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MEMORANDUM

TO: AID/W
USAID/Guatemala
USAID/San Salvador
USAID/Managua
USAID/San Jose
USAID/Tegucigalpa

FROM: ROCAP/Guatemala

SUBJECT: Study on Comparative Advantage of the Central American Region in Relation to the Rest of the World in the Areas of Manufacturing and Agro-Industrial Production

I. INTRODUCTION

In December of 1982, ROCAP contracted with ECOAGRO, a well-known private consulting firm in Guatemala, to undertake a study whose primary purpose was to identify manufacturing and agrobusiness industries that may have a comparative advantage in Central America in relation to the rest of the world. The study was to be based on an in-depth analysis of a carefully selected sample of firms operating in each of the five CACM countries in areas where the region is suspected to have a comparative advantage, as indicated by exports to outside the

region and their growth over time, favorable profit margins, labor intensity, use of domestic materials, extent of capacity utilization, and other factors thought relevant by the consultant. This study ties in closely with the CDSS submitted by ROCAP and the other CA AID Missions, all of which stress the need for the region to diversify and expand its exports to the world market. A major purpose of the study was to serve as a starting point for a proposed ROCAP-financed technical assistance program that would be directed at the most promising potential export sectors and firms to help them overcome technical problems and obstacles relating to the expansion of production and marketing of their products outside the CACM.

A second objective of the study was to describe the major problems and obstacles to increased production and exports identified by the management of the interviewed firms in the countries of the region and to present a set of proposed recommendations to deal with these obstacles. The analysis was to reflect both the views of the interviewees and the conclusions of the consultant.

The study was completed in March of 1983. A copy of the report is attached.

II. METHODOLOGY

The study was based on in-depth interviews with 94 enterprises (an average of 19 per country), spread among all

five CACM countries. The interviews were conducted by three senior professionals, including the head of the consulting firm. The questionnaire was very detailed (9 pages) and, in most cases, more than one visit was required. In addition, a coordinator was selected for each country whose primary job was to assist in the selection of the sample and to secure the cooperation of the interviewees. Visits to the Chambers of Commerce and Industry and to the Export Promotion Agency of each country were undertaken first to obtain background information and to assist in the selection of the sample.

III. MAJOR FINDINGS

The study identified areas of comparative advantage in each of the five CACM countries based on the following considerations: importance of exports to outside the region in 1980; growth of exports by major categories of manufactured and agro-industrial products over 1978-81; estimated profit margins (profits as a proportion of total cost) of the sample firms; degree of utilization of labor and domestic materials; extent of excess capacity. The results are summarized in the two tables, attached: Table 1 shows comparative advantage by major product categories and constitutes the basis of the summarized findings; while Table 2 provides a detailed breakdown by individual product and should prove of great value in

identifying areas in which assistance and promotional efforts should be concentrated.

The degree of comparative advantage was divided into three classes: A denotes outstanding export potential; B a high degree of potential; and C medium potential.

Major findings (based on Table 1) are as follows:

1. Three of the five CACM countries were found to have an "outstanding" or "high" (A or B) comparative advantage in the following areas:

- Food processing, including fabrication of chocolate and cacao;
- Yarn and textiles;
- Clothing manufacturing other than shoes;
- Manufacture of furniture and accessories (other than metalic);
- Pharmaceuticals and medicines.

2. Areas in which two countries have an outstanding or high potential comparative advantage include: canned fruits and vegetables, edible oils, shoes, chemicals, soaps and other cleansing preparations and basic metal & steel fabrications (see Table 1).

3. If we rank the countries of the region in terms of the number of areas in which each has an "outstanding" or "high" comparative advantage, we find Costa Rica in the lead with 13 areas ranked A or B. Obviously, Costa Rica appears to be the

most advanced country in terms of diversification of industrial structure and potential for extraregional export. It is followed by Guatemala with 11 areas and El Salvador with 10. Honduras and Nicaragua each have an "outstanding" or "high" potential comparative advantage in 6.

4. As may be expected, most of the areas in which the countries have an "outstanding" or "high" potential comparative advantage have the following characteristics: a) high usage of domestically produced materials (e.g. foodstuffs, cotton, leather); b) high labor intensity (clothing, shoes, leather products, furniture). While this is generally the rule, there are exceptions such as the manufacture of pharmaceuticals and medicines in which three of the five countries have an "outstanding" or "high" comparative advantage; the production of basic iron and steel structures (El Salvador and Costa Rica), and of glass and electrical appliances in Costa Rica.

5. Decline of intraregional trade: the study documents the stagnation, and in some cases decline of industrial production and exports over 1978-81. For example, the manufacturing production of El Salvador's sample firms dropped by 13%, sales to Central America by 45% and sales to outside the region by 13% (all in constant prices). In the case of the Costa Rica sample, production dropped by 11%, exports to Central America remained approximately constant while sales to

outside the area dropped by 8%. For Guatemala's sample, industrial production declined by 17% though exports to outside the region increased by 6%.

6. Excess capacity: utilization of productive capacity varies from country to country, but is estimated at about 50% on the average. Excess capacity in 1981 is estimated to range between 48% and 55% in Guatemala, Honduras and Nicaragua; it was as low as 39% in El Salvador (surprisingly!), and 61% in Costa Rica.

7. Major obstacles to production and exports to outside the region: the major obstacles cited are the scarcity of foreign exchange to purchase raw materials and other imported inputs; the absence or contraction of the market -- domestic, Central American and extraregional; technical problems relating to maintenance and modernization of plant and equipment; and shortage of domestic credit to provide needed working capital and finance the purchase of spare parts and replacement of equipment. In El Salvador, there is the added disruption and disincentive effect resulting from the violence; while in Costa Rica, the devaluation of the colon resulted in the substantial decapitalization of enterprises that had contracted loans denominated in foreing exchange.

In addition to the these fundamental obstacles, a number of additional factors specifically affect extraregional

exports. These include (a) high duties and other protectionist devices in the major market areas; (b) shortage of information with respect to quality norms and types of products wanted; (c) intensive competition from other exporting countries in the region's areas of comparative advantage; and (d) high shipping costs (reported by Costa Rican manufacturers).

IV. RECOMMENDATIONS

Major suggestions made by the interviewed managers and the consultant for policy measures and institutional adjustments to address these various obstacles are as follows:

1. Financial Measures

a. Strengthen the special funds established by the central banks in each of the five countries to channel resources to the banking system with the purpose of providing short and medium-term credit to manufacturing enterprises for working capital purposes.

b. Provide foreign exchange rotating funds to lend to manufacturing export enterprises that export all or part of their output to extraregional markets. A special mechanism should also be set up to promote intraregional exports, particularly to countries that have run up trade deficits in their intraregional trade over the last three years.*

*It is clear that this measure must be accompanied by long-term corrective measures designed to assure that chronic bilateral deficits do not recur in subsequent years.

c. Minimize the difference between the interest rate that the authorities pay on special funds borrowed abroad and what they charge end-users in the CA countries.

d. Ensure that any reduction in interest rates abroad is passed on to domestic end-users.

e. Establish a special industrial salvation fund (Fondo Especial de Rescate Industrial) to help industrial enterprises in difficulty, including those that have recently suspended operations. This fund must have access to medium and long-term loans since some of the lending should be designed to recapitalize the firms.

2. Technical Assistance

Foreign experts will be required to assist particular manufacturing firms with good export potential to help resolve their particular problems. These experts should work closely with financial institutions that are channelling funds to the private sector to assist in the preparation of the analysis of the financial and technical situation of the enterprises in difficulty.

3. Removal of Institutional and Structural Obstacles

Major institutional obstacles include time-consuming and repetitive procedures (red tape) consumer taxes that do not exempt exports, and lack of information with respect to marketing abroad. Expert advice would be useful to demonstrate

the need to simplify export procedures, create incentives to promote exports and assist exporters to identify potential markets and customers. Measures are also needed to encourage the cultivation of crops providing raw materials for processing industries such as oleaginous plants, tobacco, fruits and vegetables.*

*While not mentioned in the report, we would include adoption of a revised (and more flexible) common external tariff designed to reduce the level of effective protection for industries producing for the local and regional markets; review of the exchange rate structure (to guard against currency overvaluation); and improved coordination at the CA level of monetary, trade and exchange policies to pave the way for the eventual re-establishment of intraregional currency convertibility.

Cuadro No. 1

CENTROAMERICA: DISTRIBUCION Y CLASIFICACION SEGUN POTENCIALIDAD DE EXPORTACION DE LOS GRUPOS SELECCIONADOS SEGUN PAIS [1]

Grupo CIIU	Descripción	Guatemala	El Salvador	Honduras	Nicaragua	Costa R
3113	Envasado y conservación de frutas y legumbres	B				A
3115	Fabricación de aceites y grasas vegetales y animales	B			B	
3116	Trigo, avena y otros cereales tostados o cocidos				C	
3117	Fabricación de productos de panadería				C	
3119	Fabricación de cacao, chocolate y artículos de confitería	A	B			B
3121	Elaboración de productos alimenticios diversos	B	B	B	B	
3211	Hilado, tejido y acabado de textiles	B	B	B		
3212	Artículos confeccionados de materiales textiles, excepto prendas de vestir		B			
3220	Fabricación de prendas de vestir, excepto calzado		B	B		B
3231	Cortidurías y talleres de acabado			C	B	
3140	Industria de tabaco	C			C	
3233	Fabricación de productos de cuero y sucedáneos, excepto calzado	B				
3240	Fabricación de calzado, excepto el de caucho, vulcanizado o moldeado	A				B
3311	Aserraderos, talleres de acepilladura y otros talleres para trabajar madera			B	C	B
3319	Fabricación de productos de madera y corcho			B		
3320	Fabricación de muebles y accesorio, excepto los que son principalmente metálicos	B		B	B	
3412	Fabricación de envases y cajas de papel y cartón			C		B
3511	Fabricación de substancias químicas ferrosas	B			B	
3512	Fabricación de abonos y plaguicidas				C	A
3513	Fabricación de resinas sintéticas, materias plásticas y fibras artificiales				B	
3522	Fabricación de productos farmacéuticos y medicamentos	A	B			A
3523	Fabricación de jabones, preparados de limpieza, perfumería, etc.		B			A
3529	Fabricación de productos químicos n.e.p.			C		
3530	Refinerías de petróleo				C	
3560	Fabricación de productos plásticos					B
3620	Fabricación de vidrio y productos de vidrio					A
3710	Industrias básicas de hierro y acero		B			A
3811	Fabricación de cuchillería, herramientas manuales y artículos generales de ferretería		B			
3829	Construcción de maquinaria y equipo n.e.p., exceptuando maquinaria eléctrica	B				
3839	Construcción de aparatos y suministros eléctricos					A
3909	Industrias Manufacturadas NEP		B			
TOTAL	As and Bs	11	10	6	6	13

[1] Nota: (A) : Potencialidad de exportación óptima
(B) : Potencialidad de exportación alta
(C) : Potencialidad de exportación media
( ) : Potencialidad no determinada

FUENTE: Apéndice "C".

Cuadro No. 2

PRINCIPALES PRODUCTOS IDENTIFICADOS SEGUN PAIS Y GRUPO CIIU

Código CIIU	País		Descripción de principales productos
3113	Costa Rica	(A)	Jugos americanos, jugos tropicales, frutas en almíbar, vegetales enlatados, productos de tomate, palmito.
	Guatemala	(B)	Jaleas, chile serrano, chile jalapeño, frijol volteado, piñas en rodajas.
3115	Guatemala	(B)	Aceite comestible, margarina, harina de semilla de algodón.
	Nicaragua	(B)	Aceite vegetal, margarina, harina de semilla de algodón, aceite de semilla de coquito.
3116	Nicaragua	(C)	Avena en lata, frescavena, avena pankake.
3117	Nicaragua	(C)	Galletas de harina, snacks.
3119	Guatemala	(A)	Chicles de mascar.
	Costa Rica	(B)	Chocolates, dulces a base de azúcar, cacao en polvo.
	El Salvador	(B)	Dulces rellenos, dulces chiclosos, dulces confitados, dulces de leche.
3121	Guatemala	(B)	Extractos de café, levadura y fragmentos, miel de abeja y otras mieles.
	El Salvador	(B)	Extractos de café, mayonesa pura, mayonesa con limón, mostaza.
	Honduras	(B)	Almidones comestibles de maíz, chocolates, refrescos en polvo.
	Nicaragua	(B)	Café soluble, café molido, cereales.
3140	Guatemala	(C)	Tabaco resecado tipo burley, tabaco resecado tipo virginia, tabaco resecado tipo aromático.
	Nicaragua	(C)	Cartón cigarrillos.
3211	Guatemala	(B)	Tejidos planos manufacturados de algodón y sintéticos, lona, tela de sábanas.
	El Salvador	(B)	Hilazas e hilos de algodón y de otras fibras artificiales, tejidos de algodón, tejidos de fibras artificiales, tejidos de punto, tejidos de yute, tejidos de rayón.
	Honduras	(B)	Tejidos planos manufacturados de algodón y sintéticos, tela de pañal, gabardina, lona.
3212	El Salvador	(B)	Bolsas y sacos para empacar, mantas de algodón, sábanas, fundas, cubrecamas, manteles, servilletas, toallas, toallitas, bolsas de mano.
3220	El Salvador	(B)	Ropa interior de fibras sintéticas, ropa interior de algodón, ropa exterior de fibras sintéticas, ropa exterior de algodón puro o mezclado, sombreros, guantes y mitones.
	Honduras	(C)	Ropa interior y ropa de dormir de fibras sintéticas y de algodón puro, ropa exterior de fibras sintéticas y algodón, sombreros, guantes, corbatas, corsets, brassieres.
	Costa Rica	(B)	Ropa interior de fibras sintéticas, ropa interior de punto de algodón y de algodón puro, ropa exterior de fibras sintéticas y algodón, corsets, brassieres.
3231	Honduras	(C)	Cuero crudo, cuero terminado.
	Nicaragua	(B)	Cuero terminado de 1.5 mm., forro de flor, cuero nopa.
3233	Guatemala	(B)	Bolsas de cuerina para señora, bolsas de cuero, chumpas de tela impermeable, chumpas de cuero, chaquetas de cuero, billeteras de cuero, portadocumentos.

Cuadro No. 2

(Continuación)

Código CIIU	País		Descripción de principales productos
3240	Guatemala	(A)	Zapatos de cuero para hombres y niños
	Costa Rica	(B)	Zapatos de cuero para hombres y niños, zapato tenis, zapato P.V.C.
3311	Honduras	(B)	Madera aserrada, madera en chapas sobrepuestas playwood, cajas, cajones, puertas y ventanas.
	Nicaragua	(C)	Madera aserrada, madera en chapas, puertas, paneles ensamblados.
	Costa Rica	(B)	Madera terciada, madera en láminas, puertas, cabos para martillos, tablilla y parkets.
3319	Honduras	(B)	Manufacturas de madera.
3320	Guatemala	(B)	Muebles de madera: cunas de bebé, literas, trinchantes, juegos de comedor, libreras, mesas de noche.
	Honduras	(B)	Muebles de madera.
	Nicaragua	(B)	Muebles de madera: escritorios, sillas, sillones, sofas, mesas.
3412	Honduras	(C)	Bolsas de papel de 3 capas, bolsas de papel costuradas.
	Costa Rica	(B)	Cajas de cartón.
3511	Guatemala	(B)	Clorodineform, quina-50, inafos-90, trifucarina-48, inaclofos 60-30-15.
	Nicaragua	(B)	Colofonia, aceite de pino, dipenteno, trementina, longifoteno, cloro líquido, soda cáustica, hipoclorito de sodio, ácido clorhídrico, icimix, línea tenérica, tintes industriales, alcanfor y sus derivados.
3512	Nicaragua	(C)	Insecticidas, fungicidas, desinfectantes.
	Costa Rica	(A)	Abonos fosfatados y productos fertilizantes fosfatados, abonos mezclados, nitrato de amonio, sulfato de amonio.
3513	Nicaragua	(B)	Compuestos P.V.C., resinas P.V.C.T., P.V.C. flexibles, P.V.C. rígidos, resinas P.V.C.
3522	Guatemala	(A)	Vitaminas, medicamentos para uso oral, medicamentos para uso externo, medicamentos para uso veterinario, medicamentos para uso parentérico.
	El Salvador	(B)	Cafeina, estricnina y sus sales, medicamentos para uso parentérico, medicamentos para uso externo, medicamentos para uso veterinario.
	Costa Rica	(A)	Vitaminas, estimulantes del apetito, medicamentos para uso interno y externo, penicilina y otros antibióticos, medicamentos para uso veterinario
3523	El Salvador	(B)	Polvos preparados para tocador, tintura y otros preparados para cabello, dentríficos de toda clase, lociones y otros preparado de tocador, jabones y otros preparados para lavar.
	Costa Rica	(A)	Jabones para tocador y baño, ceras y betunes para lustrar calzado, ceras y aceites líquidos para muebles, lociones y agua de tocador, cosméticos, dentríficos de todas clases.
3529	Honduras	(C)	Aceite de liquidambar, colofonia, aguarrás, aceite de pino.
3530	Nicaragua	(C)	Aceites lubricantes, grasas lubricantes, asfalto, varsol, H.H.P.

Cuadro No. 2

(Continuación)

Código CIIU	País	Descripción de principales productos
3560	Costa Rica (B)	Batería de cocina, servicio de mesa y cubiertos de materiales plásticos, tela de enrejado, herraje para muebles de materiales plásticos, enchufes, tomacorrientes, interruptores, juguetes de vinil.
3620	Costa Rica (A)	Envases de vidrio: medicinales, salsas, cerveceras, licoreras, industriales, vineras y otras.
3710	El Salvador (B)	Hierro redondo corrugado, hierro cuadrado, hierro angular, piezas de acero para repuesto de maquinaria, viguetas y vigas.
	Costa Rica (A)	Viguetas y vigas, planchas y láminas galvanizadas, tubo y cañería con accesorios de hierro y acero, alambre y varillas.
3811	El Salvador (B)	Herramientas manuales para la agricultura y artesanos: machetes, hachas, barras, azadones, piochas, chuzos, palas, rastras, repuestos para rastras.
3829	Guatemala (B)	Bombas de agua con motor eléctrico desde 1/3 Hp. a 1 Hp.
3839	Costa Rica (A)	Tubos fluorescentes, lámparas, linternas, faroles, pilas y batería secas, interruptores de seguridad, tableros de distribución, tableros de control, cables de cobre, cables de aluminio y telefónicos.
3909	El Salvador (B)	Lápices para escribir o dibujar de toda clase, línea Eberhard Faber, línea Facela.