CORECA

REGIONAL COUNCIL FOR AGRICULTURAL COOPERATION



GISA

INTER-INSTITUTIONAL GROUP OF THE AGRICULTURAL SECTOR

FIRST AGRICULTURAL SECTOR MEETING OF THE CENTRAL AMERICAN GOVERNMENTS WITH COOPERATING GOVERNMENTS AND INSTITUTIONS

1

EXECUTIVE SUMMARY

P965r v.1 Ed.Ing.

PEC/AS/91/1
PROJECT CAM/90/002
SPECIAL PLAN OF ECONOMIC COOPERATION FOR CENTRAL AMERICA

The technical information for the First Agricultural Sector Meet presented in ten documents to facilitate real cooperating governments and institutions. The ints are:

Executive Summary

Importance of the Agricultural Sector. Technical and Financial Assistance. Summary of Project Profiles.

Documents 3 to 10 describe the eight regional programs on topics selected as being of priority by the Central American governments. The Programs are:

PEC/AS/91/3: Regional Agro-ailmentary Program.

PEC/AS/91/4: Program on Irrigation, Drainage and

Land Leveling.

PEC/AS/91/5: Program on the Development of Bio-

technology.

PEC/AS/91/6: Program on Intra-regional Trade and

Exports to Third Countries.

PEC/AS/91/7: Program on Agroindustrial Develop-

ment.

PEC/AS/91/8: Program to Strengthen Plant and Animal

Health Services.

PEC/AS/91/9: Program on the Development of Border

Areas.

PEC/AS/91/10: Program to Strengthen Rural Enterprises.

Each Program consists of two components: one of regional scope and the other of national scope. The regional component involves cooperative projects and actions among the countries of the isthmus, while the national component is made up of the investment projects to be carried out in individual countries.



CORECA

REGIONAL COUNCIL FOR AGRICULTURAL COOPERATION



IICA GISAIA

INTER-INSTITUTIONAL GROUP OF THE AGRICULTURAL SECTOR

FIRST AGRICULTURAL SECTOR MEETING OF THE CENTRAL AMERICAN GOVERNMENTS WITH COOPERATING GOVERNMENTS AND INSTITUTIONS

1

EXECUTIVE SUMMARY

PEC/AS/91/1
PROJECT CAM/90/002
SPECIAL PLAN OF ECONOMIC COOPERATION
FOR CENTRAL AMERICA

00004136 (ICA E14 P9651 U-1

ed ord

TABLE OF CONTENTS

I.	INT	RO	DUCTION5
II.	A.B.	ONG The 1. 2.	OMY
II.			EW POLITICAL SETTING AND THE CHALLENGES OF REACTI-
			N9
			e New Political Setting
	B.		ajor Challenges for Agricultural Development in the
		_	gion International competitiveness, equity and the environ-
		1.	ment
		2.	
		3.	Modernizing and streamlining the public sector and at-
			tracting private-sector participation
	C.	Re	gional Agricultural Development Programs
IV.	TIO	N II	SIS OF CURRENT TECHNICAL AND FINANCIAL COOPERA- N THE PUBLIC SECTOR OF AGRICULTURE
	В.		rure International Assistance and Areas of Emphasis
		1.	Agroalimentary development
		2.	Irrigation, drainage and land leveling
		3.	Development of biotechnology
		4.	Intra-regional trade and exports to third countries
		5.	Agroindustrial development
		6.	Strengthening plant and animal health services
		7.	Development of border areas
		8.	Strengthening and consolidating rural enterprises
V.	THE	E FI	TSIS OF INVESTMENT PROJECT PROFILES TO BE SUBMITTED TO RST AGRICULTURAL SECTOR MEETING OF THE CENTRAL CAN GOVERNMENTS WITH COOPERATING GOVERNMENTS ASTITUTIONS

•	

I. INTRODUCTION

The Special Plan of Economic Cooperation for Central America (PEC) was prepared in support of the Esquipuias II accords signed by the presidents of the Central American countries. The Plan was conceived as a flexible mechanism whose fundamental objective is to undergird peace and stability in the region. It will work by mobilizing additional resources from the international community to carry out projects in benefit of those sectors that hold high priority for the Central American governments.

The First Meeting of Central American Governments with Cooperating Governments and Institutions in the framework of the PEC took place from July 4 to 6, 1989, in Geneva, Switzerland. It was the first formal encounter of a general nature in which the governments of Central America could inform the donors of the region's needs for financial and technical assistance.

July 1989 (Geneva, Switzerland): first formal encounter between Central American governments and assistance agencies

In response to the meeting in Geneva, and at the recommendation of the United Nations General Assembly (Resolution 44/182), it was agreed to pursue the process further by holding sectoral meetings where the assistance community could receive full project portfolios, sector by sector.

The agricultural sector was selected as one of the first because it is the foundation of the Central American economies. Furthermore, this sector already has a clear orienting framework for the reglon, set forth in the Plan of Joint Action for Agricultural Reactivation approved by the ministers of agriculture of the countries of the isthmus (April, 1989).

Top priority was attached to the agricultural sector, as the foundation of the economies in Central America

The technical documentation for the agricultural sector meeting was prepared under the leadership of government agricultural officers, with the cooperation of specialized international and regional organizations from the Inter-Institutional Group of the Agricultural Sector (GISA). Project CAM/90/002/PAHO/UNDP also supported the process by working closely with the Secretariat of CORECA, which coordinated the preparation of technical documents in the countries, and with the Secretariat of the GISA, which coordinated document preparation by participating organizations.

The work done so far upholds the general statements made by the presidents of the Central American countries in their Antigua Declaration (June 17, 1990). It is also consistent with the Economic Plan of Action for Central America (PAECA) and responds to the wishes of the ministers of agriculture of the Central American countries, who met in Honduras in July, 1990 and in El Salvador in September, 1990 and specifically agreed to implement the PAECA in the agricultural sector.

The presidents of the countries of the region endorse the need to reactivate agriculture in Central America The mandates of the presidents and the agreements of the ministers of agriculture all serve to reaffirm and narrow the focus of the guidelines approved in the Plan of Joint Action for Agricultural Reactivation in the Central American Isthmus.

The projects introduced herein are a first step in this new effort to develop and integrate the region, beginning with the agricultural sector.

II. THE POTENTIAL OF THE AGRICULTURAL SECTOR TO REACTIVATE THE ECONOMY

A. General Characteristics of the Region

The PEC area of action covers over half a million square kilometers and is home to over 30 million people

- 1. The PEC will be working in six countries: Guatemala; Honduras; El Salvador; Nicaragua; Costa Rica; and Panama. Lying in the tropical zone of the northern hemisphere, the area measures 508,894 km² and is populated by over 30 million people. Central America has a mean population density of 54 people per km², ranging from 26 in Nicaragua to 240 in El Salvador.
- 2. The countries share a similar production base. Agriculture is the most important sector in the economy, playing a powerful role in gross domestic product, job creation, exports and tax revenues.

B. The Performance of the Sector

- 1. Before the crisis
- 3. The agricultural sector made a major contribution to economic growth in the countries of Central America from the end of World War II until the close of the 1970s, especially in the form of agricultural exports. Initially, a substantial portion of the surplus generated by agricultural exports was plowed back into the sector, invested in

Agricultural production and exports were the major source of wealth in the region from the end of World War II until the 1970s

Belize is not included as a beneficiary of the PEC except under assistance programs for refugees, displaced persons and the repatriated.

services and construction, or used to develop major agroindustrial companies. Later, part of the surplus was used to industrialize the economies for import substitution in the framework of economic integration. The agricultural export sector, by earning foreign exchange, also helped finance imports of the raw materials, semi-processed goods and capital goods needed for industrialization.

4. The region made major progress under these programs and was able to diversify its exports somewhat. However, the process led to a number of problems; some stemmed from the development model the countries had selected, while others were exogenous in nature, responding to conditions in the international environment. In the first place, the import substitution strategy adopted in the 1960s failed to build a foundation of sustained development or to generate enough foreign exchange to pay for the imports the region needed and bolster the process of accumulation. In the second place, in all the countries expect Costa Rica, the development process tended to be characterized by unequal distribution of income and persistent poverty among much of the population of Central America. As the crowning blow, the unfavorable performance of the international economy drastically depressed the prices of the region's exports.

A combination of external and internal factors led to stagnation and a decline in productive activities in the early 1980s

2. The crisis and adjustment policies

- 5. The international environment began to grow unfavorable in the early 1980s, with inflation, falling prices for traditional exports, breakdown in the terms of trade, oll shocks and rising interest rates. These factors combined with political and military disturbances in the region and a looming debt crisis, transforming the slowdown into complete stagnation and, later, a frank decline in productive activities. The Central American countries found themselves in difficult straits that knew no precedent; it became clear that they needed a new development strategy.
- 6. The governments of the Central American countries have responded to these complex conditions by adopting economic adjustment policies with varying degrees of intensity. The measures typically included exchange-rate adjustments, credit restrictions, cutbacks in public expenditures, tariff reductions and financial liberalization. It is difficult to quantify the direct effect of these composite policies on the agricultural sector, as many measures had ambiguous consequences. An example is the case of currency devaluations, which boost local-currency earnings for exporters, but raise the domestic cost of inputs. For producers selling on local markets, the devaluation deals a double blow: it raises the price of inputs, while contracting domestic demand. When these devaluations occur in an inappropriate macroeconomic setting, they feed infiationary expectations that actually drive up the cost of credit.

Adjustment policies have had an ambiguous impact on the agricultural sector

The countries' ability to advance has been visibly hampered by the conflicts in the region, and their close interdependence has come to the fore

- 7. The governments adopted policies to develop and support traditional exports and encourage export diversification. These efforts, however, were hampered by the stubborn problems of war, which had the following effects: a) production and marketing infrastructure was abandoned and destroyed; b) the economicallyactive population was repeatedly displaced from rural conflict zones; and c) economic resources and labor were diverted to meet the emergency needs of war instead of contributing to production. These were the direct adverse consequences of political turbulence: the countries also suffered indirect effects, as recession ate into intra-regional trade, and sales plummeted to one-third of the levels achieved at the beginning of the decade. Another indirect consequence was the flow of refugees. All this clearly reveals how closely interdependent the countries are, and how strongly these region-wide factors influence economic and social development in each country.
- 8. Despite all this, the economic crisis provided a compelling incentive to modernize or diversify agriculture. New varieties of coffee and cotton were planted. New crops were introduced, and some countries upgraded livestock management. In general, a major effort was made to usher in technical progress for agriculture. Examples can be found in bananas, plantains and melons in Honduras, vegetable crops in Guatemala and various fruit crops in Costa Rica. At the same time, important lessons were learned about marketing.

C. The Role of Agriculture In the Region's Economic Development

- 9. Agriculture has the capacity to play an immediate, decisive role in the region's development. It represents a major share of the overall economy. The agricultural sector currently employs nearly 50 percent of the economically active population in Central America, generates from 26 to 30 percent of the GDP, produces around 60 percent of all extra-regional exports, and represents from 10 to 15 percent of the trade inside the region.
- 10. These figures eloquently reveal how important agriculture is today, although they measure only the sector's direct contribution to the economy, without taking account of relations with other spheres of activity. It is generally agreed that agriculture, particularly on the Central American isthmus, should no longer be regarded merely as a primary source of crops and animals; instead, attention should focus on its close and growing input-output relations with the industrial and service sectors. As agriculture modernizes, it will generate important multiplier effects on economic activities through a process of industrialization based heavily on the agricultural production base. This implies that the sector will grow increasingly in-

The agricultural sector yields 60 percent of the region's overall exports

terpependent with the industries that manufacture its Inputs and that mill or process the raw materials it produces.

11. As agricultural production continues to incorporate more advanced technology, it will create a growing demand for industrial inputs, such as machinery, fertilizers, seeds and the like, which in turn can spark industrial development. Primary products are not being processed as they could be, and because many agricultural raw materials are exported in their natural state, the countries fail to capitalize locally on the sector's multiplier effects. Consequently, Central America still has the unexploited potential to develop a major focal point for accumulation by revitalizing agriculture, with the resulting value added that derives from any phase of agroindustry.

The multiplier effects of the agricultural sector need to be exploited inside the region

III. THE NEW POLITICAL SETTING AND THE CHALLENGES OF REACTIVATION

A. The New Political Setting

- 12. Following a decade of economic, political and military crisis and adjustment programs, which wrought major setbacks in the standard of living for the Central American population, a number of factors have converged to cast the future of development in a more optimistic light. The most important change is that a process of peace and democratization has been under way ever since the presidents of the Central American countries signed the Esquipulas II accords in August, 1987. Political tension has slackened, and resources that had gone into the war effort have been freed up. Normalcy has been gradually restored to production, shipping services and transportation, and joint efforts can now be launched for investment and for assistance.
- The process of pacification and democratization based on the Esquipulas Accords has made it possible to free up resources and restore normalcy to the production process

- 13. The experiences of the 1980s have helped Central America realign its development strategy and revive the idea of integration. No longer is Integration seen simply as the route to a new market large enough to sustain more dynamic growth in the region's production; now it is also understood as the platform on which the Central American economy can fit better and more efficiently into the international marketplace.
- 14. It was against this backdrop that the presidents of the Central American countries held a top-level forum for the region in June 1990, and approved the Antigua Declaration and the Economic Plan of Action for Central America (PAECA). This new approach at-

The Antigua Declaration and the Economic Plan of Action for Central America seek a coordinated agricultural policy tached a very important role to the agricultural sector. The ministers of agriculture received explicit instructions to "(...) prepare a coordinated agricultural policy tailored to this Plan, especially in matters of production, support services and technology, that will bring about swift recovery and expansion of traditional exports and an increase in nontraditional exports, as well as greater food security for the region and a steady supply of industrial inputs, thus forging productive linkages."

The spirit of cooperation in Central America reaffirms the basic tenets of the Plan of Joint Action for Agricultural Reactivation in Latin America and the Caribbean

- 15. In accordance with the mandates given in the meeting of presidents, the ministers of agriculture and natural resources met in Tegucigalpa, Honduras from July 19 to 20, 1990 and in El Salvador from September 12 to 13, 1990. They issued a statement and approved a series of resolutions reiterating this same desire to pursue the process of regional cooperation as a means to reactivate agriculture and agroindustry in Central America. In particular, the transformation of production should enable the region to obtain entry into international markets for its agricultural and agroindustrial products, and to guarantee food security for the local population.
- 16. The statement and resolutions of the ministers of agriculture reaffirm and further elaborate on the ideas approved by the ministers of agriculture and natural resources when they adopted the Plan of Joint Action for Agricultural Reactivation in Latin American and the Caribbean (PLANLAC) in October, 1989.

B. Major Challenges for Agricultural Development in the Region

- 1. International competitiveness, equity and the environment
- 17. An in-depth look at the nature of the crisis in all the countries of Central America reveals how strategically important it is to expand and diversify exports.

The major challenge for the countries of the region: to modernize and diversify agriculture and capitalize on the multiplier effects generated by inter-sectoral relations

- 18. The quest to earn more foreign exchange on traditional products is perfectly compatible with the desire to vigorously pursue nontraditional exports. Traditional agricultural exports still need to be encouraged, not only because these commodities account for a high percentage of total exports, but also because they are product lines in which the countries have become quite competitive internationally.
- 19. The countries of Central America are already engaged in an incipient process of diversifying nontraditional agricultural exports. The process gathered force in the 1980s and is based on sectoral and general incentives. New opportunities are now available on external markets, such as the United States government's Caribbean Basin Initiative, the European Generalized System of Preferences and, more recently, the Enterprise for the Americas Initiative. Nonetheless, the region will still find itself unable to tap the

full potential of the market unless advanced technology is introduced into production. This requires a complex, muiti-faceted transformation. In the first place, it means that the region's exports must meet the quality requirements and health specifications of the international marketplace. The harmonization of health regulations throughout the region would thus serve a dual purpose by promoting intra-regional commerce based on more stringent standards, and easing entry into external markets. In the second place, the technologies to be adopted must accentuate existing comparative advantages and generate greater value added.

20. The countries of the region are faced with an international market that demands higher levels of technology; but because their financial resources are so limited, they have found it difficult to improve productivity, quality and efficiency in their production processes. The individual countries of Central America are too small to maintain separate physical infrastructure and the type of research teams needed to modernize agriculture. Because producers in the various countries operate in similar ecological zones and under similar socioeconomic conditions, joint research into shared problems could reduce per-country costs, while spreading the benefits of research more widely.

Technology should build on comparative advantages and generate greater value added

21. Cooperation within the region can give the countries more bargaining power on the international market, while obviating the type of competition among neighbors that can glut the market and depress prices. The Central American countries face the challenge of working together to assess present opportunities and risks on the international agricultural commodities market, gradually strengthen the region's ability to navigate the increasingly complex waters of marketing these commodities, and identify market niches. Only if they rise to the challenge can they hope to compete in the recently expanded international marketplace.

If the six countries can dovetail production, they will boost their bargaining power in the international market

- 22. The development of irrigation agriculture must play a key role in modernizing agricultural production and improving international competitiveness. Irrigation can provide a solution to the common Central American problem of frequent droughts that destabilize the production of foodstuffs and other export lines. The market for fresh, high-priced agricultural produce is at a premium during the winter months in the northern hemisphere (December through April), when the dry season is in full swing in Central America. During this period, irrigation is essential if the countries are to tap the high seasonal demand in markets such as the United States, Canada and Europe.
- 23. The incorporation of advanced technology should also serve to deter the environmental degradation caused by outmoded agricultural practices. In effect, the region's natural resource base has been severely damaged as productive activities

Coordinated, vigorous action is needed to stop the degradation of natural resources

have taken a heavy toll on once-fertile volcanic soils, forest resources, water reserves and fishing resources. The land has been degraded by deforestation; livestock and inappropriate crops have spread; mangroves have been destroyed, and over-fishing is common. The intensive use of pesticides has further dirtied waters already polluted with agroindustrial waste.

24. Natural resource degradation must stop because it threatens long-term prospects for growth. Moreover, the developed countries are increasingly concerned with the environment, and this could lead to reprisals in the form of economic measures, such as shutting off markets or withholding financial aid. Central America already has made scientific and technological discoveries with plants and animals, showing how integrated pest control can reduce the use of chemicals in farm production and less-extensive methods can be adopted for livestock rearing.

The modernization and reactivation of the agricultural sector should take place in a framework of greater equity

25. The process of modernizing and reactivating the agricultural sector should also be compatible with a more equitable form of rural development. As was already noted, the exclusionary nature of the development process was one of the sparks that ignited the crisis of the 1980s. Central America already has successful experience in combining the transformation of production with equity. If these experiences are to be duplicated, small-scale farmers will require differentiated actions to provide access to production factors including not just land, but also Inputs, credit, technical assistance, training and others.

2. Food security

26. In the wake of the crisis, the countries of the Central American isthmus find themselves increasingly hard-pressed to feed their people. To begin with, the region began losing its food-production capabilities due to the convergence of a number of factors. Chief among them were the war, stubbornly low prices, contraction of credit, declining investments in infrastructure and technical services, and technology packages whose price was driven up by currency devaluations. The countries then found that the food distribution process had grown sluggish and geographically unbalanced. Finally, the problems of poverty were intensified with the crisis and military conflicts, which in turn interfered with the efforts of many resource-poor groups to obtain basic foods.

Number-one objective: provide the population with acceptable nutrition

27. Large populations in the region live under conditions of food insecurity, unable to meet their nutritional needs well enough to live a healthy, productive life. Many Central Americans are born and live out their days in a permanent state of malnutrition, ranging from protein and energy deficiencies to deprivation of specific nutrients,

such as vitamin A and iron. The implications are very serious for certain high-risk populations, such as children, pregnant and nursing women, the displaced, refugees and other groups with similar problems. The result is poorly-educated children who suffer from learning disabilities, and unskilled workers, able to sustain only low levels of productivity.

- 28. The complex causes of food insecurity defy simplistic analysis. Possible solutions must look beyond sectoral viewpoints or strictly technical arguments. More than the problem of any one sector, it is an intricate web of social, economic, technical and political factors that demand a comprehensive approach. From the standpoint of the countries, food security has two different faces. The first is the macroeconomic angle, reflected in a deteriorating agricultural balance as food production and exports decline and, year by year, imports continue to expand. The second face is sociopolitical and economic. It is reflected in the alarming proliferation of high-risk groups whose problem lies not so much in food production as in income distribution and purchasing power.
- 29. The expansion of basic food production In Central America has lagged behind population growth in recent years. The countries have found themseives obliged to import more and more foodstuffs and to receive food aid. The governments of the region face difficuit decisions on how to handle food gifts. Such donations certainly are not to be rebuffed, as they have an immediate impact on a pressing social need; however, in the majority of cases, donated foods undeniably compete with local products and provide a real disincentive to produce.
- 3. Modernizing and streamlining the public sector and attracting private-sector participation
- 30. The countries of the isthmus found their public-sector woes multiplying as the economic and political crisis contracted fiscal revenues and imposed ever-greater military expenditures. The governments face a pressing need to cut expenditures, especially on investments and social services. In a break from the past, government coffers presently lack even enough resources to meet commitments for local counterpart contributions to carry out projects funded with international loans.
- 31. Changing conditions in Central America and around the world demand a new approach to relations between the public and private sectors. Because the public sector is under severe financial constraints and has little maneuvering room, the govern-

A timely supply of basic foodstuffs, along with adequate purchasing power, will guarantee social well-being

It is time to coordinate activities between the government and the private sector to benefit agriculture in Central America ment must be selective if its interventions are to have a real impact. At the same time, as the world economy becomes increasingly open and competition intensifies, the need for dialogue and mutual support between the government and business groups can no longer be ignored. The private sector must be willing to support the interventions of the government.

The incorporation of the private sector, organized at the regional level, is essential for penetrating the world economic system

32. The task now is to develop more appropriate mechanisms for dialogue between the public and private sectors, both nationally and across the region, so that public investments flowing into agriculture can produce true multiplier effects. In particular, if the organizations that represent producers, processors and distributors of agricultural goods throughout Central America, participate actively, the countries of the isthmus will be able to adopt common, mutually-advantageous positions in the world economic system. The private sector must be fully involved as an essential part of this new mechanism for dialogue at the regional level.

C. Regional Agricultural Development Programs

- 33. All these arguments point to the same conclusion: the Central American isthmus has a technical awareness and a high-level political consensus that agriculture and agroindustry should play a central role in the process of transforming production and reactivating the region's economy.
- 34. The ministers of agriculture articulated a strategy to meet the objective of reactivating agriculture and agroindustry, based on three fundamental points:
 - Strengthening intra-regional trade and promoting traditional and nontraditional exports
 - Developing food production in agriculture, oriented toward food security in the region
 - Providing a type of socioeconomic development that will cushion the impact of free-trade policies
- 35. These strategic approaches cover different fields of action, some of which are directly relevant to the ministries of agriculture. Decisions on other facets of the strategy, particularly those having to do with macroeconomic policy, are made in a different venue or forum, and the sector must pursue close, systematic interaction with these other players, both in the countries and in the overall region.
- 36. The objective of the proposed strategy is to reactivate the agricultural sector in a framework of integration, both "inward-looking" and, even more, "outward-looking." The strategy revolves around three main axles. The first is modern productive develop-

Three fundamental features of the new strategy: strengthen intra- and extra-regional trade; bring about food security; consolidate socioeconomic development ment, emphasizing food production in agriculture. The second is oriented toward exploiting newly-opened intra-regional markets and developing trade with outside countries. The third is to counteract socioeconomic problems that could intensify in the rural sector as a result of the process of opening.

- 37. The governments of Central American countries have three key instruments at their disposal for carrying out this strategy:
 - Programs for investment and technical assistance in highpriority fields of agriculture
 - A program to harmonize policies for agriculture
 - A program to develop and strengthen institutional mechanisms for region-wide cooperation and integration
- 38. The first instrument offers a mechanism for preparing specific projects for investment, preinvestment and technical and financial assistance in high-priority fields. This will help the countries of the Central American isthmus negotiate external resources that they can combine with their own local resources, to assure that national and regional projects are implemented as the backbone of the strateav.
- 39. The governments of the Central American countries, in accordance with the established strategy, have already put this first instrument to work. They have agreed to prepare and carry out, as a first step, an initial portfolio of regional and national projects covering the following areas:
 - Agroalimentary development
 - Irrigation, drainage and land leveling
 - Development of biotechnology
 - Intra-regional trade and exports to third countries
 - Agroindustrial development
 - Strengthening plant and animal health services
 - Development of border areas
 - Strengthening and consolidating rural enterprises
- 40. The Plan of Joint Action for Agricultural Reactivation in Latin America and the Caribbean (PLANLAC) lays the foundation of the program to harmonize policies, in the form of a project for standardization of agricultural policy in the CORECA countries. In September 1990, the ministers of agriculture adopted Resolution II-CE-04, identifying fields of action and laying out a basic procedure for tackling the process of policy harmonization.
- 41. The third basic instrument is the program to strengthen institutional systems, both nationally and regionally. This program can facilitate efforts to carry out coordinated policies and encourage decision-makers outside the sector to consider more closely the

Basic tools of the strategy: investment and technical cooperation in agriculture; harmonization of agricultural policies; strengthening institutional mechanisms

Specific projects should be prepared for preinvestment, investment and technical and financial assistance

Eight basic areas have been defined for preparing an initial portfolio of regional and national projects

specific Interests of agriculture when they set macroeconomic policy. An efficient, modernized institutional organization in the region and in each country, with the participation of the private sector, is a basic requisite for integration and for adopting coordinated agricultural policies in the Central American isthmus.

IV. ANALYSIS OF CURRENT TECHNICAL AND FINANCIAL COOPERATION IN THE PUBLIC SECTOR OF AGRICULTURE*

A. General Information

42. This section will describe the general features of projects that the public agricultural sector is presently carrying out, with international support, in areas holding high priority. Such information can be used in approaching donors with project proposals that dovetail with, reinforce or redirect new investments, in accordance with acquired experience and with today's needs.

Ninety-nine investment projects and 76 technical cooperation projects are now under way in the region's agricultural sector

- 43. The agricultural sector, with the support of various international organizations, is currently addressing high-priority areas through 99 investment projects for a total of US\$1.084 billion, and 76 technical cooperation projects for US\$111.7 million. These sums reflect total project costs, consisting of both external contributions and national counterpart allocations. This is not to suggest, however, that this much money is actually available; in fact, the projects are in different states of advancement, which determines how much money is on hand at this time.
- 44. Table 1 synthesizes information on projects -- how many and the amount of money involved -- for each area of high priority in the Central American region. The following points are of particular note:
- Projects now in progress account for a total of nearly US\$1.2 billion

 The area of strengthening and consolidating rural enterprises is receiving the largest percentage (39.4%) of total resources. Next are the areas of irrigation, drainage and land leveling, development of biotechnology and agroindustrial

This chapter is based on information from a document prepared by RUTA II in July 1990, giving a comparative study of public-sector agricultural projects in the Central American region and in each country. Because the RUTA II study contains no information on the Republic of Panama, this chapter also omits data on that country.

development, receiving nearly 15 percent each. Remaining resources are divided among the other areas, ranging from 8.9 percent for strengthening plant and animal health services, down to 0.7 percent for development of border areas.

- The list does not include investment projects of regional scope, but only national projects that take place under loans negotiated bilaterally. The two regional investment projects that appear in Table 1 pertain to credit programs carried out by the CABEI to promote investments in each Central American country. The region has no recent experience with joint investment projects involving shared payment obligations.
- By contrast with investment projects, many of the technical cooperation projects are regional in scope. They are generally funded with grants and are promoted and carried out by international and regional organizations. This type of project is most common in the areas of development of biotechnology and strengthening plant and animal health services.

The area of strengthening and consolidating rural enterprises is receiving the most attention (nearly 40% of all resources)

Table 1. Projects in progress with International contributions, by high-priority grea*

HIGH-PRIORITY AREA	IN	VESTMENT	PROJE	CTS 1	TECH. COOP. PROJECTS TOTAL			TOTAL			
	Regi	onal"	Natio	nat	Regio	nai	Natio	nal			
	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	%
Agroalimentary development			12	24.8	2	2.3	9	9.7	23	36.8	3.1
Irrigation, drainage and land leveling			25	183.8			3	2.5	28	186.3	15.6
Development of biotechnology			6	111.0	14	43.0	19	15.9	39	169.9	14.2
Intra-regional trade and exports to third countries	1	10.0	7	175.9			5	1.0	13	186.9	15.6
Agroindustrial development	1	10.0	4	19.3			1	0.2	6	29.5	2.5
Strengthening plant and animal health services			6	85.9	9	11.1	5	9.7	20	106.7	8.9
Development of border areas			1	8.5			2	0.3	3	8.8	0.7
Strengthening and consolidating rural enterprises			36	454.9	1	n.d.	6	16.0	43	470.9	39.4
TOTAL	2	20	97	1064.1	26	56.4	50	55.3	175	1 195.8	100

Development of biotechnology and strengthening plant and animal health services are benefiting the most from regional technical cooperation projects

B. Future international Assistance and Areas of Emphasis

- 45. As a result of the economic crisis, certain limiting factors interfere with the implementation of internationally-supported government projects to foster agricultural development. The principal obstacles are the lack of counterpart resources, due to cutbacks in public budgets, and difficulty meeting certain requirements before funds can be disbursed.
- 46. Because of real budgetary constraints, external assistance for the agricultural sector will need to be mobilized selectively so

Technical and financial assistance will have to be selective in the future

^{*}In millions of US\$. Refers to total project costs, both external contribution and local counterpart.

projects can be truly productive and will not require a flow of government subsidies. International assistance can be a source of support for modernizing the public sector and managing the cooperation of the private sector.

Agricultural investments with external contributions must support the private sector, without neglecting essential aspects of governmental activity

47. External resources invested in agriculture must emphasize support for the private sector without neglecting certain substantive matters that the public sector must continue to handle. In general, present international technical assistance does not target the regional level or act in direct support of national projects. The region has a plethora of small national projects for technical assistance, lasting a short time and difficult to coordinate. The multinational approach should provide a conduit for technical assistance and exchange of experiences benefiting all the countries in areas that are essential for agricultural development.

Bearing in mind the characteristics of the full range of projects taking place with international assistance, experience accumulated to date, and present conditions in the countries, future assistance in each high-priority area should emphasize the lines of action described below.

1. Agroalimentary development

Make credit more readily available for producing basic fooastuffs

48. Agroalimentary development is a field receiving very little support from the international community. Any additional external assistance in this area should stress the following points: a) setting up funds that would be available to the countries on very short notice, to deal with temporary shortages of basic staples; b) increasing access to credit from development banks for production of basic staples; c) supporting the development and modernization of the livestock sector, especially dairy production, to make better use of abundant forage resources and byproducts available in the region, without overlooking the protection of forest resources.

2. Irrigation, drainage and land leveling

- 49. The most successful public investments, in terms of both agricultural production and equipment operation and maintenance, have been in mini-irrigation systems covering from 30 to 60 hectares each; with these projects, the most appropriate areas can be selected for developing intensive agriculture. Because such systems serve only a small number of users, farmers can be easily organized and trained in new techniques. This type of irrigation system offers many other advantages as well. It can be installed quickly, and project maintenance and operation are easy and affordable.
- 50. Under present circumstances, when public resources for investment are limited, mini-irrigation projects appear to be the most appropriate type of investment for the countries of the region. The same is true for investments to rehabilitate and improve the use of

Minimization projects appear to be the most appropriate investments

presently existing irrigation infrastructure. There is a lack of regional-level technical cooperation projects designed to optimize the benefits of heavy investments in irrigation. The multinational approach and horizontal cooperation are best suited to projects for training technicians and farmers, joint research among countries, upgrading legislation, setting irrigation standards, and institutional reorganization to incorporate the private sector into the development of irrigation agriculture.

3. Development of biotechnology

- 51. The national technology research and transfer institutions possess certain basic physical resources; however, in all the countries, they are faced with major operating constraints and are generally undergoing similar kinds of institutional and methodological crises.
- 52. Under these circumstances, there is a pressing need for more international assistance to ensure greater strength and continuity for technological development in the region. This assistance should focus on helping the countries to: a) work more effectively with producers, and engage the private sector; b) set priorities and provide coordination across the region, in subject areas to be researched jointly by two or more countries, so that resources can be used more effectively and duplication of efforts can be avoided; c) strengthen, redirect and coordinate the region's efforts to tap the potential of biotechnology, introducing practical techniques into agricultural modernization; d) bolster existing regional research networks and create new networks for key commodities not yet covered (nontraditional exports, plantains, fruits, oilseeds); it will become necessary to improve coordination among these networks, which can be done by setting up a central research clearing house for the region.

There is a pressing need for international support to improve technology development.

4. Intra-regional trade and exports to third countries

- 53. The small number of public-sector projects in this field can be attributed to the fact that these activities, by their very nature, tend to be in private hands. Under the circumstances reigning today, the role of the public sector is to create macroeconomic conditions that will facilitate export development by the private sector.
- 54. Any new support from donors should go into helping the governments provide better access to credit resources for the business sector. Initially, these resources would provide a means to strengthen the first phase of the "agricultural-industrialization-market" cycle by funding projects for the production of traditional and nontraditional export items. Technical assistance projects should support market studies useful for all the countries; establish informa-

Provide more credit resources for the private sector to complete the cycle of agricultural production, processing and marketing, both in the region and outside

tion systems available to the private sector; conduct technological research on packaging, shipping and storage; encourage an exchange of experiences; and help form region-wide enterprises for collective exporting.

5. Agroindustrial development

A top-priority objective is to finance the reconversion of private agroinaustrial plants and the setting up of new plants 55. The region has had little success with large-scale agroindustrial projects which call for government participation in the production process. Most agroindustrial plants are becoming obsolete and showing signs of wear and tear. Future international assistance should be directed toward helping the private sector with industrial reconversion, modernization and establishing new plants. Similarly, support in the form of technical assistance should be oriented toward: a) regional studies and formulation of projects for agroindustrial reconversion and modernization; b) development of export agroindustry in rural areas, with the participation of small-scale farmers; c) research to solve regional problems in the agroindustrial process.

6. Strengthening plant and animal health services

Harmonizing health methods and standards, in order to encourage exports and avoid restrictions, is a step towards integration 56. Under present circumstances, any additional international assistance in the area of strengthening plant and animal health services for the countries of Central America should be directed at: a) modernizing institutions, always ensuring the participation of the private sector, to make more efficient use of existing investments in infrastructure and equipment, especially in animal health; b) harmonizing health control methods to encourage exports and prevent unnecessary restrictions on intra-regional trade; c) standardizing methods and programs for surveillance, detection, control and eradication of pests and diseases; d) information systems on pests and diseases (prevention, incidence and distribution), legislation, toxic residues and tolerances.

7. Development of border areas

Two-fold approach to border areas: finance investment projects with technical studies arroady complete, and continue prenyestment studies in other strategic areas.

- 57. International assistance and support for this type of project have been limited due to the tensions in the countries in recent years; however, once this situation is resolved, the issue will take on high priority. The following matters need immediate attention: a) financing the impiementation of investment projects for which technical studies have already been prepared, such as the binational Costa Rica/Panama project and the Triffinio Plan; b) consolidating technical expertise that the region has already acquired, to facilitate projects in other border zones.
- 58. These projects will improve living conditions for border populations, groups which are usually poor because they lie far distant from capital cities and major urban centers. Such projects also

make it easier to identify and implement activities on a scale too large for individual countries to take on alone.

- 59. International technical assistance could be helpful in distributing border-zone project formulation activities equitably. Thus all the countries could benefit over the medium term from development of the many international border areas in the isthmus.
- 8. Strengthening and consolidating rural enterprises
- 60. International support in this field needs to be redirected, turning away from past practices by placing greater emphasis on productive matters rather than political concerns. Investments are presently high, but they are insufficient if compared with the size of the rural population. These projects hold tremendous importance from the socioeconomic standpoint because of the particular circumstances in the Central American isthmus at this time. Support for rural enterprises must be maintained and even augmented because the process of market opening can heighten the economic vulnerability of these producers. Moreover, it is important to consolidate advances already made under agrarian reform programs in the region (the isthmus presently has over 5,900 settlements, which are home to 287,700 campesino families who own nearly 2.4 million hectares of land).

The campesino sector requires immediate support because it is economically and socially very fragile

61. In view of the constraints imposed by today's crisis, any additional international assistance should focus on supporting rural development activities based primarily on considerations of economic and social worth, rather than questions of mere government aid. In this connection, one of the best options is the development of selected rural settlements that have the potential to consolidate themselves as truly productive businesses and eventually be cut loose from government institutions. While this approach will improve the situation of small- and medium-scale farmers who have no problems with land ownership, poorer social groups will need specific programs that go beyond mere agricultural production assistance.

New rural development actions should be based on criteria of economic and social profitability

V. ANALYSIS OF INVESTMENT PROJECT PROFILES TO BE SUBMITTED TO THE FIRST AGRICULTURAL SECTOR MEETING OF THE CENTRAL AMERICAN GOVERNMENTS WITH COOPERATING GOVERNMENTS AND INSTITUTIONS

- 62. As was already stated, the governments of the Central American countries, in accordance with the regional strategy for reactivating agriculture, decided, as a first phase, to prepare and carry out high-priority projects contained in eight programs. Each program consists of a regional component and a national component. The regional component provides projects and activities for cooperation among the countries of the region, while the national component contains investment projects from each country.
- 63. The portfolio is made up of 59 project profiles. The 51 investment projects comprise the national components of the programs, while the eight technical cooperation and preinvestment projects are regional components. Most of the latter could be funded with grants or nonrefundable resources.
- 64. A total of US\$788 million will be needed to carry out all 59 project profiles. Of this total, 74.1 percent (US\$584 million) will come through external financing, with the remaining 25.9 percent (US\$204 million) from counterpart resources. Depending on each project, the counterpart resources could arise from various sources: government allocations, private-sector support and contributions from regional organizations taking part in project implementation.
- 65. All the project profiles are presented according to a format containing the following sections: i) frame of reference; ii) project description; iii) organizational structure; iv) cost and financing; and v) analysis. The investment projects underwent a financial and economic analysis using such indicators as IRR, NPV and the B/C ratio, whose results revealed all the projects to be financially and economically sound.
- 66. Background studies are progressing at different rates and will be available in the sectoral meeting to any assistance agencies or governments interested in particular projects. Document 2 gives cost figures in a technical summary for each project, while project profiles can be found in the separate regional program documents (Documents 3 through 10).

Financial and economic studles have been made which show that all the projects are feasible.

Table 2. Financial requirements, by Program and Country*

REGIONAL PROGRAMS	COSTA	EL Salvador	GUATEMALA	HONDURAS	NICARAGUA	PANAMA	NATIONAL COMPONENT TOTAL	REGIONAL COMPONENT TOTAL	TOTAL FUNDING NEEDS BY PROGRAM AMOUNT %	IG NEEDS RAM
1. AGROALIMENTARY DEVELOPMENT	0	26 672.0	13 070.0	28 624.0	38 905.8	0	107 271.8	3 424.2	110 696.0	18.96
2. IRRIGATION, DRAINAGE AND LAND LEVELING	4 731.2		O .	7 280.0	3 630.2	1 006.5	16 647.9	7 258.1	23 906.0	4.09
3. DEVELOPMENT OF BIOTECHNOLOGY	781.5	626.1	626.1	737.4	739.6	744.5	4 255.2	2 277.8	6 533.0	1.12
4. INTRA-REGIONAL TRADE AND EXPORTS TO THIRD COUNTRIES	15 723.1	29 988.2	21 489.9	5916.0	25 205.4	12811.0	111 133.6	4 233.2	115 366.8	19.76
5. AGROINDUSTRIAL DEVELOPIMENT	21 072.5	22 669.8	19513.5	8 192.2	54 695.0	1 790.4	127 933.4	55 392.5	183 325.9	31.39
6. STRENGTHENING PLANT AND ANIMAL HEALTH SERVICES	4 000.7	1.097.7	2 027.5	1 484.3	1 560.3	3 396.5	13 567.0	2 361.0	15 928.0	2.73
7. DEVELOPMENT OF BORDER AREAS**	8 442.8	6 210.0	7 590.0	9 200.0	0	8 442.8	39 885.5	2 962.0	42 647.5	7.34
8. STRENGTHENING AND CONSOLIDATING RURAL ENTERPRISES	18 480.7	٥	16413.7	11 230.0	25 517.7	10 595.0	82 237.1	3 100.0	85 337.1	14.61
TOTAL FUNDING NEEDS BY COUNTRY	73 232.5	87 263.8	80 730.7	72 663.9	150 254.0	38 786.7	502 927 6	81 008.8	583 940.3	100.00
PERCENTAGE	12.54	14.94	13.63	12.44	25.73	6.64		13.67		100.00

• To these needs for external funding should be added US\$16.503 million for a project under the Program for Strengthening and Consolidating Rural Enterprises, presented by the Dominican Republic.

[&]quot; The amounts correspond to two projects: a) Binational Costa Rica-Panama; and b) Triffnio (El Salvador, Guatemala and Honduras)

- 67. Projects need external funding ranging from US\$626,100 to US\$48.8 million. The great majority (62%) need less than US\$10 million, while funding needs for 25 percent of the projects range from US\$10 million to US\$20 million, and only 13 percent need more than US\$20 million.
- 68. Table 2 summarizes external funding needs, by regional program and by country. The regional components of the programs will need a total of US\$81,008,800 in external funds, or 13.9 percent of total external requirements. The Agroindustrial Development Program has a much larger regional component than the other programs because It will create a regional credit fund to finance national-level agroindustries.
- 69. Of all the countries, Nicaragua has the greatest need for financing, as it has had serious difficulty covering the costs of agricultural reactivation. Funding needs are about the same for Costa Rica, El Salvador, Guatemala and Honduras, with Panama needing about one-half this amount.
- 70. A project on strengthening institutional capabilities for harmonizing agricultural policies and projects has been drawn up in order to allow for follow-up on and coordination of regional activities pertaining to the integration and promotion of the sector.

Overall coordination will be carried out by the Coordination Secretariat of the Regional Council for Agricultural Cooperation (CORECA), which will work closely with the Technical Secretariat of the Inter-Institutional Group of the Agricultural Sector (GISA).

The project will have a total cost of US\$6,831,800. It is proposed that the following resources be requested:

- Counterpart contributions, US\$1,602,400; CORECA, US\$864,300; total external financing, US\$4,365,100.
- The resources for this project are to be added to those requested for the project portfolio itself. This project is not included in the costs of any of the regional programs because it covers the entire portfolio of programs and projects.
- 71. Table 3 indicates total costs and external funding needs for each project, organized by regional programs.

Table 3. Total costs and external funding needs for the project portfolio, by regional program (US\$ X 000)

PROGRAMS/COMPONENTS/PROJECTS	COUNTRY	TOTAL	FUNDING NEEDS
1. AGROALIMENTARY DEVELOPMENT		150,650.3	110,696.0
A. NATIONAL COMPONENT		147,050.3	107,271.8
-Full Reactivation of Dairy Activities	El Salvador	27,850.5	26,672.0
-Support for the Development of Food Production in Agriculture	Guatemala	14,377.0	13,070.0
-Fostering Dairy Production and Processing	Honduras	36,015.2	17,906.5
-Agricultural Development in the Jamastran Valley and the Watersheds of the Patuca and Coco Rivers	Honduras	16,779.7	9,852.7
-Production of Bacterins against Hemorrhagic Septicemia and Symptomatic Anthrax	Honduras	1,034.4	864.8
-Livestock Rehabilitation and Agroforestry Protection	Nicaragua	50,993.5	38,905.8
B. REGIONAL COMPONENT		3,600.0	3,424.2
-Regional Committee on Food Security		300.0	294.0
-Management Information on Food Security		300.0	282.0
-Research Services and Transfer of Technology to the Food Industry		300.0	289.2
-Regional Quality Standards for Agroalimentary Products		177.8	165.8
-Reciprocal Technical Cooperation on Food Security		922.2	898.2
-Harmonization of Investment Policies and Food Security Profiles		1100.0	1088.0
-Regional Organizations in the Private Agricultural Sector		300.0	219.0
-Joint Agricultural Input Purchasing Service		100.0	94.0
-Study on the Creation of a Supply Fund to Ensure Food Security		100.0	94.0

PROGRAMS/COMPONENTS/PROJECTS	COUNTRY	TOTAL COST	FUNDING NEEDS
2 IRRIGATION, DRAINAGE AND LAND LEVELING		31,263.9	23,906.0
A. NATIONAL COMPONENT		23,190.8	16,647.9
-Design and Construction of Irrigation Infrastructure in the Region of Barranca, Province of Puntarenas	Costa Rica	9,733.3	4,731.2
-Agricultural Development in the Comayagua Valley: Rehabilitation and Improvement of the Irrigation System of the Las Flores District	Honduras	8,090.0	7,280.0
-Rehabilitation and improvement of Irrigated Agriculture in the Sebaco Valley	Nicaragua	4,070.7	3,630.2
-Rehabilitation of the El Cano, Guarare and La Herradura Irrigation Systems	Panama	1,296.8	1,006.5
B. REGIONAL COMPONENT		8,073.1	7,258.1
-Inventory of Irrigation Projects		50 .0	25.0
-Feasibility Studies and Final Design of irrigation Projects in the Countries		7,500.2	6,750.2
-Harmonization of Irrigation Legislation and Regulations		61.5	61.5
-Regional Training		268.9	268.9
-Regional Executing Unit		192.5	152.5

PROGRAMS/COMPONENTS/PROJECTS	COUNTRY	TOTAL COST	FUNDING NEEDS
3. DEVELOPMENT OF BIOTECHNOLOGY		7,803.0	6,533.0
A. NATIONAL COMPONENT		4,745.2	4,255.2
-Micropropagation for Commercial Production of Plantains and Pineapple	Costa Rica	860.5	781.5
-Micropropagation for Commercial Production of Plantains and Potatoes	El Salvador	698.6	626.1
-Micropropagation for Commercial Production of Bananas and Potatoes	Guatemala	698.6	626.1
-Micropropagation for Commercial Production of Bananas and Pineapple	Honduras	828.9	737.4
-Micropropagation for Commercial Production of Bananas and Plantains	Nicaragua	822.1	739.6
-Micropropagation for Commercial Production of Bananas and Cassava	Panama	836.5	744.5
B. REGIONAL COMPONENT		3,057.8	2,277.8
-Technology Transfer and Investment Promotion Network for the Production of Plants by using Microcomputer Techniques		1,928.9	1,328.9
-Regional Regulations for the Production and Sale of Plants on the Intra-regional Market		52.8	40.8
-Reciprocal Technical Cooperation		586.2	562.2
-Harmonization of Investment Policies		155.5	131.5
-Private Regional Organizations concerned with Plant Multiplication		334.4	214.4

PROGRAMS/COMPONENTS/PROJECTS	COUNTRY	TOTAL COST	FUNDING NEEDS
4 . INTRA-REGIONAL TRADE AND EXPORTS TO THIRD COUNTRIES		151,313.6	115,366.8
A. NATIONAL COMPONENT		146,154.4	111,133.6
-Promoting the Production and Export of Man- goes in the Central Pacific and Chorolega Re- gions	Costa Rica	17,195.1	11,749.8
-Promoting the Cultivation, Processing and Export of Cashew Nuts	Costa Rica	4,948.2	3,973.3
-Melon Production and Installation of Packing Plants in Comalapa	El Salvador	7,761.5	7,360.0
-Promoting the Cultivation, Processing and Export of Cashew Nuts	El Salvador	3,175.3	2,707.2
-Banana Production and Installation of Packing Plants in Lempa-Acahuapa	El Salvador	10,204.0	9,124.0
-Citrus Production and Processing	El Salvador	13,797.0	10,797.0
-Support for Fruit and Honey Exports	Guatemala	21,682.0	19,514.0
-Processing and Cold Storage Facilities for Veg- etable Preservation in Production Centers	Guatemala	2,456.4	1,975.9
-Chilling Plants for Agricultural Exports	Honduras	4,000.0	3,454.0
-Rehabilitating Cashew Plantations in the South- em Zone and Installation of a Nut Processing Plant	Honduras	2,791.0	2,462.0
-Developing Melon Production and Export	Nicaragua	4,494.0	3,172.3
-Rehabilitation of Coffee Cultivation	Nicaragua	34,847.5	22.033.1
Promoting the Production of Nontraditional Export Crops	Panama	18,802.4	12,811.0
B. REGIONAL COMPONENT		5,159.2	4,233.2
Commercial Information Network on Agricultural Products		2,648.0	2,228.0
Infrastructure for Border Customs Facilities		160.6	125.6
Single Border Facility		37.8	31.8
Development of Cold Storage Infrastructure		413.7	324.0
National Agricultural Commodities Exchange		320.6	225.8
Transport Development		<i>7</i> 01.0	605.0
Uniform Incentives and External Trade Policies		124.5	101.0
Coordination of the Regional Program		753.0	592.0

PROGRAMS/COMPONENTS/PROJECTS	COUNTRY	TOTAL COST	FUNDING NEEDS
5. AGROINDUSTRIAL DEVELOPMENT		269,427.1	183,325.9
A. NATIONAL COMPONENT		199,671.9	127,933.4
-Agroindustrial Development of Coconut Palm in the Huetar Atlantic Region	Costa Rica	24,353.8	12,716.2
-Agroindustrial Development of Oil Palm in the Central and Brunca Regions	Costa Rica	12,710.7	8,356.3
-Promoting the Cultivation and Processing of Soybeans	El Salvador	25,916.0	20,666.0
-Promoting the Cuttivation and Processing of Cassava	El Salvador	2,269.3	2,003.8
-Producing and Processing Oilseeds	Guatemala	21,745.2	19,513.5
-Promoting Soybean Cultivation	Honduras	8,531.3	8,192.2
-Promoting Sesame Cultivation	Nicaragua	6,903.2	5.985.0
-Promoting Cotton Cultivation	Nicaragua	94,167.0	48,710.0
-Center for Research and Technology Transfer for Agroindustrial Development	Panama	3.075.4	1,790.4
B. REGIONAL COMPONENT		69 ,755.2	55.392.5
-Regional Agroindustrial Information Network		730.0	603.0
-Analytical Inventory of Agroindustry		44.4	32.0
-Proposal on Harmonization of Policies		172.5	126.5
-Regional Training Program		95.0	65.6
-Quality Control Laboratory Services		100.0	79.5
-Development of Investment Project Portfolios (ails and fats, dairy products, coffee, sugar cane, coca, fruits and vegetables, non-exportable banana production)		4,922.5	3,460.5
-Regional Executing Unit		450.8	325.4
-Rural Agroindustry Development Fund		63,240.0	50,700.0

PROGRAMS/COMPONENTS/PROJECTS	COUNTRY	TOTAL COST	FUNDING NEEDS
6. STRENGTHENING PLANT AND ANIMAL HEALTH SERVICES		31,449.6	15,928.0
A. NATIONAL COMPONENT		28,780.9	13,567.0
-Improving Plant and Animal Health and Quarantine	Costa Rica	7,623.4	4,000.7
-Improving Plant and Animal Health and Quarantine	El Salvador	2,452.7	1,097.7
-Improving Plant and Animal Health and Quarantine	Guatemala	4,942.0	2,027.5
-Improving Plant and Animal Health and Quarantine	Honduras	2,540.6	1,484.3
-Improving Plant and Animal Health and Quarantine	Nicaragua	2,870.3	1,560.3
-Improving Plant and Animal Health and Quarantine	Panama	8,351.9	3,396.5
B. REGIONAL COMPONENT		2,668.7	2,361.0
-Technical and Administrative Coordination		518.2	210.5
-Strengthening of Institutions		142.0	142.0
-Quarantine and Agricultural Emergencies		445.5	445.0
-Diagnosis of Agricultural Diseases and Pests		617.5	617.5
-Disease and Pest Management		637.5	637.5
-Information on Plant and Animal Health		308.0	308.0

PROGRAMS/COMPONENTS/PROJECTS	COUNTRY	TOTAL COST	FUNDING NEEDS
7. DEVELOPMENT OF BORDER AREAS		51,177.5	42,847.5
A. NATIONAL COMPONENT		47,625.5	39,885.5
-Support for Developing the Farming Community in the Trifinio Region	GU-ES-HO	29,000.0	23,000.0
-Support for Agricultural Production in the Coto Brus (Costa Rica) and Chiriqui Viejo (Panama) River Basins	CR/PAN	18,625.5	16,885.5
B. REGIONAL COMPONENT		3,552.0	2,962.0
-Assessment of Twelve Border Areas		747.0	570.0
-Formulation of Development Strategies in Selected Border Areas		498.0	380 .0
-Preparation of Investment Project Profiles		1,245.0	950.0
-Regional Executing Unit for the Development of Border Areas in the Central American Isthmus		1,062.0	1,062.0

PROGRAMS/COMPONENTS/PROJECTS	COUNTRY	TOTAL COST	FUNDING NEEDS
8. STRENGTHENING AND CONSOLIDATING RURAL ENTERPRISES		94,721.6	85,337.1
A. NATIONAL COMPONENT ^o		89,628.6	82,237 .1
-Strengthening and Consolidating Rural Enter- prises	Costa Rica	19,255.7	18,480.7
-Strengthening and Consolidating Agrarian Set- tlements	Guatemaia	18,048.2	16,413.7
-Strengthening and Consolidating Rural Enter- prises	Honduras	13,061.0	11,230.0
-Strengthening and Consolidating Rural Enter- prises	Nicaragua	28,327.7	25,517.7
-Reorganizing Rural Enterprises	Panama	10,936.0	10,595.0
B. REGIONAL COMPONENT		5,093.0	3,100.0
-Regional Training Program		1,435.0	1,069.0
-Development of Investment Projects		560.0	560.0
-Project Follow-up and Evaluation		480.0	480.0
-Regional Information Network		245.0	245.0
-PRACA Secretariat		1,643.0	16.0
-Equipment and supplies and other expenditures		7 30 .0	730.0

^{*}These totals do not include the Dominican Republic project, which would cost US\$24,170,000 and which would require financing in the amount of US\$16,503.

COMPONENTS	TOTAL COST	FUNDING NEEDS	
TOTAL NATIONAL COMPONENT	686,847.6	502,931.5	
TOTAL REGIONAL COMPONENT	100,959.0	81,008.8	
GRAND TOTAL	787,806.6	583,940.3	

	5 1 5		
2 Mints 1	kuc		
		_	
		_	



