviewed by a consultant firm to determine whether the borrowing companies can be rehabilitated or whether they should be liquidated. *and then what?*

4. INCAE

INCAE is Central America's leading business/management institute. INCAE's best-known program is the two-year M.B.A., which has graduated approximately 1,100 people since 1964. The entire MBA program is related to industrial reactivation. The courses on Production and Productivity and Advanced Marketing relate specifically to increasing exports. Several case studies on "drawback" (in the textile and electronic component sub-sectors) are used in the MBA curriculum. English language training is also included in the curriculum. ROCAP assists the MBA program with

scholarships and a summer internship program placing MBA students with U.S. import/export firms. Other long-term INCAE academic programs are the two-year Masters in Economía Empresarial, and one-year programs in Banking Administration and Functional Administration. All of these have an impact on regional industrial reactivation.

In addition, INCAE sponsors many short courses and seminars. Its four-week Advanced Management Program has graduated 2,100 people since it began in 1979. A total of 32,000 people have attended its executive seminars and other programs. These include:

- a. Six-week courses, supported by ROCAP, aimed at improving the teaching of Business Administration in the region's universities and focussing on non-traditional export promotion;
- b. Three-day Productivity and Competitiveness Seminars, also focussing on non-traditional exports and supported by ROCAP with 50 percent scholarships;
- c. High-level, public and private sector Policy Dialogue Seminars, which address difficult economic restructuring issues and which have a direct impact on industrial growth. These are also supported by ROCAP; and
- d. Joint training programs with CINDE/ROCAP and the Costa Rican Chamber of Industries, among others.

INCAE has recently begun a Management for Development program, which includes training and research in Small and Medium Enterprises, Cooperatives, Private Voluntary Organizations (PVOs) and Housing and Urban Development.

Finally, INCAE does consulting, sponsors a wide variety of research, and publishes several magazines, bulletins and newsletters -- all related to industrial reactivation. Its first semester 1987 "Revista" was devoted entirely to Central American export promotion.

According to its new Rector, Melvyn Copen, INCAE will continue to be an "institution of change", an active participant in the process of regional economic development. He intends to continue the extension of INCAE's management training orbit to the public sector, unions, PVOs, universities, small businesses and cooperatives.

INCAE wants to increase its programs in areas related to exports and is currently seeking funding for an INCAE-sponsored Miami seminar on exports for Central American exporters.

~~INCAE is highly thought of as a "neutral broker," able to bring together diverse parties to discuss difficult subjects~~ -- as in, for example, the Policy Dialogue Seminars. Given the success of the Policy Dialogue Seminars, these will probably continue and expand. It can also be anticipated that INCAE will be increasingly active in research and publications relating to non-traditional exports.

A leading Government official in the region called INCAE the only regional institution significantly helping the industrial sector. INCAE's reputation seems to be excellent throughout the region.

On the negative side, many feel that INCAE's programs are overly expensive, which tends to make their graduates also too expensive. Some decry INCAE's almost exclusive focus on top management and urge that its programs be aimed at lower management levels as well. Some people feel it should do more outreach programs at the local level, away from its two campuses. Finally, it is felt by some observers that INCAE's courses should be more specific, i.e. quality control for the pharmaceutical industry instead of quality control in general.

5. LAAD

The Latin American Agribusiness Development Corporation (LAAD) is a privately-held, for-profit investment and lending institution incorporated in Panama. It was founded in 1970 with an initial capital of \$2,000,000 by a group of 15 leading agribusiness and financial corporations to develop agribusiness projects in Latin America. The list of shareholders include:

Adela Investment Company, S.A.
Bank America International Financial Corp.
Cargill, Inc.
Castle & Cooke, Inc.
Caterpillar Tractor Co.
Rabobank Curacao, N.V.
Chase Manhattan Overseas Banking Corp.
CPC International, Inc.
Deere & Company

Mellon International Holding Corp.
Monsanto Company
Ralston Purina Company
Southeast Bank, N.A.
The Goodyear Tire & Rubber Co.

LAAD has four operating subsidiaries. These are: LAAD Americas, S.A. (Santiago, Chile), LAAD Caribe, S.A. (Santo Domingo, Dominican Republic), LAAD de Centroamerica, S.A. (Guatemala City), and LAAD Marketing Company, Inc. (Miami, Florida). The first three oversee lending and investment operations in South America, the Caribbean Islands, and Central America and Panama, respectively. The fourth, serves as a brokerage firm in the distribution of agricultural and agribusiness products from Latin America.

LAAD Marketing itself maintains a 25 percent minority interest in the following operating subsidiaries in the United States: Mountain Fresh Inc, Southern Sun Inc., Transamerican Seafood Inc., Fresh Fish Inc. and Fresh Cargo Inc. The 75 percent majority equity in these subsidiaries is held by LAAD's Latin American exporting clients. Through these organizations, LAAD Marketing distributes the exports of its clients while at the same time controlling their cash flows.

LAAD's marketing activity is incidental to its prime function as a finance company and financial intermediary. Since formation, it has received five concessionary loans from USAID at interest rates of 3 to 4 percent. It is the only successful, regional, private sector agricultural development lender. Return on equity has averaged 10.9 percent over the last ten years and reached almost 14 percent in 1985.

Even though development loans are, by nature, more risky than loans to well established enterprises, LAAD has managed such risk better than CABEI which serves a similar market and whose loan portfolio has serious asset quality problems. Over the years, LAAD has gained a well-deserved reputation for superior management and lending skills. The organization is highly centralized and lean. Headquarters in Miami provide all the administrative support to subsidiaries in the field.

Since LAAD obtains its loanable funds in dollars, it grants only dollar denominated loans. Borrowers must generate dollars to be able to pay interest and repay the principal. Thus, LAAD provides loans only to agribusiness ventures which generate hard currency income from exports. Loans for fixed capital and working capital were granted primarily in the following areas:

- Processed foods (principally frozen fruit and vegetables since canned goods are usually consumed domestically)
- Sesame (decorticated sesame seeds for hamburger buns)
- Cardamom (has become the second largest export earner in Guatemala)
- Ornamental plants and cut flowers
- Wood products (broom and mop handles produced from sawmill trim)
- Fish and shrimp (new area for LAAD of particular interest for El Salvador which lacks agricultural land and has few opportunities for diversification)

6. FEDEPRICAP

The Federacion de Empresarios Privados de Centroamerica y Panama (FEDEPRICAP) is a private sector initiative organized to promote new business opportunities and modernization of present day commerce. It advocates constructive national, regional and international policies that will promote the physical, intellectual, social and economic well-being of the people of Central America and Panama. It was founded in response to the collapse of the CACM and out of a growing concern for the future of Central America by the business leadership in the area. Its membership includes twelve private enterprise development organizations in the area whose common goal is to create a strong business environment that will broaden the base of economic participation, strengthen the middle class and create healthier economies for the nations of the region. The participating organizations are non-profit, non-partisan and include the following entities:

- COSTA RICA:
- Comite Costarricense de la Empresa Privada
 - Coalicion Costarricense de Iniciativas de Desarrollo (CINDE)

- EL SALVADOR: - Asociacion Nacional de la Empresa Privada (ANEP)
 - Fundacion Salvadorena para el Desarrollo Economico y Social (FUSADES)
- GUATEMALA: - Comite Coodinador de Asociaciones Agricolas, Comerciales, Industriales y Financieras (CACIF)
- HONDURAS: - Consejo Hondureno de la Empresa Privada, (COHEP)
 - Fundacion para la Investigacion y Desarrollo Empresarial, (FIDE)
- NICARAGUA: - Instituto Nicaraguense de Desarrollo, (INDE)
 - Consejo Superior de la Empresa Privada, (COSEP)
- PANAMA: - Consejo Nacional de la Empresa Privada, (CONEP)
 - Asociacion para el Desarrollo de Panama (ADEPA)

7. BLADEX

The Latin American Export Bank (BLADEX), headquartered in Panama, was created by the Cartagena agreement of the Governors of Latin American Central Banks in 1977. Operations started two years later with an initial paid-in capital of \$25 million.

Authorized capital of BLADEX is \$110 million divided into four classes of shares. Classes A, B and C represent 30 percent each of the total capital, and class D represents 10 percent. The latter is held by one shareholder, the International Finance Corporation (IFC), who is the largest single shareholder of the Bank. Class A shares are held by the Central or other official government Banks of 20 Latin American nations. Class B shares are held by 185 commercial banks domiciled in those 20 countries and owned by Latin American investors. Class C shares are held by 26 international banks located outside of the region.

The prime objective of BLADEX is to promote exports, preferably non-traditional exports of Latin American goods and services, that will generate foreign exchange earnings for the region. In order to achieve this objective, the Bank provides export credits including pre- and post-export loans. It also finances the import of raw materials necessary for

the production of exportable goods and capital items needed to increase the manufacturing capacity of exportable goods. Additionally, it promotes the development of a market for Banker's Acceptances created to finance export operations.

BLADDEX negotiates only Banker's Acceptances issued by its shareholders banks or by banks authorized to do so by their respective Central Banks, and then only those acceptances issued to finance Latin American exports.

The Bank provides short term revolving credit lines to discount negotiable documents, as well as medium and long term loans. Its interest and discount rates are those which prevail in the international financial markets for similar operations. It does not subsidize interest nor bank commissions under any circumstances.

In its first three years of operation, BLADDEX has approved an average of 600 transactions totalling \$500 million per year. Since 1982, over \$170 million of USAID's Export Promotion Fund have been disbursed by BLADDEX for short term financing of non-traditional exports. USAID's co-financing goal of 1:1 has been satisfied as of March 31, 1986 and this ratio is expected to increase to 2:1 in 1987. In as much as demand for short term pre-export credit fell far short of estimates, USAID deobligated \$3.4 million of its loan to BLADDEX.

C. A.I.D. Activities

USAID's project portfolio reflects Central America's economic transition from strategies based on import substitution regional trade and export of traditional commodities (coffee, cotton, sugar) to strategies promoting industrial development and the production and export of non-traditional goods.

USAID Missions throughout the region support projects that address changing economic realities and opportunities. Given economic stagnation in traditional areas, emphasis has increasingly focussed on industrial development, non-traditional agriculture and export and investment promotion activities.

Chart 1 presents both bilateral and regional projects in these areas. Its purpose is to identify the constraints these new strategies face and the efforts made by USAID to overcome them. The chart includes current and future projects which place primary emphasis on industrial development and the promotion of non-traditional agricultural exports. Small projects, those which only indirectly support

these endeavors, and bilateral mission ESF programs are not included. Chart II presents more detailed information on these project activities.

Principal constraints to industrial development and the export of non-traditional agricultural commodities are in the areas of infrastructure, finance, information and the policy and regulatory environment. Most projects attempt to address constraints in more than one of these broad areas.

Infrastructure

Infrastructure constraints that directly relate to industrial development and non-traditional exports include the lack of physical facilities and inadequate energy resources. (Transportation and road building projects are not included.) Projects such as Industrial Parks and Infrastructure in El Salvador and Private Enterprise Development in Guatemala support the development of industrial parks or free trade zones to house new industries. Energy projects, such as the two ROCAP-funded ICAITI projects, aim to improve energy efficiency and thereby decrease wasteful consumption of costly imported petroleum. Of the 32 projects listed, five have components in the energy sector.

Finance

One of the largest constraints facing industrial development and non-traditional export strategies is financial. Both endeavors require significant capital inputs and are constrained both by banking requirements that severely limit access to credit and by business climates that discourage investment. Of the 32 projects presented in Chart 1, fully 20 seek to address financial constraints. Most provide lines of credit for working capital and for pre-export financing.

Complementing the credit facilitation projects are those of investment promotion. Nearly all of USAID's bilateral programs in Central America and ROCAP include investment promotion projects. ROCAP's support to LAAD and its proposed creation of a regional Trade and Development Corporation, aim to promote regional investment. In Belize, the Export and Investment Promotion project supports private sector endeavors to promote investment. CINDE and PIC in Costa Rica, and FUSADES and the Agribusiness Development project in El Salvador aim to provide incentives for foreign investment. In Honduras the Export Development Services

USAID'S INDUSTRIAL AND NON-TRADITIONAL EXPORT DEVELOPMENT PORTFOLIO

BY CONSTRAINT

<u>Country Project</u>	<u>INFRASTRUCTURE</u>		<u>FINANCE</u>		<u>INFORMATION/TECHNICAL ASSISTANCE</u>			<u>TRAINING</u>		<u>POLICY/REG ENVIRONMENT</u>
	<u>General</u>	<u>Energy</u>	<u>Credit</u>	<u>Invest Cap</u>	<u>Mktg</u>	<u>Prod Process</u>	<u>Produc- tivity</u>	<u>Instit Strength</u>	<u>Management</u>	
<u>ROCAP</u>										
Fuelwood & Alt. Energy 0089 (ICAITI)		X								
Regional Energy Effic. 0095 (ICAITI & SIECA)		X								X
Non Trad Ag Export 0108					X	X				
Regional Ec Recon 0114 (CABEI)			X					X		
Export Agribus Dev 0123 (LAAD)										
Regional Export Mgt Training 0124 (INCAE)									X	
Trade & Dev Corp. 0144				X						
Indus. Tech. qual Ctrl & Productivity 0128 ICAITI					X	X	X			

Country Project	INFRASTRUCTURE		FINANCE		INFORMATION/TECHNICAL ASSISTANCE			TRAINING		POLICY/REG ENVIRONMENT
	General	Energy	Credit	Invest Cap	Mktg	Prod Process	Produc- tivity	Instit Strength	Management	
ROCAP (Continued)										
Regional Industrial Expansion 0147 (CA6EI)			X							
BELIZE										
Export & Invest Prom 0027				X				X		
Training for Employment & Productivity 0020									X	X
Export Invest Credit 0019			X							
COSTA RICA										
CINDE 0186				X	X		X	X		X
Ag & Indus Reactivate 0223 (AIRR)			X							
Priv. Sector Productivity 0176 (BANEX)			X							
Private Invest Corproation 0204 (PIC)			X	X						
Private Sector Export Credit 0187 (COFISA)			X							

Country Project	INFRASTRUCTURE		FINANCE		INFORMATION/TECHNICAL ASSISTANCE				TRAINING		POLICY/REG ENVIRONMENT
	General	Energy	Credit	Invest Cap	Mktg	Prod Process	Produc- tivity	Instit Strength	Management	Skills	
<u>EL SALVADOR</u>											
Indus. Stab & Recovery 0287 (FUSADES)				X	X			X	X		X
Industrial Parks & Infrast 0323	X										
Agribus Develop 0327				X							
Training for PS Devel 0315									X	X	
<u>GUATEMALA</u>											
Priv. Enterprise Development 0314	X		X				X		X		X
Agribus Dev 0276			X		X					X	
PS Dev 0337					X		X			X	
<u>HONDURAS</u>											
Export & Dev Services 0207				X	X			X			X
Agribus Invest Support 0241	X		X				X				

Country Project	INFRASTRUCTURE		FINANCE		INFORMATION/TECHNICAL ASSISTANCE			TRAINING		POLICY/REG ENVIRONMENT
	General	Energy	Credit	Invest Cap	Mktg	Prod Process	Produc- tivity	Instit Strength	Management	
PANAMA										
Invest Council of Panama 0239				X				X		
Priv. Sector Export Financ- ing 0261				X						
Priv. Sector Scholarship Training 0258								X	X	
Productivity Improvement & Product Devel. 0272						X	X			

Activities: By Mission

ROCAP #	Title	Implementing Institution	Funding	Purpose	Dates
596-0089	Fuelwood and Alt. Energy Sources	ICAITI	4.54 MM	To disseminate industrial technologies developed under project; to increase new commercial applications; to train national counterparts; to transfer new technologies to small and medium industries and commercial firms.	9/79-1
596-0095	Regional Indus. Energy Efficiency	ICAITI	5.40 MM	To improve energy efficiency in industry and decrease industrial consumption of imported petroleum by introducing (1) energy audits; (2) conservation measures; (3) energy efficient machinery.	7/82-1
596-0095	Regional Indus. Energy Efficiency	SIECA	0.45 MM	To identify and promote public policy and public and private financial mechanisms which encourage efficient energy use.	7/82-1
596-0108	Non-Trad. Ag. Export Support	Nat'l Ag. Exporter Associat.	8.00 MM	To create and/or strengthen private sector capabilities in hands-on training and TA in skills related to production and marketing technology for non-trad. ag. exports.	12/85-
596-0114	Regional Economic Recovery	CABEI	50.00 MM	To improve financial and administrative capabilities of CABEI. To increase its present investment impact in the region which strengthen its ps increase program.	9/85-9/
596-0123	Export Agribusiness Dev. Promo.	LAAD	15.00 MM	To expand non-traditional ag exports from CA and increase levels of income in economies of CA.	9/86-9/
596-0124	Regional Export Mgt. Training	INCAE	6.8 MM	To strengthen INCAE's capabilities in: export management training, assistance to other schools of business/management in region, intersectoral pol. dialogue.	12/85-1
596-0144	Trade and Dev. Corp.		40.00 MM	Possible creation of regional venture capital company to provide medium-term finance and support market access and investment promotion in region.	Propose FY 88
596-0128	Indus. Tech., Quality Ctrl & Productivity	ICAITI	6.00 MM	Will provide firm level assistance in: (1) product quality control and other technical aspects; (2) ID cost-saving opportunity thru improved management and efficiency; (3) access to markets information, training for market segment, pricing, export market technology.	Propose FY 87
596-0147	Regional Industry Expansion	CABEI	50.00 MM	Four components: (1) Agribusiness lending, 15,000; (2) Industry rehabilitation, 15,000; (3) Infr. for Non-Trad. Exp., 14,000; (4) Tech. Assist., 1,000	Propose FY 88

GUATE- MALA #	Title	Implementing Institution	Funding	Purpose	Dates
520-0341	Private Enterprise Development	GOG CAEM	10.00 MM	To strengthen the economic and policy role of private enterprise in Guatemala through (1) Small and Medium Enterprise Technical Support (training, policy dialogue), (2) Export Promotion (Non-Traditional, free trade zones), (3) Financial Market Development (Guaranty Fund).	9/87-9/92
520-0276	Agribusiness Development	BG BANDESA Financieras Gremial	12.50 MM	To provide small farmers with profitable outlets for fruit and vegetable production thru new or expanded agribusiness enterprises in rural areas. Information services, cooperatives assistance and credit.	3/85-3/90
520-0337	PS Development	CAEM FUNTEC FUNDAP	1.50 MM	Institutional strengthening, technical assistance and training.	3/85-3/88

EL SAL- VADOR #	Title	Implementing Institution	Funding	Purpose	Dates
519-0287	Industrial Stabilization & Recovery	FUSADES MICE	ESF - 38.92 MM	To develop private and public sector capacities to provide policy support and TA, technology transfer and training services to Salvadorean exporters of non-traditional products.	FY 86-89
519-0323	Industrial Parks and Infrastruc.		12.00 MM	To increase foreign exchange earnings and jobs; generate income.	FY 88-91 future project
519-0327	Agribusiness Development		30.00 MM	To increase agribusiness investment by providing incentives to foreign and Salvadorean investors	FY 87-91
519-0315	Training for Private Sec- tor Dev.	FEPADE	15.00 MM	To establish the institutional base to assist economic recovery and extend the benefits of growth by strengthening human resources skills which are needed for private sector development.	/87-8/92

COSTA RICA #	Title	Implementing Institution	Funding	Purpose	Dates
515-0186	Costa Rican Coalition for Development	CINDE	9.30 MM	To improve the business climate for export and investment, to promote investment in close coordination with the GOGR, to improve worker productivity, to strengthen institutions.	
575-0223	Agricultural & Industrial Reactivation (AIRR)	BCCR	20.00 MM	To establish a rediscount facility in the Central Bank to finance medium to long-term credit for modernization and expansion of existing industrial and agro-industrial enterprises.	8/86-8/89
515-0176	Private Sector Productivity	BANEX	10.00 MM	1) To establish a credit system making loans at market interest rates to provide export-oriented banking services. 2) To establish a privately operated export management organization (Trading Company).	
515-0204	Private Investment Corporation	PIC	21.00 MM	To establish a viable private investment corporation to provide investment packaging services, medium and long-term credit and equity financing for export oriented investment.	84-8/88
515-0187	Private Sector	COFISA	10.00 MM	To develop private banking oriented toward development and to increase liquidity in the local credit Export Credit market.	82-12/86

BELIZE #	Title	Implementing Institution	Funding	Purpose	Dates
505-0027	Export and Investment Promotion	BCCI BEIPU	2.50 MM	To develop the capacity of the private sector to promote and facilitate investment, export and tourism projects.	86-91
505-0020	Training for Employment & Productivity	BCCI MOE OED	5.00 MM	Provides (1) support to the private sector Belize Institute of Management; (2) training in public administration for GOB agencies key to the promotion of exports, investments and tourism; and (3) establishment of a vocational education division within the Ministry of Education.	85-89
505-0019	Export investment Credit		4.00 MM	Establishment of a new financial institution to meet the credit needs of exporting and other new productive activities.	87-90

HON-DURAS #	Title	Implementing Institution	Funding	Purpose	Dates
522-0207	Export Development & Services	FIDE FEPRO	23.50 MM	To increase non-traditional exports in the agricultural and industrial sectors.	-6/87
522-0241	Agribusiness Investor Support		25.00 MM	Stimulate agribusiness development in secondary cities throughout the country. The three components are: (1) local infrastructure development; (2) Agribusiness Development Centers and (3) financial support fund.	

PANAMA #	Title	Implementing Institution	Funding	Purpose	Dates
525-0239	Investment Council of Panama	ICP	3.975 MM	To develop the operational capacity of the Investment Council of Panama to promote and service new export oriented foreign and domestic investments.	7/83-8/87
525-0261	Private Sector Export Financing	FIDESA	19.30 MM	To generate increased export earnings by substantially increasing private investment in manufacturing and agribusiness industries for exportable goods.	8/86-9/91
525-0258	Private Sector Scholarship Training	IIE COSPAE	2.50 MM	To establish a private Panamanian Organization (COSPAE-Consejo del Sector Privado para la Asistencia Educacional) with broad private sector participation which can identify training needs, select trainees, arrange programs and successfully reincorporate participants into the Panamanian economy. Focus on industrial sector needs (production, quality control, electronics, etc.)	6/84-3/88
525-0272	Productivity Improvement and Product Development	CODEPRO	10.00 MM	Provide TA for the full productivity cycle (production process, quality control, waste management, accounting, general management) including diagnosis of productivity problems at the plant level; create a data base for productivity gains in the agribusiness and manufacturing sectors, and provide productivity seminars.	88-92

Project (FIDE, FEPRO) and in Panama the ICP-Investment Council of Panama and Private Sector Export Financing Project seek to attract equity financing. Most of these programs also have an export promotion component.

Information

Another major constraint faced by industrial and non-traditional agricultural strategies is a lack of information. For the purposes of this report, information is defined to include marketing, production processes, and productivity. Institutional strengthening activities are also included here. Nineteen of the 32 projects listed have information/technical assistance components.

Marketing constraints are addressed by nearly all the bilateral USAID Missions and by ROCAP. In ROCAP, the Non-Traditional Agricultural Exports project and ICAITI aim to provide access to market information and marketing technology at the regional level. CINDE in Costa Rica and FUSADES in El Salvador support offices in the U.S. to develop direct market linkages. In Guatemala, the Agribusiness Development Project and the Private Sector Development Project have marketing components, as does the Export Development Services Project (FIDE, FEPRO) in Honduras.

Inadequacies in both the production process and productivity areas are recognized as hindrances to the development of industrialization or non-traditional agricultural export strategies. Bilateral USAID Missions and ROCAP support several technical assistance projects designed to overcome these problems. ROCAP's Industrial Technology, Quality Control and Productivity Project with ICAITI would provide firm level assistance in product quality control and improved management and efficiency. The Non-Traditional Agricultural Export Support Project provides similar technical assistance in production technology to non-traditional agricultural exporters. One of CINDE's objectives in Costa Rica is to improve worker productivity. In Panama, the Productivity Improvement and Product Development Project will provide technical assistance for the full productivity cycle, diagnose productivity problems at the plant level, create a data base for productivity gains in the agribusiness and manufacturing sectors and provide seminars on productivity.

In addition to providing outside technical assistance USAID Missions seek to strengthen local capacities to analyze and resolve problems. ROCAP and all of the bilateral USAID Missions have Institutional Strengthening/Institutional Development Programs. One of the objectives of ROCAP's CABEI project, for example, is to improve the financial and

administrative capabilities of CABEI. The primary objective of the Export and Investment Promotion Project in Belize is to develop the capacity of the private sector to promote and facilitate investment and exports. Institutional Strengthening is an important thrust of support to CINDE in Costa Rica, FUSADES in El Salvador, CAEM in Guatemala, FIDE and FEPRO in Honduras and ICP in Panama.

Policy/Regulatory Environment

Another very significant constraint to industrial development and non-traditional export strategies is the policy and regulatory environment that discourages, if not handicaps, progress. The SIECA portion of ROCAP's Regional Energy Efficiency Project aims to identify and promote public policy that will provide incentives for efficient energy use, while a portion of its support to INCAE is dedicated to policy studies/policy dialogue. A fundamental objective of CINDE is to work in close coordination with the Government of Costa Rica to improve the export and investment climate. In El Salvador, FUSADES aims to bring together the public and private sectors to develop policy support for the export of non-traditional products. The Guatemalan Private Enterprise Development Project will work through CAEM to promote policy dialogue. Finally, in Honduras, both FIDE and FEPRO have policy dialogue components.

Training

Training forms an important component of industrial development and non-traditional export projects supported by USAID. These programs aim to overcome human resource constraints at both the managerial and technical/skills levels. ROCAP's Regional Export Management Training Project at INCAE supports export management training and the development of this capacity at other business/management schools in the region. Training forms an important component of ROCAP's Fuelwood and Alternative Energy Sources Project as well as its Non-Traditional Agricultural Export Support Project. The Belize Training for Employment and Productivity Project supports the Belize Institute of Management, provides training in public administration for GOB agencies key to the promotion of exports, investment and tourism and assists the vocational education division within the Ministry of Education. In El Salvador, the Training for Private Sector Development Project aims to strengthen human resource skills which are needed for private sector development and FUSADES' efforts also include a training component. The Guatemalan Private Enterprise Development Project will have a major training component directed at small and medium sized enterprises provided by the Asociacion Guatemalteca de Gerentes. Skills training to farmers and cooperatives is

provided through the Agribusiness Development Project and the Private Sector Development Project. Finally, in Panama, the Private Sector Scholarship Training Project will select trainees and arrange programs focussed primarily on industrial sector needs, such as production, quality control, electronics, etc.

V. PROJECT IDEAS

The foregoing analysis of USAID project activities reveals that ROCAP and the bilateral missions have been actively involved in trying to reduce the constraints to industrial growth in Central America. The main areas of focus of USAID project interventions have been credit, export and investment promotion, and technical assistance in training and production processes. In spite of the impressive numbers of USAID activities (and levels of funding) devoted to industrial reactivation, four project ideas which would further contribute to regional economic recovery have been identified: (1) mid-level management/technical training; (2) creation of a Central American Businessman/Government Roundtable; (3) a marketing information clearinghouse; and (4) a technical assistance program for maquila and drawback industries. These project ideas are developed below. In all these project ideas a crucial issue is the institutional capacity of ROCAP supported regional entities to implement the proposed activities. It is recommended that ROCAP include institutional strengthening/development components in any new project designs.

A. Mid-level Management/Technical Training Project

Goal

To foster regional industrial reactivation by improving the technical and managerial training of middle-level managers and supervisors throughout Central America and Panama.

Objectives

1. To meet the need for middle-level technical and managerial personnel in the industrial sector by establishing training programs which are:
 - a) practical and experiential;
 - b) oriented toward specific sub-sectors and products;
 - c) short-term in duration (less than one year); and
 - d) affordable to the middle and lower economic levels of society.
2. To make the training of such relevance and quality that the private sectors of the region will be willing to underwrite an increasing portion of program operating costs, assuming all costs after five years.

Statement of the Problem

In Central America and Panama there are insufficient training resources for the middle levels of management, from technical line supervisors to department chiefs. As the industrial sector reorients itself to production for exports outside the region, middle-level technical/managerial training will be required in a quantity far beyond the current capacity of the region's training resources. Even in Costa Rica, where education and training levels are above those of the rest of the region, middle-level management and technical skills are already in short supply. Throughout the region there is a gap between the level of training provided by the vocational schools on the one hand and the universities and technological institutes on the other.

There is at least one training program in the region, which is aimed in part at middle-level management. It is sponsored by the Asociacion de Gerentes de Guatemala. By pursuing a regional approach to training, the proposed project will have the advantage of economies of scale.

In selecting middle-level supervisors and managers, companies must choose between promoting from within and hiring outside. Promotion from within often results in supervisors who lack adequate academic preparation (especially in subjects like mathematics) to meet the demands of their new jobs. Most Central American companies do not have a well-defined career ladder, with in-service training facilities that prepare people to move up in the organization. In many older companies, there is an attitude that discourages such training, out of fear that workers who receive additional training will leave the companies for better jobs elsewhere. In younger companies, of which there are many in the export sector, in-service training systems leading to promotion from within have not yet been established.

Hiring middle-level supervisors and managers from outside the company is often not a satisfactory alternative. The available candidates with the requisite technical and supervisory skills would usually be graduates of universities or technological institutes in Central America or abroad. They would be expensive (having completed long and expensive training programs and being in great demand), and would probably not have the practical, "hands-on" experience that would enable them to supervise most effectively.

Technical skills which are in short supply at the middle-level include the following: quality control, marketing, maintenance, micro-electronics, and computer technology. Middle-level managerial areas in short supply include accounting, budgeting, inventory control, receivables management, and personnel management.

How the Project Would Work

This project embraces both technical and managerial training at the regional level. ROCAP is already heavily involved with two regional institutions -- ICAITI and INCAE -- that carry out training in these areas. INCAE's principal focus is on managerial training for top management. ICAITI has carried out numerous technical training activities, although training is not its principal focus. The two institutions have worked together successfully -- e.g., the training programs for industrial energy audits. This project idea seems to be another opportunity where the two organizations could collaborate as joint sponsors. A Cooperative Agreement would have to be negotiated between the two institutions covering such questions as: responsibility for overall project direction, institutional contributions of staff, equipment, materials, etc. ICAITI would take primary responsibility for technical training, and INCAE for managerial training. Responsibility for training where the two areas intersect (e.g., maintenance management) would be a subject of negotiation.

It is unlikely that either INCAE or ICAITI has the necessary resources available such as buildings, equipment, and materials. Thus, some financial assistance will be needed for capital items as well as a subsidy for the project's initial operating costs.

The project should become gradually self-sufficient over a five-year period. Initially, about one half of the on-going costs of professional and administrative salaries, materials, maintenance, utilities, equipment replacement, amortization, etc. (increasing to 100% over a five-year period) could be covered by student tuitions and by fees charged to companies whose employees receive training. Student scholarships would be available based on need.

The training center should be located in either Guatemala or Costa Rica because of (1) ease of air access to countries where the greatest training need is anticipated (Honduras, Guatemala, El Salvador and Belize); and (2) ease of access to ICAITI and INCAE.

Since the needs may vary significantly from country to country, the project would begin by assessing the need in each. The Needs Assessment, which should be updated annually, would derive information from representatives of industry, workers' organizations, governments, and training institutions. It would identify training requirements by industrial sub-sector and would focus on gaps in skill that cannot be filled by existing training institutions. It would also address the question of the willingness of employers to send employees to a regional training center for several months and paying a fee for their training. The assessment could also determine the feasibility of conducting some of the training "in-house" with project instructors sent to the plants themselves.

Depending in part upon the training needs as identified in the Needs Assessment, it may be necessary to bring in short-term trainers from outside the region to train some or all of the project's instructors. It is not anticipated that extra-regional trainers will be needed for classroom training.

The curriculum would be designed by the center's professional staff. It would embrace both technical (maintenance, quality control, computer technology, etc.) and managerial (accounting, inventory control, receivables management, etc.) subjects at the middle level. It should also include areas where the managerial and the technical intersect -- e.g., quality control managers, maintenance managers, and plant supervisors. The courses should be sub-sector-specific -- e.g., quality control for pharmaceutical companies. They should be intensive and short (maximum one year, minimum one month).

Training methodology should stress practical, "hands-on" experience. Internships with industries near the training center may perhaps be arranged, so that trainees could "learn by doing", as a complement to their classroom instruction.

Trainee recruitment and selection may be carried out through the Chambers of Industry. The Chambers would have to devote some or all of the time of at least one employee to carrying out these functions.

Evaluations of the training would be held at the end of each program and six months thereafter -- the latter, to ascertain to what extent the trainee is applying the training on the job. At both intervals, discussions would be held with the trainees regarding the need for, and possibility of, follow-up training.

Issues

- Would both INCAE and ICAITI be willing to undertake this responsibility?
- Would ICAITI be able to restructure itself to carry out such a large, on-going training program?
- To what extent is it realistic to expect the training project to become self-sustaining over a five-year period? How could this be accomplished?
- The issue of land and buildings for the training center would have to be resolved. An existing facility would be sought, to avoid building costs. The Government of the country where the center is to be located would be asked to donate the land (and the buildings, if they already exist), in recognition of the benefit that the nation would derive from having the center located its country.
- The project is designed for the needs of private sector employees. Should consideration be given to including public sector training in the project?

B. Central American Businessmen/Government Roundtables

Goal

Bring private sector and government decision-makers together to resolve promptly on a case-by-case basis any problems constraining intra-regional trade.

Objectives

Reactivate intra-regional trade to revitalize industrial production idled by the collapse of the CACM.

Statement of Problem

Protected by an outside tariff barrier and free trading opportunities within the CACM, many industries have been created to serve an undemanding regional market with goods produced in volumes greater than required for domestic consumption. These industries flourished and created significant employment until 1980 when the CACM started unraveling. The collapse of intra-regional trade resulted in loss of jobs and idle industrial capacity. The slack has been absorbed only to a limited degree by exports outside the region because most industries are and may never become competitive in the more sophisticated extra-regional markets. Many of the current obstacles to regional trade are

artificial barriers created not only in response to political and economic conditions but also as a result of faulty perceptions of national interests and, sometimes, self-interests of minor government officials. It is believed that some of these barriers could be removed easily through the personal and cooperative effort of all parties involved.

How Project Might Work

Organize quarterly meetings between Central American businessmen interested in developing regional business opportunities and appropriate government officials capable of resolving obstacles to contemplated trade transactions. Participants should be decision-makers. Private sector participants would include businessmen interested in transacting businesses for themselves as well as businessmen representing chambers or associations. Government officials would include decision-making level officials of Ministries of Industry, Commerce and Economy as well as of Central Banks. SIECA in cooperation with the various Chambers of Industry and Commerce could assume responsibility for organizing the meetings, establishing agendas, disseminating information on agreements reached, monitoring of implementation and solving bottlenecks.

At least one separate round table meeting per year would be organized for each major industrial sub-sector or groups of related sub-sectors (i.e., food industry, textile industry, basic industry, etc.) The agenda would cover the following topics:

- a. Business negotiations among private and/or public sector executives:
 1. Normal business deals: products offered or solicited, availability, quality, delivery, terms of sale.
 2. Bi-lateral and multi-lateral barter deals.
 3. Across border sub-contract or component manufacturing deals.
 4. Joint bidding on extra-regional exports when demand exceeds production capabilities of single country/enterprise.

The private sector can be very creative, discover opportunities and find solutions which may escape bureaucratic minds. Joint meetings and dialogues among all parties involved would bring a better understanding and appreciation of the problems leading to solutions and attitudinal changes.

- b. Resolution of problems through cooperative efforts of business executives and government officials.
 1. Review obstacles and artificial barriers which prevent completion of deals agreed during business negotiations.
 2. Resolve on-the-spot minor obstacles (i.e., unnecessary red tape, border crossing delays, etc.) and transfer major problems to the policy discussion topic on the agenda.
- c. Policy discussions at a regional level between private sector and government officials.
 1. Discuss government policies that constrain regional trade (i.e., multiple exchange rates, tariff and non-tariff barriers, credits, liquidation of payments, acceptance of dumping by extra-regional suppliers offering favorable credit terms, etc.
 2. Negotiate solution of problems.
- d. Regional economic planning.
 1. Industrial rationalization.
 2. Counter-trade.

The expected benefits from round table meetings would include:

- Completion of business transactions which otherwise might not have materialized.
- Demonstration to government officials how trade can be stimulated through removal of petty obstacles, a learning process for government officials.
- Revitalization and increase of regional trade.
- Revitalization of the industrial sector.
- Removal of some constraints to intra-regional trade.

- Accelerate the process of finding solutions to problems, imparting a sense of urgency to solve rather than create problems.

Issues

The project encompasses the entire region and would fall well within ROCAP's mandate. Both, SIECA and ADL have proposed somewhat similar ideas. Coincidentally, both proponents estimate the cost of their projects at \$1.5 million. No budgetary details were provided in their proposals. While the idea undoubtedly merits ROCAP's moral support, it is less clear whether it should be funded by ROCAP. The cost is insignificant in context with U.S. Government economic support to region. For the same reason, it might be argued that the beneficiary governments and private sector entities should be sufficiently interested and committed to provide the necessary funding for it.

SIECA has the necessary infrastructure in place to organize and conduct the roundtables. It has a capable staff which could assume responsibility for follow-ups, implementation of agreements reached at the meetings, developing data banks for a permanent industrial and trade information service, and researching policy issues. Private sector organizations such as FEDEPRICAP and national chambers of industry and commerce would be expected to cooperate with SIECA to assure the success of this endeavor.

C. Marketing Information Project

Goal

To increase Central America's exports to countries outside the region, thereby increasing foreign exchange earnings and domestic employment.

Objective

1. To increase extra-regional exports by providing accurate and timely information to exporters about markets outside the region.
2. To increase regional exports by providing accurate and timely information to importers about regional exports.

Statement of the Problem

Frequently Central American non-traditional exporters have had to send their products to the United States with incomplete market information. Horror stories exist regarding exporters who lost heavily when USDA in Miami refused to allow their perishable produce already in Miami, entry into the U.S. It does not take many such incidents to put a "chilling effect" on the potential non-traditional exports from Central America to third markets that international development agencies and the Central American countries are trying to stimulate.

To make intelligent export decisions, Central American producers need accurate and timely information on a wide variety of topics concerning foreign markets. These include: quality standards; trade documentation requirements; other formal and informal rules of commerce; administrative decisions that can cause such rules to change rapidly; transportation channels and costs; and the competition. Without complete, up-to-date information in each of these areas, Central American potential exporters often find the risks of exporting too high.

Governmental and international attempts to help exporters with these problems have met with mixed success. GUATEXPRO in Guatemala has been successful in helping Guatemalan exporters identify market opportunities. On the other hand, CENPRO in Costa Rica has been less successful than was hoped in promoting exports. CINDE, a private, USAID-financed institution in Costa Rica, has been successful in promoting export-related foreign investment, and is now turning to a program of export promotion through technical assistance to industries with the greatest non-traditional export potential; the results of the latter effort are not yet in. Coordination between CINDE and CENPRO is said to be ineffective.

FIDE and FEPROEXAAH in Honduras have been actively involved in promoting non-traditional exports, but with only limited success. In general terms, export promotion strategies have been very cost ineffective, in large part due to the large technical assistance, information, and marketing expenses relative to the size of the potential exporters in given countries.

How the Project Would Work

The project would be ROCAP-funded, with support from each of the USAID bilateral missions in the region. In return for this support, the project would be expected to coordinate its country-specific efforts with the respective bilateral USAID Missions.

FEDEPRICAP, a regional organization focussing primarily on trade and investment policy and promotion, would be asked to administer the project. Through its offices in each country, it would coordinate its market information-sharing activities with local Chambers of Industry and producer associations. It would also encourage market information-sharing among exporters and potential exporters by facilitating exporter's consorcios, export seminars, etc.

A Needs Assessment would be carried out in each country to determine general and country-specific needs. This would be done by means of questionnaires and/or interviews with exporters, potential exporters, Chambers of Industry, producer associations, exporter groups, and government and private agencies concerned with export promotion.

The objectives of the project are information-sharing in nature. The information about foreign markets which could be made available would include: standards of quality; trade documentation requirements; other formal and informal commercial rules; administrative processes affecting such rules; transportation information; and the nature of the competition.

The best means of sharing information is through direct, personal contact with the sources of the information. One way to facilitate this direct contact is to send exporters to the countries to which they hope to export, giving them the opportunity to make direct contact with importers and bankers. This could be done through project-sponsored export seminars in Miami or Asia. Where such contacts have been made in the past, trade has usually been stimulated. Alternatively, a contractor might be hired to promote regional exports in Asia or Europe.

A more economical approach would be to transmit the necessary information to the exporters in Central America. Information that does not change rapidly could be distributed through bulletins and seminars. Rapidly changing information, on the other hand, would have to be handled by telex to local-level producer associations where it would be available for exporters to consult. A computerized data bank of relevant information would be used to enhance this effort.

Foreign market information should be combined with information to potential exporters concerning sources of financing for their operations. Without new financing, many exporters will be unable to develop their export potential.

The project should operate in both directions, in that information regarding Central American exports should also be made available to importers in the United States and Western Europe. A computerized data bank of relevant information regarding Central America and its exports would be established. This would include information on the region's natural resources and geography; agricultural and manufactured products and their price variations and quantities; names of producers, processors, exporters and other organizations related to importing from Central America; freight costs; and credit information. This would be updated frequently and made available to potential importers in the U.S., Europe, and Asia.

Consideration should be given to opening project offices in a few key cities in the U.S. and Europe to facilitate the exchange of information in both directions. Alternatively, and probably less effectively, commercial trading companies could be relied upon as information channels.

Issues

- Is FEDEPRICAP the appropriate regional institution to carry out this project?
- To what extent is the experience of the Chemonics non-traditional agricultural export project relevant to this project?
- To what extent would existing export promotion institutions (many USAID created and funded bilaterally) be willing to cooperate with a regional market information project?
- Can marketing information be distributed in a way that does not jeopardize already established trading relationships between individual exporters and importers, and that does not stimulate counterproductive competition between Central American producers for the same piece of the international market?
- Might the project later embrace the area of export-related investment promotion through mechanisms like joint ventures and subcontracts, which should include information on Central American labor markets, investment codes, taxes, earnings repatriation regulations, etc?

D. Regional Technical Assistance Program for Maquila and Drawback Industries

Goal

To increase non-traditional exports and generate employment.

Objective

To accelerate the development of the maquila and drawback industries in Central America through the creation of a regional technical assistance center for maquila and drawback industries.

Statement of the Problem

High labor costs in developed countries and competitive pressures have forced manufacturers and distributors of labor-intensive products to seek locations where such products can be assembled at lower cost. Central America, faced with high unemployment aggravated by the contraction of the CACM, offers an abundance of low-cost, trainable labor. However, this human resource alone is not sufficient to attract maquila and drawback business to the region, even when coupled with an adequate business infrastructure, fiscal incentives and closeness to the vast U.S. market. The business is highly competitive and easily transferable from country to country. In fact, it could be regarded as a commodity which will move where it is offered the best prices, quality and service. Prices depend not only on low labor costs but equally as much on productivity. Production efficiencies and quality in turn are a function of adequate training, not only of labor but also of supervisory and management personnel. Technical assistance needed to achieve productivity and quality goals are identical in the five Central American countries. A common language and geographical closeness would make it possible to achieve economies of scale in establishing one Regional Technical Center to serve the needs of the five countries and Panama.

How the Project Might be Achieved

Costa Rica might be chosen as the location for the Regional Technical Assistance Center because it has the most developed maquila and drawback industry in the region and, therefore, offers the best infrastructure for the Center's activities. The Center's technical assistance activities may be limited initially to assembly of apparel, and may gradually expand to cover electronic and other assembly industries, after gaining some experience. Services to be provided by the Center would include:

- Technical data bank covering worldwide information on items such as productivity statistics, production standards, comparative costs, etc.
- Advice on plant layouts, product design, material flow, quality standards, systems, procedures.
- Technical, management and quality audits.
- Dissemination of technical advances.
- Trouble shooting and problem solving.
- Training of operators, supervisors, mechanics, quality control personnel, cost accountants, and management.
- Market information, export statistics.

The Center should be managed by a board composed of members representing private sector interests of both the Maquila operators in Central America and buyers abroad. Such a board would assure that the Center's activities serve real needs in a practical manner which would show immediate results. Equally important, a significant portion of the Center's budget should be covered by the beneficiaries of the Center's activities.

Operation of the Center should be entrusted to a team of experts who most likely would be expatriates. The initial team would be comprised of experts in the clothing industry preferably with experience in maquila operations. The team would include specialists in management, cost accounting, marketing production and quality control. The leader could be either the management or marketing specialist and it may be possible to combine both functions. His/her assignment would be for a four-year period, the production engineer would be hired for three years and other members for two years. In addition to their normal duties, expatriates would be responsible for training their successors selected among Central American nationals.

The Center's operating expenses should be financed partly through a user's fee composed of two parts. Part 1 would be a general "membership fee" which would provide access to the services of the Center and would be based on the member's volume of business (percentage on sales). Part 2 would be a fee for actual services rendered such as participation in training courses, technical visits by extension specialists, etc.

Issues

- Should the proposed center be located within ICAITI (with a restructured board to permit private sector participation) or is the creation of a new entity required?
- What are the precise technical assistance needs of existing and proposed maquila and drawback industries?
- What would be the fee structure and funding sources for the proposed center?

VI. SUMMARY AND ANALYSIS OF THE SIECA, CABEI, ICAITI PROPOSAL TO REACTIVATE INDUSTRIAL PRODUCTION

A survey of 280 industrial enterprises operating in the five Central American countries (Guatemala, El Salvador, Honduras, Nicaragua and Costa Rica) was conducted jointly by three Central American regional institutions, SIECA, CABEI and ICAITI, over an 18-months period during 1986 and 1987. A draft report dated August 13, 1987, entitled "Propuesta para reactivar la produccion industrial y el intercambio de bienes complementarios en la region Centroamericana" (Proposal for industrial reactivation and exchange of complementary goods among Central American nations) was reviewed for any guidance it might provide to ROCAP for the preparation of its Country Development Strategy Statement (CDSS). The final report has not been released by SIECA at the time of this writing. In addition to reviewing the document, personal interviews were conducted with Raul Sierra Franco, Gilberto Rodriguez Valdez, Laura Quintero de Aguilera and Carlos Federico Cardenas (Secretary General, Assistant Secretary General, Industry Department Director and Assistant Industry Department Director, respectively of SIECA), Oscar Gil (Technology Department of ICAITI) and Leonel Preza Quezada (Chief Productive Sectors Promotion and Studies Department of CABEI).

A summary, evaluation and comments on the above draft report follows:

1. Survey Parameters

The survey included only what SIECA calls "complementary" industries in the categories of food, textiles and clothing, medicines, agricultural inputs, industrial raw materials, packaging materials and finished goods. The term "complementary" is a misnomer used by SIECA to refer to all raw materials, semi-finished and finished goods produced in one Central American country and sold in another Central American country. Factories producing such goods have also been referred to as "strategic" industries in verbal conversations with the document's authors.

The industrial categories chosen for this survey represent what SIECA considered the 83 most important NAUCA I (customs) classifications. Only industries which currently, or at one time, have exported at least \$1,000,000 of goods (except Honduras for which the minimum was set at \$500,000) to countries within or outside Central America were included.

Industries producing for their respective domestic markets were not covered by the survey. The survey was conducted through personal and follow-up visits by teams composed of representatives of SIECA, CABEI and ICAITI. The 280 valid responses represent 58 percent of the intra-regional commerce.

The questionnaire utilized for the survey had some shortcomings. It did not cover such important items as:

- Ownership of equity capital, i.e., private, state, foreign, domestic, other Central American origin
- Capitalization, i.e., debt/equity ratio, loan terms, credit institutions, credit terms, fixed and total capital employed
- Sales volume in monetary units
- Production volume in units produced

In spite of these shortcomings, the survey provided some useful data including employment figures which may permit preliminary ranking of companies by size.

2. Information Developed by Survey

The principal regional export industries of the five countries were:

GUATEMALA:	Food, chemicals, basic metals, and non-metallic minerals
EL SALVADOR:	Textile and clothing, paper and paper products, other manufactured items and non-metallic minerals
HONDURAS:	Wood products
COSTA RICA:	Leather, shoes, metal products, machinery and equipment
NICARAGUA:	Food, basic metals, metal products, machinery and equipment

In spite of the contraction of CACM, 68 percent of the industrial enterprises surveyed continue exporting within the region. Although 52 percent of the companies suffered a significant reduction in exports, some increased their regional sales last year because of improved sales promotion, sales strategies, marketing, pricing policies and more aggressive sales practices.

It was noted that about 10 percent of the industries studied enjoyed more than a 50 percent share of the intra-regional market. Approximately 72 percent of the regional exporters were large enterprises with over 100 employees.

Principal problems concerning raw materials supply were related to foreign exchange and Central Bank red tape in the case of imported inputs, and inadequacy of supply in the case of domestic and regional inputs.

The highway system is of great importance to CACM as 95 percent of the intra-regional shipments move over land. The lack of 24-hour service at border crossings causes delays, loss of perishables and additional costs because of discretionary fees charged by custom officials working outside their normal hours. Rerouting of shipments to avoid unsafe highways in El Salvador also increases the cost of regional trade.

The survey identified major constraints affecting regional trade. The constraints are listed below in order of frequency with which they were mentioned by the companies covered in this survey: payment problems, types of exchange rate, bureaucratic red tape, border closings, exchange controls, unfair competition, political situation, protective measures, and contraction of demand.

Over one half of Central American industrial plants were set up in the 1950s and 1960s, and close to one third, in the 1970s. About 39 percent of the equipment is of 1950-1969 vintage and 45 percent was built in the 1970s.

Almost all industrial enterprises apply some kind of in-house quality control. Nevertheless, occasionally a company can be found, as for instance a Guatemalan vegetable and animal fats and oil plant, which does not use any quality control procedure whatsoever.

Idle production capacity was determined by the survey according to type of product in either tonnage (example: cement), meters (example: textiles) or units produced (example: plastic articles). Capacity to increase production was reported primarily in textiles (79%), cement, lime and gypsum (32%), plastic articles (n/a %) and

fertilizers and pesticides (15%). Industrial segments most capable of increasing their production to satisfy Central American demand were listed as follows:

- GUATEMALA: Food, textiles and clothing, chemicals, pharmaceuticals, cosmetics, metal workshops.
- EL SALVADOR: Textiles and clothing, paper and cardboard, cement, metal workshops, electric instruments.
- HONDURAS: Textiles and clothing, wood, chemicals.
- COSTA RICA: Pharmaceuticals, food, textiles, leather and furs, chemicals, machinery and electric tools.
- NICARAGUA: Chemicals

The survey indicated that 68 percent of the industrial enterprises required technical assistance for their initial start-up. Those which did not require technical assistance either utilized unsophisticated technology or had in-house capabilities.

The following technical assistance needs were identified:

Industrial Segment	Technical Assistance Required
General	Development of new products; plant layout and process design
Food	Better utilization of local raw materials; waste utilization
Clothing	Productivity improvement; evaluation of manufacturing process
Paper and Cardboard	Raw material development
Pharmaceuticals	Quality control
Rubber products	Marketing
Metal workshops	Factory installation

The need for technical improvements has not received the attention in Central America that it receives in industrially more advanced countries because executives as well as governments are faced with more pressing problems.

BUSINESS' REPORTS - REASONS FOR DECREASE IN SALES

(SIECA Survey of 280 Central American Businesses)

Cause	GU	ES	HO	NI	CR	TOTAL
Payment problems	19	13	0	0	17	49
Exchange rates	9	17	2	1	5	34
Bureaucratic red tape (central bank)	11	8	1	0	6	26
Border closings	12	2	2	0	8	24
Competition	3	10	0	2	5	20
Political problems	4	6	0	0	10	20
Foreign exchange control	10	8	0	1	4	15
Restrictions on free trade (protectionist measures)	5	8	0	1	1	15
Reduced demand	6	5	2	1	1	15
Closing of NI market	3	1	0	0	4	8
Warehousing problems	3	3	0	0	1	7
Uncertainty about market	2	2	1	0	1	6
Shortage of primary materials	0	0	0	6	0	6
Red tape at customs	3	2	0	0	0	5
Preferences for Third Country imports	1	1	0	1	0	3
Reduced supply	0	0	0	2	0	2
Sanitation barrers	2	0	0	0	0	2
Partial agreements	1	1	0	0	0	2
Contraband	0	1	0	0	1	2
Increased production costs	1	1	0	0	0	2
Lack of credit	0	1	0	0	1	2
Lack of communication between private and public sectors	1	0	0	0	0	1
Unilateral exchange measures	1	0	0	0	0	1

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CENTRAL AMERICA: BUSINESSES REPORTING INCREASED
SALES AND PRINCIPAL CAUSE

Cause	GU	ES	HO	NI	CR	TOTAL
Product promotion	11	1	0	2	2	16
Increased demand	2	3	1	0	2	8
Popular product	2	0	0	0	1	3
New market	1	1	1	0	0	3
Bilateral treaties	0	1	1	0	0	2
Competence	0	0	0	1	1	2
Reduced supply	2	0	0	0	0	2
Central Bank bureaucratic process	1	0	0	0	0	1
Warehousing problems	1	0	0	0	0	1
Closing of borders	1	0	0	0	0	1
Payment problems	0	0	0	0	1	1
Market uncertainty	1	0	0	0	0	1

SOURCE. SIECA, op. cit., August 1987.

Industrial development in the region was generally achieved through the acquisition of "packaged technology" which included equipment, installation and operating instructions. Inasmuch as such packages were developed for conditions prevailing in more advanced economies, their importation does not always fit local conditions, particularly with respect to raw materials and manpower requirements. The report attributes the lack of basic industries and the predominance of assembly industries in Central America to the importation of packaged technology. It further suggests that a so-called "intermediate technology" be developed locally to utilize more labor-intensive rather than capital-intensive processes. A rather shortsided and politically biased opinion was expressed in the SIECA proposal. It stated that transfer of foreign technology, while highly beneficial to productivity and competitiveness gains, was not necessarily desirable from a social or national point of view. Consequently, a long-term program was advocated to stimulate the development of Central America's own local technology basis. It was recognized that a certain amount of equipment and technology must be imported. But to assure that such dependence is minimized and favorable social economic effects are achieved, it was suggested that human resources capable of distinguishing between what can be made locally and what must be imported be developed.

Extra-regional exports were primarily shipped to Panama (25%), USA (23%) and the Caribbean (19%). Shipments to Panama included processed foods, textiles, plastics, paper, chemicals, galvanized sheets, plumbing and electrical supplies, and bottle closures.

Exports to the United States were comprised primarily of canned vegetables, meat products, bone meal and dried soups; also textiles, clothing, skins, leather shoes, wood panels, broom sticks, natural rubber sheets, polyester fiber, chemicals, sanitary ceramics, glass containers and decorated glasses. The Caribbean received medicines, paper, plastics, electrical supplies, insecticides and pesticides, synthetic materials, tires and tubes, and breakfast cereals.

About 45 percent of the companies exporting outside Central America were established in the 1960s. Three fifth are large companies with 100 or more employees and one third of them enjoy a 70 to 100 percent share of the local market. It was interesting to note that 77 percent of extra-regional exporters manufacture their products under license from a foreign company. This demonstrates the importance of foreign

technology to the regional economy in spite of the opinion expressed in the report that transfer of foreign technology is not necessarily in the best interest of social and national goals.

3. Proposed Program

On the basis of the information obtained from the survey of 280 industrial enterprises, SIECA, CABEI and ICAITI have jointly proposed a program designed to revitalize industrial production and trade within Central America. The proposal has three components or sub-programs covering respectively the areas of finance, technical assistance and trade.

The financial sub-program recognizes the need for an infusion of new capital to rehabilitate, expand and initiate new projects within existing industrial concerns. The 280 enterprises surveyed representing 58 percent of some but not all segments of the so-called "complementary" industries, reported a need of \$120 million of fresh capital for the above-mentioned purposes. From this figure, SIECA projected the capital requirements of all companies producing for the Central American market to total more than \$250 million. Not included in this amount are the capital needs of companies producing exclusively for their domestic market.

The financial sub-program covers only the \$120 million capital requirements identified by the survey and constitutes an important part of a larger industrial reactivation project currently being developed by CABEI. The proposed distribution is shown in the following table:

(\$000)					
Country	Expansion Projects	Rehabilita- tion Projects	New Projects	Total	%

Guatemala	24,559	7,070	16,202	47,831	40.0
El Salvador	12,570	1,199	3,602	17,371	14.4
Honduras	3,761	---	2,125	5,886	5.0
Nicaragua	11,490	3,698	12,609	27,747	23.3
Costa Rica	20,981	---	160	21,141	17.3
TOTAL	73,361	11,967	34,698	120,026	
%	61.2	10.0	28.8		100.0

Funding would be provided by local banks (63%), suppliers' credits (23%) and investors' contributions (14%). Applications would be primarily for equipment (52%), working capital (26%) and buildings (16%). As the only regional development and credit institution in Central America, CABEI expects to become the channel for multi- and bi-lateral credits for this sub-program.

The technical assistance sub-program has both short-term and medium-term goals. Short-term goals aim at improving the productivity, competitiveness, modernization and product quality of the industrial sector. Action plans to accomplish these aims are not well defined. Medium-term goals propose to develop an "intermediate" technology which, being neither too rudimentary nor too advanced, would be more appropriate for conditions encountered in Central America. The technology would be developed through research projects undertaken by ICAITI and sponsored and largely financed by groups of enterprises with similar needs. The cost of this sub-program was estimated at \$5 million over a four-year period.

The trade sub-program intends to revitalize enterprises to save jobs and capital investments by reestablishing some reasonably normal conditions for trade in the common market with the hope of regaining previous trade levels. It plans to accomplish the above objective through periodic round table meetings between business executives of the private and public sectors with government and Central Bank officials responsible for the economic integration of Central America. Direct contacts between individuals attending round tables are expected to produce business transactions through exchange of supply and demand information and access to government officials able to resolve bottlenecks. The sub-program will also establish a network of information on industrial enterprises and sector statistics to assist trade negotiations. Additionally, governments are urged to revoke policies that constrain free trade of goods which businessmen are ready to negotiate, and also to institute some type of mechanism to assure payment of business transactions negotiated at the round table.

4. Comments

This proposal to reactivate the Central American industrial sector is seriously flawed in terms of both analysis and recommendations. It does not contain a serious analysis of the causes of the collapse of the CACM, of the current factors which impede intra-regional trade, or of the financial, technical, and policy changes which would be required. General criticisms of the proposal include:

- If enacted, the proposal would contribute to the maintenance of unequal development in the region, in spite of its integrationist objectives.
- In establishing the financial requirements of regional industries, no inventory of existing credit lines was undertaken.
- It establishes a financial program for industries which export primarily to the CACM, and not for international markets.
- The reactivation of the industrial sector is predicated upon the regional market, and does not consider or develop an export strategy for international markets.
- It lacks a cost/benefit analysis of what this proposal would generate in terms of GDP, employment, and export earnings.
- It rests upon the reactivation of the Central American Clearing House and the use of the DICA, neither of which is viable in the short term.

The trade sub-program suggested in SIECA's proposal has considerable merit and would be worth trying. The cost is minimal and the results may well justify the expense. If nothing else, it will surface the real problems affecting regional trade.

The proposed technical assistance program has short-term goals which are not well defined and long-term goals which are unrealistic. While it is true that imported foreign technology must be modified to be applicable and serve the needs of a developing economy, it would be too costly to reinvent the wheel rather than buy it. Furthermore, it is unrealistic to assume that competitors will join forces to jointly develop the proposed intermediate technology. It must also be recognized that industrial know-how is not static but evolves constantly. It is an accumulation of small improvements developed daily. It is the result of

practical experience developed in an operating environment which a research institute without access to industrial operations may find difficult to duplicate.

APPENDIX I
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APPENDIX II
INDIVIDUALS INTERVIEWED

INDIVIDUALS INTERVIEWED

Guatemala

Carlos F. Poza	-	Commercial Attache, US Embassy
Larry Thomson	-	Economic Counsellor, US Embassy
Raul Sierra Franco	-	Secretary General, SIECA
Gilberto Rodriguez Valdes	-	Deputy Secretary General, SIECA
Laura Quinteros de Aguilera	-	Director Industrial Dept., SIECA
Carlos Federico Cardenas	-	Assistant Director Industrial Dept., SIECA
W. Ludwig Ingram	-	Director, ICAITI
Keith L. Kline	-	Consultant, ICAITI
Elias C. Hill	-	Program Coordinator, ROCAP/ICAITI
Thomas W. Mooney	-	President, LAAD de Centroamerica, S.A.
Luis Fernaudo Leal	-	President of IMSA and SINUSA
J. Carmelo Torrebiarte	-	Manager of Empresas Torrebiarte (Manufacture of Calzados Coban)
Javier Tessari	-	Director of Agropecuaria Balmoral
Juan Luis Bosch	-	President, Chamber of Industry
Guillermo Rodriguez	-	Export Coordinator, CAEM
Fanny de Estrada	-	Manager, Association of Non-traditional Products Exporters

Ricardo Santa Cruz	-	Assistant Technical Mgr., Non-traditional Products Exporters
Daniilo Cruz	-	Director Industrial Policies, Ministry of Economy
Juan Antonio Giron	-	Director Statistical Section, Ministry of Economy
Oscar Gil	-	ICAITI
Edgar Castillo	-	President of Cerveceria Centroamericana, S.A.
Rodolfo Pais	-	Minister of Finance
Rafael Escobar	-	President, BANVI
Felipe Mantiega	-	USAID/Guatemala
Robert H. Bellefeuille	-	Inter-American Development Bank, Guatemala
Hugo Rios	-	Inter-American Development Bank, Guatemala
Enrique Tarud	-	Inter-American Development Bank, Guatemala
Nicola Bertolini	-	United Nations International Development Office
<u>Costa Rica</u>		
Gustavo Gutierrez Castro	-	Executive Director, Chamber of Industry
Javier Rodriguez A.	-	Productivity Specialist, Chamber of Industry
Eduardo Villafrana	-	Grupa Zeta
Enrique Denegri	-	Production Manager, Manufacturera de Cartago

John McMahon	-	ROCAP
Noel Vidaurre	-	ROCAP/INCAE
Noel Ramirez	-	INCAE
Lionel Rodriguez	-	INCAE
Jose Nicolas Marin	-	INCAE
Neil Billig	-	USAID
Vinze Sunmack	-	USAID
Rodrigo G. Barohona Israel	-	Vice Minister, Foreign Trade
Alvaro Soto Mora	-	Director General Ministry of Economy, Industry, and Commerce
Mario Alberto Mora	-	National Training Institute (INA)
Gonzalo Perez Perez	-	National Training Institute (INA)
Carlos Aguilar	-	CINDE
Tony Shiels	-	CINDE
Clara Zomer	-	CINDE
Carlos Torres	-	Consultant
 <u>Honduras</u>		
Mary Likar	-	USAID
Ramon Medina	-	FIDE
Jorge Gomez Andino	-	COHEP
Richard Zabala		
Dr. Juan J. Buttari	-	Economic Advisor, USAID
Dr. Wesley D. Boles	-	Private Sector Advisor, USAID

Hilario Hooker	- Senior Agribusiness Specialist, Chemonics-Regional Economic Reactivation Project, CABEI
John W. Varley	- Robert N. Nathan Associates Inc. - Chief of Party or Team Leader, Technical Group, ROCAP Project, CABEI
Leonel E. Preza Q.	- Division Chief - Public Relations & Productive Sector Studies, CABEI
Jorge Papadopollo	- Financial Manager, CABEI
Mario Perdomo	- Director, C.A. Economic Integration - Ministry of Economy
Isidro Rodriguez	- Vice President, BANCAHSA
Rene Morales	- President - Food Processing Industries of Honduras, S.A. (INAHLSA)
Don Richardson	- ROCAP Officer, CABEI
Robert Abusada	- Consultant to Central Bank of Honduras
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Hugh Schwartz	- Inter-American Development Bank
Roberto Lopez Porras	- Inter-American Development Bank
Federico Sanz	- Inter-American Development Bank
John Loraas	- USAID/Washington/ROCAP
Karen Freeman	- USAID/Washington/ROCAP
Clarence Zurekas	- USAID/Washington/Development Planning