

SUPPORT FOR RESTRUCTURING OF FOOD AND AGRICULTURE PRODUCTION

(GU-0070)

EXECUTIVE SUMMARY

BORROWER AND GUARANTOR: Republic of Guatemala

EXECUTING AGENCIES: Central executing agency: the Ministry of Agriculture and Food (MAGA); coexecuting agency: Ministry of the Economy (MINECO)

AMOUNT AND SOURCE: IDB: US\$33 million (OC)
Local contribution: US\$ 9 million
Total: US\$42 million

FINANCIAL TERMS AND CONDITIONS: Amortization period: 20 years
Disbursement period: 5 years
Grace period: 5 years
Type of interest: variable
Inspection and supervision: 1%
Credit fee: 0.75% on undisbursed amounts
Currency: dollars of the United States of America

OBJECTIVES: The objective of this operation is to contribute to sustainably increasing the competitiveness of the food and agriculture sector and thereby bolster its contribution to economic growth, which is necessary to address the problems of poverty in the country.

DESCRIPTION: In order to achieve its objective, the operation is organized into two subprograms; the first supports the government in managing MAGA during its restructuring; the second is a technical-cooperation subprogram to improve the regulatory framework and increase the efficiency of foreign trade.

The support for MAGA, starting with the restructuring of the ministry, stresses areas that produce services with elements of public goods (technology, health, the management of externalities, regulatory frameworks) and includes: (i) the design and implementation of a nonreimbursable competitive financing mechanism for food and agriculture research; (ii) strengthening public plant and animal health services and food safety, which were recently restructured in MAGA; (iii) the design and

implementation of a pilot program of direct support for forestry, compensating landowners in strategic wooded areas for the environmental services (externalities) of sustainable forest management; and (iv) the development of policies and a legal framework for comprehensive management of water resources. The implementation of these components will increase efficiency in allocating resources in the sector, thus contributing to the achievement of the project's objective. The technical-cooperation subprogram to develop trade focuses on contributing to increasing the sector's efficiency in trade through two components: (i) the first is to simplify and computerize the single export window (VUPE), which verifies compliance with export regulations; and (ii) the second supports the administration of import regulations, including the management of tariff quotas, the development of compensatory measures for trade liberalization, and support for the government in negotiating the new agricultural round of the World Trade Organization (WTO).

**ENVIRONMENTAL
AND SOCIAL REVIEW:**

The implementation of the actions proposed in the operation will have a clearly positive impact on the environment and society. The components of the subprogram to support the restructuring and management of MAGA will contribute to correcting shortcomings in the design and/or implementation of environmental policies and standards that have led to the degradation of natural resources and the environment and contributed to rural poverty. The technical support components for developing trade will contribute to providing independent merchants and/or microenterprises with access to the import and/or export business.

RISKS:

Guatemala is in a phase of reconciliation following 36 years of armed conflict. Through the peace agreements signed in December 1996, the government committed, among other things, to implementing an economic policy that will lead to an annual growth rate of 6% for the 1997-2000 period. The project is consistent with and part of the ensuing economic transition and, as such, may be affected by any changes in that policy. This risk is not specific to this project and is currently of little significance. As part of this transition process, the sweeping changes in the State apparatus, particularly the reforms in MAGA, are a risk for project execution, since they may affect its administrative, financial, and technical strength in the short term and thus its overall capacity to carry out the actions proposed in the project. Therefore, the project includes strong

support for MAGA for project execution through the administrative coordination unit and the technical execution units for each component. Resources from the Project Preparation Facility (PPF) will be used to put those execution units into operation prior to the first disbursement of the loan.

At the macroeconomic level, the trend towards the appreciation of the real exchange rate (34% between 1990 and 1997) has a negative impact on the competitiveness of the sector. If it persists, it may reverse or offset the increase in competitiveness resulting from the government actions supported by the project.

BENEFITS:

Guatemala has not yet recovered its 1980 level of per capita GDP. The recession and negative growth rates of per capita GDP for most of the 1980s markedly increased the incidence of poverty. Under these conditions, sustainable economic growth must clearly be promoted in order to address the problems of poverty in the country. The consolidation of trade liberalization and the new institutional and economic incentive framework supported by the operation should contribute to increased production, employment and income in rural areas of the country, particularly in those regions with the highest potential for production, such as the central highlands and the costal plains of the Pacific and the Caribbean. This expansion would primarily involve the production, processing, and trade sectors in those regions and would have an impact on the economic activity of other sectors in the region and beyond.

**ROLE OF THE
PROJECT IN THE
BANK'S COUNTRY AND
SECTOR STRATEGY:**

In order to achieve the goal of 6% annual economic growth established in the peace agreements, Guatemala must (i) consolidate its macroeconomic stability and, in particular, strengthen its fiscal policy by increasing tax collections; (ii) establish an institutional support and incentive system that will improve its competitiveness; and (iii) better target social spending, giving priority to poor segments of the population. The operation will contribute to achieving point (ii) from the standpoint of the food and agriculture sector.

State modernization and competitiveness are focal points of the Bank's strategy in the country (country paper for Guatemala, October 1996, page vi). Both elements are covered by the operation; the former through support for MAGA, which has been restructured as part of broader State reform; and the latter

(competitiveness) is the common denominator found in each and every component of the proposed operation.

POVERTY TARGETING: The proposed investments are not poverty-targeted. However, besides helping to sustainably increase sector competitiveness, at least two of the proposed components may simultaneously further the social objectives of the government's policy. Although the pilot program for direct support for forestry prioritizes regions and areas based on their capacity to produce environmental benefits, populations with a high incidence of poverty who will receive benefits from the program reside in those regions. The competitive technological development fund for food and agriculture will assign priority, among other areas, to environmental issues linked to situations of rural poverty, such as the sustainable management of marginal agricultural areas (which to a great extent are currently cropped with basic grains).

The operation's main contribution to poverty reduction will be through its impact on economic growth. That growth is not only a necessary condition for poverty reduction, but also the overall instrument with the greatest potential to reduce the incidence of poverty in a country such as Guatemala, whose per capita GDP is below the levels achieved in 1980.

**PROCUREMENT OF
GOODS AND
SERVICES:**

International competitive bidding will be required for the procurement of goods and services in amounts over US\$250,000. There will be no works in the program. For the hiring of consultants for contracts in amounts over US\$200,000, announcements must be published in the *United Nations Development Business* (see paragraph 3.15).

**EXCEPTIONS TO
BANK POLICY:**

None

**SPECIAL
CONTRACTUAL
CONDITIONS:**

The conditions precedent to the first disbursement are: (i) entry into force of the ministerial agreement reached by MAGA and MINECO that establishes the operational structure required for program execution and staffing of the administrative coordination unit (UCA) with the minimum personnel agreed upon with the Bank; (ii) entry into force of the financial administration agreement between the Center for International Cooperation for Preinvestment in Agriculture (CIPREDA) and MAGA for program execution; and (iii) fulfillment of the conditions precedent to the first disbursement of at

least one of the program components (see paragraph 3.12).

The first disbursement of the financing for each of the six program components will be subject to prior establishment of the institutional structure and minimum regulations for execution of the respective component, as previously agreed upon with the Bank (see paragraphs 2.13, 2.23, 2.35, 2.40, 2.46, and 2.51).

I. FRAME OF REFERENCE

A. The food and agriculture sector ^{1/}

1. Duality of production, crops, regions, and poverty

- 1.1 Guatemala, with over 10 million inhabitants and a total GDP of over 17 billion dollars (1997), is the largest and most populous economy in Central America. Seventy-five percent (75%) of its population lives in poverty, which is concentrated in rural areas and in indigenous groups. Primary agricultural production accounts for one-quarter of GDP and contributes almost half of employment and two-thirds of exports. This share increases significantly if the production chains stemming from that primary production are taken into account. The productive structure has a dual nature: a modern sector geared towards export crops and a predominantly marginal agricultural sector geared towards the domestic market.
- 1.2 The area made up of the central highlands and the coastal plains along the Pacific and the Caribbean is the country's agricultural area with the greatest potential for production (export crops: coffee, sugar, bananas, fruit, and vegetables). In the case of sugar (the Pacific coast) and bananas (the Caribbean coast), production is predominantly on large farms, which is not the case for coffee and nontraditional exports (fruit and vegetables) where small producers constitute a considerable proportion concentrated in the central highlands (fruit and vegetables) and at the foot of the highlands (coffee). ^{2/} The consolidation of trade liberalization and the new institutional and economic incentives framework supported by the proposed operation should contribute to increasing production, income, and employment in these regions of the country. That increase would involve primarily all the production, processing, and trade sectors in the region and would have an impact on the economic activity in other sectors in the region and beyond.
- 1.3 The products geared towards the domestic market are predominantly basic grains and livestock. Physically, they are less concentrated in specific regions of the country. The main changes in this connection have been a reallocation of resources from dairy and

^{1/} For the purposes of this document, the food and agriculture sector, in the broad sense, includes primary agricultural and forest production and the production chains stemming from that primary production.

^{2/} For further details, see J.C. Martínez, N. Quezada, and P. Martel "Guatemala: Marco de Referencia Sectorial para el Apoyo del Banco a la Reconversión Productiva Agroalimentaria." Nota Técnica RE2/EN2, May 1998, pp. 1-2.

dual-purpose cattle to meat production and vertical integration of the poultry industry.

- 1.4 The production of basic grains is associated with small- and medium-sized producers spread out throughout the country, including marginal agricultural areas, such as the western highlands (in particular the northwest portion of that area) and the northern lowlands (particularly the southern portion, Alta and Baja Verapaz). For an indication of the regions, productive activities, and poverty map, see maps 1 and 2. It is in these regions, which were the most affected by the armed conflict, that extreme rural poverty and the country's indigenous population are concentrated. Underemployment is chronic given the seasonal nature of subsistence agriculture and the low, declining productivity of the land. The agricultural frontier in these areas has been pushed back by felling and burning forests and introducing basic grains and, to a lesser extent, because of extensive livestock-farming on fragile soil and hilly terrain. Given the fragility of the environment and the resulting levels of poverty, these areas require intense government action that includes but goes beyond the food and agriculture sector. Such action must focus on alleviating poverty and achieving greater integration into the national economy (for example, infrastructure, education, and mobility of the rural labor force). Recently-approved Bank-financed projects (see paragraph 1.13) support these government actions, stressing capital formation in these poor regions of the country by developing the capacity for local community management and the social infrastructure.

- 1.5 Guatemala is a forested country, a fact which its indigenous roots recognize in its very name: "Guatemala" means "land of forests" in the language of the Maya. Slightly over one-third of the total surface area of Guatemala is covered with forest. However, the area with forestry potential is over half of the land. The difference between the area with forestry potential and the currently forested land gives an overall idea of the amount of deforestation. The undervaluing of forest resources partially explains this deforestation, since the environmental benefits of forests cannot be appropriated in their entirety by the families or enterprises that control this resource. Appropriate (public) management of the environmental externalities associated with forest resources, such as the preservation of water resources and soil, and carbon sequestration, would reduce deforestation. The pilot program for direct support for forestry proposed in this operation includes government actions to address these problems.

2. Competitiveness, economic growth, and poverty

- 1.6 Primary agricultural production has basically mirrored the general performance of the economy, with marked sluggishness in the 1980s and a recovery of growth starting at the end of that decade thanks to macroeconomic stability and structural readjustment programs.

In the 1980s, Guatemala experienced low or negative rates of per capita GDP growth and consequently an increase in the incidence of poverty. In the late 1980s, with the recovery of economic growth, there was a reduction in the incidence of poverty. ^{3/} However, the economic growth rate (4.1% in 1997) remains below the goal of 6% in the peace agreements and/or the level required for a significant contribution to reducing the incidence of poverty in the country. The economy has not yet recovered the 1980 level of per capita GDP. Under the circumstances, sustainable economic growth must clearly be promoted as a necessary condition for addressing the problems of poverty in the country. Although the agricultural GDP growth rate (2.4% in 1997) reflects a recovery, it is markedly below the growth rate of total GDP. Among the explanations for this performance is the lag in agricultural policy, including institutional changes and trade policy, which has started to be overcome in recent years, particularly in 1997.

3. Key elements of the sector policy

- 1.7 In recent years, Guatemala has made important changes in its food and agriculture sector policy. They include: (i) a reduction in tariff and nontariff barriers in order to allow international prices to be transmitted to the domestic market and to promote national competitiveness; (ii) the elimination of minimum production prices and maximum consumer prices for agriculture and food products; and (iii) the restructuring of the State agriculture apparatus, including divestiture, personnel reductions, and the reformulation of the functions and organization of the main services and decentralized agencies of Ministry of Agriculture and Food (MAGA). The proposed operation will contribute to consolidating and/or deepening these sectoral reforms.
- 1.8 As for trade, the operation concentrates on reducing transaction costs that still prevent more widespread participation in international trade, reduce national competition and competitiveness, and prevent international prices from being transmitted to domestic trade. Contributing to this are: (i) the component for plant and animal health services (section II B2) which, among other things, will revise the regulatory framework and the requirements for prior authorization of imports, based on risk analysis; and (ii) the component to develop food and agriculture trade (section II C), which supports simplifying quota management and simplifying and computerizing the single export window (VUPE).
- 1.9 In 1997 a deep restructuring of MAGA took place, as part of a broader process of State reform that gave direction and legitimacy to the changes made in the ministry and incorporated in the

^{3/} See J.C. Martínez et al. "Elementos para un nuevo "paradigma" operativo agroalimentario en la Región II" Draft, IDB, March 18, 1998, pp. 4-6.

Executive Agency Act (November 1997). Within the framework of this restructuring, the project will support the technological development of the sector, particularly of technologies with elements of public goods, through a financial mechanism to which public and private research institutions will have access (competitive fund, section II B1). The resulting technologies will contribute to sustainable improvements in productivity and the management of natural resources in specific priority areas of the sector. Similarly, plant and animal health services, many of which also have elements of public goods, are being adjusted to the new requirements of trade liberalization and WTO discipline, including the plant and animal health regulatory framework for foreign trade, the quality standards of international markets, and the resulting requirements for food quality control throughout the production chains. The project supports these government actions through its plant and animal health services and food safety component which, besides its impact on public health, will contribute to the objective of sector competitiveness through greater efficiency in food and agriculture trade.

- 1.10 In 1996 Guatemala passed a forestry law to promote reforestation and the management of natural forests, through the forest incentive program (PINFOR). The operation proposes implementing a pilot program for direct support for forestry (section II B3) in addition to the PINFOR national program. This support is justified based on the positive externalities of sustainable forestry practices, the benefits of which cannot be appropriated in their entirety by the families or enterprises that generate them. These externalities consist of hydrological benefits, soil conservation, and carbon sequestration. This pilot program will contribute to public policy on the "internalization" of these externalities of private forest management. Eventual implementation of that public policy at the national level will contribute to a sustainable increase in the competitiveness of the sector through greater economic efficiency in the allocation of resources associated with the externality (for example, land resources). Furthermore, the component will have a social dimension, since poor families inhabit the areas eligible for this forestry support.
- 1.11 The forestry policy is in part a reflection of the fundamental importance given to water resources in the development of the country. Unfortunately, Guatemala does not have a suitable legal and regulatory framework to protect water rights and promote efficient use of water. The operation will support the formulation of a political framework and regulatory system on the use and conservation of this resource (Section II B4). Just like the forestry incentives will promote the "production" of water, the legal framework for water resources will contribute to its efficient allocation for alternative uses.

B. Economic policy and the Bank's strategy

- 1.12 The peace agreements signed in December 1996 include a government commitment to implement an economic policy that leads to 6% annual growth for the 1997-2000 period. To achieve this goal, Guatemala must: (i) consolidate its macroeconomic stability, and in particular strengthen its fiscal policy by increasing tax collection; (ii) establish an institutional support and economic incentive system that leads to increased competitiveness; and (iii) better target social spending, giving priority to poor segments of the population. The project will contribute to the achievement of point (ii) in the food and agriculture sector, through support for key areas in the provision of food and agriculture services in the new MAGA and its contribution to the increase in the sector's efficiency in trade.
- 1.13 State modernization and competitiveness are focal points of the Bank's country strategy (country paper for Guatemala, October 1996, page vi). Both elements are covered by the operation; the former through support for MAGA, which has been restructured as part of broader State reform; and the latter (competitiveness) is the common denominator found in each and every component of the proposed operation.
- 1.14 In addition to contributing to the objective of sustainably increasing the competitiveness of the sector, at least two of the operation's components may simultaneously further the social objectives of the government's policy. The pilot program for direct support for forestry (section II B3) will be channeled to regions assigned priority because of their capacity to produce environmental benefits (for example, water recharge). This environmental prioritization coincides with areas with a high incidence of poverty (see maps 2 and 3). As a result, the program has the capacity to contribute to alleviating poverty in those priority regions. The competitive technological development fund for food and agriculture (section II B1) will assign priority to environmental issues linked to rural poverty, such as the sustainable management of marginal agricultural areas (currently cropped with basic grains). Furthermore, the proposed operation is well complemented by other social and productive Bank-financed projects targeting specific regions and rural poverty. Particularly worthy of mention are the social investment fund (943/OC-GU) and the community development program for peace (968/OC-GU), both of which target rural poverty (the latter also favors the areas most affected by the armed conflict).
- 1.15 Two MIF projects are coordinated with the proposed operation: (i) the first supports small- and medium-sized producers of nontraditional exports (ATN/ME-5911-GU), is being executed by the Association of Exporters of Nontraditional Products (AGEXPRONT), and was approved in April 1998; and (ii) the second supports the agricultural products exchange (Bolsa Agrícola Nacional, S.A.), and

is expected to be approved by the end of this year. In particular, nonreimbursable technical-cooperation project ATN/ME-5911-GU was designed to supplement the program activities using MIF resources. This project focuses on nontraditional exports and targets only at small and medium-sized farmers organized in cooperatives, committees, or groups. The common denominator of the activities called for is to support the incorporation of these groups of small producers into the process of expanding nontraditional exports and include, among others: (i) technological support; (ii) quality control; (iii) drawing up protocols with importing countries; and (iv) access to trade information. The environmental aspects of the operation are linked to two other projects under way: one in the upper basin of the Chixoy River (871/SF-GU) and one in the department of El Petén (973/OC-GU), both of which are contributing to the preservation of natural resources in their geographic areas of influence.

C. Activities by other international agencies in the sector

- 1.16 In April 1997, the government established the Institutional Committee for the Development and Strengthening of Land Tenure (PROTIERRA) with the objective of coordinating government efforts to be carried out as part of the commitments made under the peace agreements to improve campesino access to land resources and titling. As part of PROTIERRA, in May 1997 the Land Fund trust fund was established to finance access to land by landless campesino groups. The World Bank is expected to approve two projects in 1998 (both of which are in the negotiation phase): one to support the Land Fund (US\$20 million) and the other to implement a pilot program to modernize the land registry and records in El Petén (US\$31 million). The latter proposes actions to complement those financed by the IDB through project 973/OC-GU also in the department of El Petén.
- 1.17 Several bilateral cooperation projects have recognized the importance of regularizing land tenure and have given priority to supporting the mapping base, the registry, and ownership records (projects supported by the European Union, France, Germany, and other countries). Japan's technical-cooperation agency is executing projects to support an increase in productivity in areas with small-scale irrigation (US\$16.3 million) and promote the production of basic grains (US\$4.7 million).
- 1.18 The International Fund for Agricultural Development (IFAD) is financing four comprehensive rural development projects that include services to support production, community organization, infrastructure, and the management of natural resources. The projects under way are located in areas with a high concentration of small farmers in el Quiché (US\$10.4 million), Sierra de los Cuchumatanes (US\$17.6 million), and the departments of Zacapa and Chiquimula (US\$14.8 million). The fourth project is still being prepared for the northwest region of las Verapaces (US\$17 million).

The IICA has various cooperation projects with MAGA, including the promotion of livestock-farming, support for fruit growing for export, and collaboration on regional projects. The FAO is providing advisory services on the sustainable management of natural resources and supports forestry in particular.

II. THE PROGRAM

A. Objective

- 2.1 The objective of this operation is to contribute to sustainably increasing the competitiveness of the food and agriculture sector and thereby invigorate its contribution to economic growth, as a condition for addressing the problems of poverty in the country. To this end, technical assistance and investment activities are proposed in the form of an investment loan and technical cooperation with an execution period of five years.
- 2.2 To achieve its objective, the operation is designed to: (i) support the government in managing MAGA during its restructuring, placing emphasis on the ministry's areas that provide public goods; and (ii) improve the regulatory framework for trade development. The proposed project components are described in sections B and C, and their cost and financing are presented in section D.

B. Subprogram to support the restructuring and management of MAGA (US\$29.7 million)

- 2.3 The Executive Agency Act of November 1997 (114-97) broadened MAGA's functions considerably, not only in matters concerning the food and agriculture sector, but also in the sustainable management of natural resources. With MAGA's broadened sphere of activity, the basic guidelines of its institutional policy are to have a highly deconcentrated ministry that: (i) performs strategic and regulatory functions and conducts monitoring and evaluation; (ii) administers regulations; and (iii) provides "public" food and agriculture services directly and/or through the private sector. Within this institutional framework, four components were identified that will contribute to a sustainable increase in the competitiveness of the sector.

1. Competitive Technological Development Fund for Food and Agriculture (AGROCYT, US\$12.5 million)

- 2.4 The decision to develop the AGROCYT fund is based on three elements of the national, sectoral and technological process: (i) the restructuring and rescaling of the Institute of Agricultural Science and Technology (ICTA) as part of the process of modernizing MAGA; (ii) the decision on the part of that ministry to stimulate the development of a technological services market in which both public and private institutions operate; and (iii) the establishment and recent startup of the National Science and Technology Fund (FONACYT), with an operations system similar to that proposed for AGROCYT, but with different objectives. The ICTA remains (despite its restructuring and rescaling) the most

important institution in the food and agriculture technology system in Guatemala. The National Council on Science and Technology (CONCYT) is the main institution in the multisector system for promotion and coordination of the national technological system, of which the ICTA is a part, with sector objectives. FONACYT is headed by CONCYT and managed by the National Secretariat for Science and Technology (SNCT).

- 2.5 Based on these elements, the government is planning to establish a competitive research financing system (AGROCYT), which will provide nonreimbursable resources for partial financing of the operating costs of research. Government agencies and private institutions will have access to the financing, such as the ICTA, universities, private research centers, other nongovernmental organizations, consulting firms, and private food and agriculture enterprises. The Bank will provide the resources for the fund during the five years of program execution. Local counterpart funds will be contributed by the institutions whose research projects are selected by the fund.
- 2.6 The information available on investment in agricultural research by institutions in the public and private research system is fragmented and incomplete. Bearing this in mind, the project team estimated the annual amount of investment in 1998 at roughly 8.5 million dollars, which is roughly 0.16% of agricultural GDP in Guatemala. Investments by the public sector are primarily from the ICTA, the National Forest Institute (INAB), the University of San Carlos, which accounts for 40% of the total, and roughly ninety researchers, mostly from the ICTA (70). Private sector investments include those made by private universities and agroindustrial enterprises. The latter are made directly (for example, banana companies) or through the private institutions they finance (for example, CEGICAÑA). The investments of regional (CATIE) or international (CIMMYT) centers are not included in this estimate. These and other international agencies may compete for AGROCYT funds through strategic partnerships with Guatemalan institutions.
- 2.7 As a result of the AGROCYT financing and the local counterpart contribution to research projects, it is estimated that investment in sector research in Guatemala could increase from 0.16% to 0.20% of agricultural GDP in the fund's third year of operation. Although this increase over the original investment is significant (25%), the resulting level is clearly modest when compared to the average for Latin America (0.5% of agricultural GDP), and even more so when compared with developed countries (2-4% of agricultural GDP). It is estimated that AGROCYT will provide over 10% of the sector's investment in research.
- 2.8 In addition to contributing to the main objective of sector competitiveness, AGROCYT will: (i) promote the allocation of resources to priority areas, particularly in the case of technologies that cannot be privately appropriated (for example,

natural resources management); (ii) diversify the supply of food and agriculture technology to promote greater participation of universities and the private sector in producing technologies that cannot be appropriated; and (iii) promote interinstitutional financing and cofinancing for research. Furthermore, the fund will increase current levels of sector public investment in research and contribute to its efficient allocation to priority areas, based on the criteria of capacity and expertise.

- 2.9 The fund will operate as one of FONACYT's several lines of financing, including financial management, through a specific line from the FONACYT trust fund. Executive management of the fund will be headed by a managerial committee chaired by the Vice Minister of Agriculture. The committee will receive technical and operational support from a management unit and, in addition to the Vice Minister of Agriculture, will be composed of the National Coordinator of the SNCT and three members to be appointed by the Minister of Agriculture from: (i) MAGA; (ii) universities; and (iii) the private food and agriculture production or trade sector. The complementary roles of MAGA and CONCYT in managing the fund are defined in an agreement to be signed by both institutions, the draft of which is available in the technical files of EN2 (as well as the draft AGROCYT operations manual). The management unit will be supported in executing this component by the program's administrative coordination unit (see section III.C).
- 2.10 To set the priority lines of research, the lines drawn up through separate national meetings with broad participation will be used as a basis. Two CONCYT committees organized those meetings in 1996 and 1997: the national Agricultural Committee and the Committee on Land, Ocean, and Space Science, respectively. ^{4/} On this basis, a team of national and international experts from different disciplines, using the framework of the new MAGA policies as a reference, will fine-tune CONCYT's prioritization, reducing the priority lines of research of the CONCYT committees. The results of this process will be transmitted to AGROCYT's managerial committee for consideration and possible approval.
- 2.11 The selection and approval of research projects eligible for AGROCYT financing will be carried out through evaluation by national and international experts. The proposals submitted must fulfill the requirements of acceptability (to be included in the evaluation process); relevance and importance with regard to the priority lines of research; technical design; and economic, social, financial, institutional, and environmental feasibility. It is

^{4/} Representatives from 28 organizations and universities participated in the national meeting of the Agricultural Committee, and over 25 governmental and nongovernmental organizations participated in the meeting of the Committee on Land, Ocean, and Space Science.

estimated that over the five years of execution, AGROCYT will finance approximately 110 research projects.

2.12 The percentage of financing from AGROCYT may not exceed 50% of the operating costs of the research projects, except in the case of research for sustainable management of natural resources and/or linked to subsistence farming (generally technologies that cannot be privately appropriated). In this case, the percentage of financing may go up to 80%. The fund has been defined as an instrument to support sector technology, with an initial period of operations of five years. At the latest, in the fourth year of execution or once half of the research funds allocated to the component are committed, there will be a mid-term evaluation. Its main objective will be to evaluate the operational experience and results of AGROCYT operation and, on that basis, identify adjustments and options for the financial sustainability of the fund.

2.13 Conditions precedent to the first disbursement of the AGROCYT component will be: (i) the entry into force of the agreement between MAGA and CONCYT for the execution of the component, including the establishment of the AGROCYT managerial committee; (ii) approval by CONCYT of the Operating Regulations of AGROCYT, including the model contract that will be used to formalize the financing for research projects; (iii) staffing of the management unit of the component with the minimum personnel agreed upon with the Bank; and (iv) the establishment of a special line of financing under the FONACYT trust fund to manage the component resources.

2. Public plant and animal health services and food safety
(US\$3.5 million)

2.14 The liberalization of markets and WTO discipline require international recognition of the plant and animal health system in Guatemala, including sanitary surveillance, quality control of foods throughout the food and agriculture production chains, and an appropriate regulatory framework for foreign trade. MAGA's new authority in this area include: (i) formulating public policy on plant and animal health services; (ii) promoting and ensuring the implementation of standards, in pursuit of market efficiency and competitiveness; (iii) contributing to the design of foreign trade policies on agricultural products; and (iv) developing mechanisms that contribute to food safety.

2.15 The purpose of this component is to improve MAGA's capacity to exercise its new regulatory mandates and its functions of direct execution and supervision of plant and animal health services and food safety. The supervisory role will be carried out in the case of functions delegated to the private sector. The execution of this component will contribute to protecting agricultural assets, reducing losses from diseases and pests, improving the quality of agricultural products, fulfilling international trade standards,

and thus contributing to the objective of sustainably increasing the competitiveness of the food and agriculture sector.

- 2.16 This component seeks to overcome major restrictions to production, promote techniques that improve the environment and public health, establish the responsibilities of the State, promote an expanded role for the private sector, and enhance the financial sustainability of the services involved. Within the foregoing framework, the specific activities to be carried out under this component are divided into the six subcomponents indicated below:
- 2.17 **Standards and procedures.** This subcomponent is designed to help generate and disseminate regulations, standards, and procedures of the system to prevent, monitor, and control exotic pests and the safety of nonprocessed foods and to support the accreditation of professionals and the reliability of laboratories. This will be achieved through technical support, training, and the provision of equipment, in particular for MAGA's standards and regulations unit (UNR).
- 2.18 **Agricultural quarantine.** This subcomponent is designed to strengthen the system to protect agriculture to prevent the entry into the country of exotic pests or diseases and the spreading of those already in existence to regions of the country where they are not present. This will be achieved through: (i) technical outfitting to supervise and monitor the quarantine actions delegated by MAGA to the Regional International Organization for Agricultural Health (OIRSA); (ii) the incorporation of MAGA into the information network on diseases and pests requiring quarantine, countries affected, and marketing requirements; (iii) the provision of means to facilitate risk analysis of exotic pests and diseases; and (iv) the training of personnel in quarantine procedures and risk analysis.
- 2.19 **Plant and animal health surveillance.** This subcomponent is designed to maintain or improve the favorable plant and animal health conditions in the country, strengthen coordination with laboratories, oversee export inspection, plan and supervise control campaigns, and develop emergency plans, through the activities indicated below: (i) strengthening epidemiological surveillance to establish a modern information system that is integrated nationally and internationally, monitor the national health situation, and fulfill trade agreements, with the support of the Ministry of Health and Welfare (MINSALUD), official and private laboratories, quarantine, agroindustries, and international organizations; (ii) activation of disease and pest control to prepare emergency plans for plant and animal health and carry out simulations, as well as conducting plant and animal health campaigns, in conjunction with organizations of producers, promoters, and accredited professionals; (iii) expanding preinspection and inspection to accredit a greater number of professionals in plant

and animal health precertification and certification, agrochemicals management, and the dissemination of plant and animal health regulations, through closer coordination with the comprehensive program to protect agriculture and the environment (PIPAA), maintained by MAGA with AGEXPRONT, using its experience and benefitting from the support received under MIF project ATN/ME-5911-GU.

- 2.20 **Diagnostic laboratory services.** This subcomponent is designed to provide services efficiently, increasing the demand for them, and ensuring their sustainability by: (i) additional outfitting of central diagnostic laboratories that join, through the MAGA-MINSALUD agreement, the Unified Laboratory for Food and Medicines Control (LUCAM) under MINSALUD; (ii) reactivating five regional diagnostic laboratories, the administration of which will be delegated to professional associations, organizations of producers, universities, or nongovernmental organizations that qualify, in keeping with the Plant and Animal Health Act and the administrative delegation process agreed upon with the Bank.
- 2.21 **Registry and control of inputs for agricultural use.** This subcomponent is designed to assure producers that agrochemicals, pesticides, biological products, and pharmaceuticals are effective, through: (i) computerized control of all enterprises involved and the assessment of laboratories responsible for control, particularly pesticide formulation; and (ii) the inspection of distributors and the dissemination of good management practices by training professionals, experts, producers, and promoters, as well as through education.
- 2.22 **Sanitary quality of unprocessed foods.** This subcomponent is designed to strengthen the regulatory and sanitary control activities of manufacturers of products and foods derived from plants or animals, through: (i) supervision and contributing to those industries that use processing good practices (PBP) and modern methodologies to ensure quality (system for hazard analysis of critical control points - HACCP); (ii) information on sanitary conditions required by the markets and the recommendations of the Codex Alimentarius Commission and other recommendations of importing countries deemed feasible; (iii) the integration of actions with AGEXPRONT and the training of official inspectors and personnel responsible for the plants, with the support of MIF project ATN/ME-5911-GU; and (iv) the accreditation of microbiological and waste control laboratories, as well as the identification of demonstrative industries.
- 2.23 In terms of the program's overall operational structure, the execution of this component will be the responsibility of a technical execution unit (UTE), which will have broad technical autonomy and will be attached to MAGA's standards and regulations unit. The UTE will have support from the administrative

coordination unit (UCA) of the program (see section III.C). The establishment of the UTE, with the minimum personnel agreed upon with the Bank, will be a condition precedent to the first disbursement of this component.

3. Pilot program for direct support for forestry (US\$12.5 million)

- 2.24 MAGA, through the National Forest Institute (INAB), is implementing a National Program for Direct Forest Incentives (PINFOR), consisting of fixed payments per hectare for the implementation of eligible practices for the sustainable management of natural forests and/or reforestation in areas of high forest productivity. Although the instrument introduced through the forestry act has the potential to have a significant economic and environmental impact, there are some operational and design problems that limit its effectiveness. Strict fulfillment of the requirements for receiving the incentives makes it difficult or impossible to assess small and medium-sized plots, disqualifies families who do not hold titles to the land in which they live in the areas involved, and imposes a high transaction cost on the potential beneficiaries.
- 2.25 This component is designed to support the development of a pilot program for direct support for forestry that is separate from but complements PINFOR. The objective of this pilot program will be to increase the private benefits of sustainable forest management, by compensating families, entrepreneurs, communities, and municipalities that manage eligible forested areas through the positive externality of that forest management (for example, "the production of water"). Because of the nature of the externality, these benefits cannot be appropriated by the persons who generate them. The distortion resulting from this externality will be corrected or controlled through the payment of direct support per eligible hectare of US\$55/ha per year in two priority regions. In this way, the pilot program will promote production and protection activities linked to the sustainable management of natural forests in these two priority regions of the Guatemalan highlands. The deforestation of these wooded regions that are strategic because of their environmental services (in the middle and upper portions of the basins) will thereby be reduced.
- 2.26 Although the program objectives are eminently environmental, the vast majority of the population in forested areas lives under the poverty line and, as a result, the program has the potential to further the social aspects of the government's policy. To realize this potential, the program will explicitly introduce the operational requirements needed to provide access to the program for poor families living in the wooded areas involved.
- 2.27 The priority regions were selected based on the population concentration in the basins, their water catchment and supply capacity, and their forest cover. The first region is the area made up of the middle and upper portions of the water basins that

supply water to Guatemala City and other large cities in the central highlands. The second region is composed of the areas that supply water to the large population centers in the departments of Quezaltenango and San Marcos (see map 3).

- 2.28 In its five years of execution, the pilot program would incorporate the sustainable management of 50,000 hectares of natural forests. This area represents 20% to 25% of the forested area in the regions selected. In those regions there are large expanses of woodlands belonging to communities or municipalities, which would be an important link for achieving the environmental goal of covering 50,000 hectares through the pilot program. Data from several studies suggest that in the priority regions there are up to 40,000 hectares of communal or municipal forests. Some of those forests occupy very large individual areas, such as the communal forest of San Francisco El Alto (Totonicapán), which covers 9,000 hectares, and the municipal forest of Quetzaltenango, which covers 14,895 hectares.
- 2.29 Bank financing over the five-year execution period will include: (i) the studies needed to support the INAB in operational aspects of implementing the pilot program; (ii) studies to develop sustainability mechanisms for the program, identifying strategic basins that produce water for municipalities, and consultations to support the implementation of the sustainability mechanisms; (iii) technical support for small owners and communities; (iv) outfitting for program implementation; (v) program promotion and publicity; (vi) the direct supports or payments for forestry; and (vii) program administration and coordination. A program evaluation will also be conducted when 60% of the direct support programmed is committed or, at the latest, in the fourth year of execution. This evaluation will make it possible to document the achievements and hurdles encountered in implementing the program and the lessons learned, for possible use by PINFOR or other future actions of this type. In particular, the results of this evaluation will help to guide the possible expansion of the pilot program (including its continuity in the two priority regions selected) and potential IDB financing for that expansion.
- 2.30 Given the difficulty of quantifying the environmental benefit of the forest, to determine the amount of direct support per hectare, the opportunity cost of keeping the forest standing was used. The proxy of that estimate is provided by the values potentially associated with felling the forest and planting corn (a process that has occurred on large expanses of forest in Guatemala). The calculations result in a sum of US\$55/ha per year for the support, which is consistent with that used by PINFOR in Guatemala and similar programs in other countries in the region (for example, Costa Rica).
- 2.31 There is little information on rural land transactions in Guatemala and still less on native forest land. Given the municipal or

communal tenure of a large percentage of the native forests in the highlands, the changes that would be made in the designation of right of use in these areas, if any, do not enter and are not valued in the formal market. The fragmented information available suggests high variability in the price of natural forest land. This is due, among other factors, to differences in: (i) location and proximity to rivers, communications, and/or urban centers; (ii) plot conditions; (iii) demographic density in the area; and (iv) opportunities for productive use (for example, vegetables-farming is considered of greater value, basic grains, lesser value). Given the above, information from different sources (including the National Land Fund and the INAB) suggests values ranging from US\$1,000 to US\$10,500 per hectare. Given the objectives and level of the support for hectares under the pilot program, it is likely that the price of the forested land that enters the program will fall in the lower end of the range indicated.

- 2.32 To receive the support, the holders of eligible forests that join the program will be contractually obligated to carry out the activities needed to maintain the forest cover on their property. Those activities may include forest protection practices, such as measures to prevent pest infestations, diseases, and fires. The direct forest support contracts will be effective for five years. The beneficiaries will be individual producers, organizations of producers, municipalities, communities, or other legally established organizations that control potentially eligible land in the two priority regions.
- 2.33 The main positive impact on the environment generated by the pilot program regarding the conditions that could exist in its absence are: (i) preventing a reduction in the quantity and quality of the water available for different uses downstream from catchment areas; (ii) preventing a reduction in the recharge of aquifers; (iii) reducing the rate of deforestation; (iv) reducing soil erosion and sedimentation in streams in lower-lying areas; (v) conserving biodiversity; and (vi) contributing to the maintenance of biological corridors in the central and western highlands of Guatemala.
- 2.34 The technical implementation of this component will be the responsibility of a technical execution unit (UTE), which will be attached to the INAB incentives program for development. Among other functions, the UTE will supervise the work of the executing firms, which will hold primary responsibility for the field work under the pilot program, including aspects of promotion, receiving applications for forest support, technical support, and supervision of contracted forest management activities. The executing firms may be private enterprises or legally established NGOs. As in the other components, the UTE will receive administrative support from the program's administrative coordination unit (UCA).

- 2.35 Conditions precedent to the first disbursement of this component are: (i) entry into force of the agreement between the INAB and MAGA; (ii) adoption of the manual of procedures and supervision previously agreed upon with the Bank, including payment mechanisms and model contracts to be signed with the executing firms and eligible owners that participate in the component; and (iii) staffing of the UTE with the minimum personnel agreed upon with the Bank.

4. Technical cooperation for comprehensive water resource management (US\$1.3 million)

- 2.36 The legal and institutional framework in place in Guatemala does not favor the comprehensive management of water or its rational, efficient, and sustainable use. For each use, there are different legal and administrative provisions. Legislation regulates use depending on the form of the water in nature: atmospheric, rain, lakes, springs, and groundwater; the provisions in force stem from the Spanish Water Act of 1879. Different analyses conducted on the status of water resource legislation in Guatemala have concluded independently that the current system does not provide certainty and legal security for permits and concessions for use.
- 2.37 The authority given to MAGA with regard to water resources through Executive Law 114-97 cannot be exercised administratively without first fulfilling the constitutional mandate (article 127) of issuing legal, regulatory provisions on water resources. To that end, MAGA is launching a participatory process of analysis and consultation with the different stakeholders involved, both government institutions and civil society organizations, to formulate a plan for the comprehensive management of water resources. That plan will propose a new political framework and legal and institutional system for water resource management that recognizes its alternative uses and economic value. The purpose of this technical-cooperation component is to support the government in designing and implementing the participatory process to formulate national water policy.
- 2.38 The overall orientation of the plan is based on basic accepted modern principles for managing water resources, including: (i) water is a finite and vulnerable resource that is essential for sustaining life, economic development, and protecting the environment; (ii) the use and administration of water management must be based on an approach that includes the participation of the users and decision-makers at all levels; (iii) water has an economic value in its alternative uses and must be recognized as an economic good. The proposed operation will support the formulation of this plan by financing specialized consulting services in this area, visits to other countries to share experiences of particular relevance to Guatemala, national workshops with participatory discussion, and attendance at international seminars on this topic.

- 2.39 This component will be implemented through a temporary, participatory program to be established through a ministerial agreement, pursuant to the authority conferred upon MAGA through the Executive Agency Act (Decree No. 114-97, Article 27c and 29(2)). This participatory program will be composed of: (i) a coordinating committee (CC), made up of two high-level representatives from institutions in the public and private sectors; (ii) a technical committee (CT) made up of experts from the same institutions represented on the CC; and (iii) a technical management unit financed by project resources, which will be responsible for the technical execution of this component and will receive support from the project's administrative coordination unit for administrative matters, such as the procurement of goods and services. Support will be given by the urban and rural development councils, at the regional, departmental, and municipal levels, to bring together interested civil society organizations and hold events for consultation and discussion of proposals, consensus-building, and making commitments for execution of the plan.
- 2.40 Conditions precedent to the first disbursement of this component will be: (i) entry into force of the ministerial agreement establishing and organizing the component's participatory program; and (ii) staffing of the UTE with the minimum personnel agreed upon with the Bank.

C. Technical cooperation subprogram to develop trade (US\$1.9 million)

- 2.41 This subprogram focuses on contributing to increasing the sector's external trade efficiency, both for exports and imports. To that end, the government's technical capacity to efficiently manage the trade liberalization process and the new round of WTO negotiations will be increased, and technical support will be provided for institutional strengthening of the Ministry of the Economy (MINECO) and to reduce transaction costs in the foreign trade regulatory framework. Although MAGA will participate in and is responsible for the topics identified, institutional leadership on these subjects lies with MINECO. The technical-cooperation topics identified for this subprogram have been grouped into two components, which are described below.

1. Single export window (US\$900,000)

- 2.42 The single export window (VUPE), established in 1988, is a unit of the Ministry of the Economy. Its main function is to "join together the government agencies and private concerns involved in the authorization of export documents." The VUPE has facilitated exports by concentrating all export requirements in one location. This was achieved by reducing: (i) the steps in authorization procedures; (ii) the time required for document authorization; and (iii) the distances exporters must cover. However, it is necessary to further streamline procedures for exporters, decentralize access

and application procedures, and allow part of the proof of compliance to be submitted after export.

- 2.43 The government, through Government Agreement 578-98 of September 9, 1998, delegated the operational management of the VUPE to the Association of Exporters of Nontraditional Products (AGEXPRONT), and established thereunder the electronic export authorization service (SEADEx). SEADEx is to: (i) streamline procedures for exports, in particular by introducing electronic media and remote access; (ii) provide users with information and guidance on the applicable legislation and procedures for exports; and (iii) develop and maintain a data base on exports.
- 2.44 The project will support the VUPE and SEADEx in: (i) simplifying their regulations and reducing to a minimum their requirements in a manner consistent with Guatemala's commitments to the WTO; (ii) identifying, procuring, and installing the necessary equipment and computer programs to expedite the processing of paperwork, including remote (electronic) access to and processing of applications; (iii) designing and implementing a data base on exports; and (iv) providing training to their personnel and orientation seminars to users on implementation and/or use of the new system. All of these activities together will contribute to lowering the export transaction costs and facilitate the entry of new economic agents, including microenterprises, into the export business.
- 2.45 For the execution of this component, a technical execution unit (UTE) will be established in AGEXPRONT that will be headed by the manager of AGEXPRONT. For this purpose, MINECO will sign an agreement with AGEXPRONT, setting forth the specific details necessary for execution of this component.
- 2.46 Conditions precedent to the first disbursement of this component will be: (i) signature of the agreements between MAGA and MINECO, and between MINECO and AGEXPRONT, establishing the conditions under which execution of this component is delegated to AGEXPRONT, including its administrative and financial management, within the framework of the program's operational structure; and (ii) staffing of the UTE, in AGEXPRONT, of the minimum personnel agreed upon with the Bank.

2. Administration of trade regulations and negotiations
(US\$900,000)

- 2.47 To administer the tariff quotas negotiated with the WTO, the Government of Guatemala established the tariff quota administration unit (UDACA), assigned to the Office of Multilateral Economic Affairs (DAEM) of the Ministry of the Economy (MINECO). The DAEM coordinates the inter-agency group established to monitor implementation of WTO agreements. In addition, MINECO's Office of International Trade Negotiations (DNCI) is responsible for lending

technical support to the negotiations in the new agricultural round of the WTO.

- 2.48 Guatemala has activated quotas for six products (of a total of 22 negotiated with the WTO): rice, corn, chicken, beef, apples, and wheat. In a typical quota, imports of a fixed quantity (quota) of an item pay a preferential tariff. Imports above the quota pay a relatively high tariff.
- 2.49 In the framework of the WTO's new round of trade negotiations, Guatemala is preparing its strategy so the liberalization concessions translate into trade opportunities and its food and agriculture sector becomes competitive enough to prosper in an environment of greater liberalization.
- 2.50 Through this component, the operation will support the government in: (i) identifying and developing opportunities to improve the management of tariff quotas in a manner consistent with WTO discipline and the objectives of sector competitiveness; (ii) supplying UDACA, DAEM, and DNCI with computer and communications equipment to administer the quotas and for multilateral trade negotiations; (iii) identifying priority areas of negotiation in the new agricultural round of the WTO; and (iv) exploring other measures to increase the efficiency of trade in food and agriculture in the country.
- 2.51 To execute this component, a technical execution unit (UTE) will be established, headed by the Director of the DAEM. The establishment of that UTE and its staffing with the minimum personnel agreed upon with the Bank will be conditions precedent to the first disbursement of this component.

D. Cost structure and financing 5/

- 2.52 The program's cost structure is summarized in Table 1, which specifies the total cost of each category indicated in the program, as well as the two sources of financing for each of them. The annual timetable for disbursements corresponding to that cost structure is shown in Annex A.III. The itemized budgets of each component can be found in the technical files of EN2.

5/ During negotiations on the loan contract, the borrower expressed interest in reviewing the allocation of resources for this component and the pilot program for forestry support, without affecting the program objectives. Note was taken that Bank policies allow resources to be transferred from one category of financing to another if necessary during program execution, through the Country Office of the Bank.

1. Program financing plan

- 2.53 **Loan.** The Bank will grant the Republic of Guatemala a loan guaranteed by the government in the amount of US\$33 million, from the ordinary capital, for a period of 20 years, with a grace period of five years that corresponds to the program's disbursement period. The other financial conditions of the loan will be those that the Bank ordinarily grants to its borrowers. Bank financing represents 78.6% of the total cost of the program.
- 2.54 **Local counterpart.** The counterpart funding, estimated at the equivalent of US\$9 million, represents 21.4% of the total cost of the program. It includes the equivalent of US\$3.9 million representing the sum of the contributions that would have to be made by the public and private specialized entities that receive financing from the AGROCYT competitive fund for food and agriculture research. The remainder of the local counterpart (US\$5.1) will be financed directly by the government, from the annual budget for MAGA expenses during the program execution period.

Table I: Summary of project costs (in thousands of U.S. dollars)				
CATEGORY AND COMPONENT	TOTAL			
	IDB	LOCAL CONTRI- BUTION	TOTAL	%
I. General project administration				
1.1 Administration and coordination	326.0	100.0	426.0	1.0
1.2 Financial administration	960.0	0.0	960.0	2.3
1.3 External auditing	150.0	0.0	150.0	0.4
1.4 Environmental management and administration	300.0	100.0	400.0	1.0
Subtotal, I:	1,736.0	200.0	1,936.0	4.7
II. Direct costs				
2.1 Support for restructuring and management of MAGA				
2.1.1 Competitive technological development fund	8,440.0	4,010.0	12,450.0	29.6
2.1.1.1 Agricultural research financing	7,400.0	4,010.0	11,410.0	27.1
2.1.1.2 Administration and technical execution	1,040.0		1,040.0	2.5
2.1.2 Plant and animal health services and food safety	2,380.0	1,120.0	3,500.0	8.3
2.1.2.1 Investments	2,110.0		2,110.0	5.0
2.1.2.2 Associated costs	70.0	1,120.0	1,190.0	2.8
2.1.2.3 Administration and technical execution	200.0		200.0	0.5
2.1.3 Pilot program for support for forestry	1,000.0	2,500.0	12,500.0	29.8
2.1.3.1 Direct forestry support	6,438.0	2,500.0	8,938.0	21.3
2.1.3.2 Equipment	97.0		97.0	0.3
2.1.3.3 Consulting services and technical execution	3,465.0		3,465.0	8.2
2.1.4 Comprehensive management of water resources	989.0	275.0	1,264.0	3.0
2.2 TC for the development of trade in food and agriculture				
2.2.1 Single export window	871.0	69.0	940.0	2.2
2.2.2 Administration of trade regulations and negotiations	843.0	75.0	918.0	2.2
Subtotal, II:	23,523.0	8,049.0	31,572.0	75.1
III. Project Preparation Facility (PPF)				
3.1 Costs of the PPF not incorporated in the plans of operation	222.0	0.0	222.0	0.5
Subtotal, III:	222.0	0.0	222.0	0.5
IV. Unallocated				
4.1 Contingencies and cost escalation	2,122.0	131.0	2,253.0	5.4
Subtotal, IV:	2,122.0	131.0	2,253.0	5.4
V. Finance charges				
5.1 Interest	5,067.0	0.0	5,067.0	12.0
5.2 Credit fee	0.0	620.0	620.0	1.5
5.3 Inspection and supervision	330.0	0.0	330.0	0.8
Subtotal, V	5,397.0	620.0	6,017.0	14.3
GRAND TOTAL	33,000.0	9,000.0	42,000.0	100.0
PERCENTAGE	78.6%	21.4%	100%	

III. EXECUTION

A. Borrower/guarantor and executing agencies

- 3.1 The borrower and guarantor for the proposed loan operation will be the Republic of Guatemala. The central executing agency of the operation will be the Ministry of Agriculture and Food (MAGA), with the Ministry of the Economy (MINECO) acting as co-executing agency. MAGA will be responsible for executing the subprogram to support the restructuring and management of this ministerial office, and MINECO will be responsible for executing the technical cooperation subprogram for the development of trade in food and agriculture and will delegate the VUPE component to AGEXPRONT.

B. Central executing agency

- 3.2 The speed and sweeping nature of the changes made beginning in 1990 in the country's economic policy initially exceeded the adjustment capacity of the State apparatus. The structure and functions of MAGA up to 1997 were a clear example of this lag. In that year, the current administration of MAGA designed and implemented a profound restructuring of the ministry, with a view precisely to adapting the institution's functions and structure to the government's new economic policy. This restructuring occurred as part of broader State reform that gave direction and legitimacy to the adjustments made in MAGA and which resulted in the Executive Agency Act (114-97), promulgated in November 1997, which included MAGA. With this legal framework, on May 20, 1998 Government Agreement 278-98 established MAGA's internal regulations. The content of these two legal instruments clearly defines and is the basis for the institutional reform that has been and continues to be implemented in MAGA. They also clearly contain and define the orientations and legitimacy of the functional and operational adjustments made in that ministry.
- 3.3 As part of this process of change, between 1997 and early 1998 significant personnel reductions were made through a voluntary retirement program, divestiture of technical units or services, and the privatization of assets. Likewise, a new organic structure for the ministry was designed, made up of an executive office (minister and three vice ministers) and six management units with substantive and administrative functions: (i) policy and strategic information; (ii) management for development; (iii) standards and regulations; (iv) rural operations; (v) project coordination and external cooperation; and (vi) administration and finance. The decentralized agencies are the Institute for Agricultural Technology (ICTA), which has been restructured; the National Forest Institute (INAB), established under the new law on forestry, with conservation and productive support functions, and the National

Bank for Rural Development (BANRURAL), which is a product of the transformation of the Agricultural Development Bank (BANDESA).

C. Execution structure

- 3.4 The program execution structure is made up of a unit that will centralize the program's administrative and environmental management functions (UCA), and six units generically called technical execution units (UTES) with broad autonomy, through which the technical execution of each component will be decentralized. Of the six UTES, four will be located in MAGA to handle the components of the subprogram to support that ministry; and of the two remaining units, one will be located in MINECO (DAEM) and the other in AGEXPRONT. The latter will cover the VUPE component, expressly delegated to it by MINECO.
- 3.5 The UCA will become part of MAGA's organizational structure and will report to the ministry, through its Project and Technical Cooperation Department. For the execution of the program's environmental and social management plan, the UCA will have a full-time environmental/social specialist for the entire execution period, with program financing. The specialist will have overall responsibility for environmental and social monitoring of the program and will strengthen the environmental policy area (APA) in MAGA's policy and strategic information unit. The UCA will maintain close coordination with MINECO and AGEXPRONT with regard to the execution of the two components that make up the subprogram to support the development of trade. The organizational structure of each of the UTES to be established to execute the different program components is described in sections B and C of chapter II.
- 3.6 In keeping with this decentralized execution plan, and with the objective of facilitating the administration of the program by COF/CGU, plans of operations have been prepared for each of the components (technical cooperation and/or investment). Each plan of operations contains the frame of reference and nature of the component and the operational details needed for its execution (manuals of operations, if necessary, agreements in force or draft agreements required for execution, timetable of activities, breakdown of costs and disbursement schedule, indicative or complete terms of reference, as appropriate, etc.).

D. Financial administration of the program

- 3.7 To carry out the financial and accounting administration of the program, which includes the procurement of the goods and consulting services called for during program execution, the UCA will be supported by the Center for International Cooperation for Preinvestment in Agriculture (CIPREDA) through an agreement to be signed between CIPREDA, MAGA, and MINECO. To facilitate financial execution of the program, a revolving fund will be established according to Bank rules.

- 3.8 CIPREDA was established in 1987, based on a joint memorandum of understanding, by the governments of Guatemala and Mexico, through MAGA and the Ministry of Agriculture and Rural Development of Mexico (SAGAR). Its purpose is to lend support to the preinvestment process in the agricultural sector and achieve greater effectiveness in the investments made in agricultural development projects. At the end of 1988, the content of the joint memorandum was expanded through an addendum to adapt CIPREDA's activities to the new economic policies established by the Government of Guatemala and in response to the Government of Mexico's desire to expand its cooperation in agricultural and rural development.
- 3.9 CIPREDA's Operating Regulations, along with the two aforementioned legal instruments, are the legal and administrative basis under which that entity is currently operating as the financial and accounting administrator of over 25 development projects executed by MAGA with both domestic financing (for example, FONAGRO and FONAPAZ) and foreign financing (for example, from Japan, France, Italy, and Holland).
- 3.10 CIPREDA was recently the subject of an institutional and operational evaluation by consultants, the purpose of which was to support the processing of the financing for a project by USAID. Among the findings of the evaluation, it was concluded that CIPREDA currently has the capacity and the appropriate organizational, administrative, technical, and accounting instruments to suitably serve as the financial administrator of the projects it is administering. Nonetheless, to more efficiently administer new projects in the sector, CIPREDA should strengthen certain specific aspects of its organizational, operational, and technical structure.
- 3.11 After a detailed evaluation of CIPREDA's current efficiency was conducted, it was concluded that in order to support the financial and accounting administration of the proposed program, CIPREDA will need to be strengthened with regard to some of its legal, operational, and control instruments and the training of its technical and administrative personnel in Bank standards and procedures for procurement and the selection and hiring of consulting services. The operational strengthening of CIPREDA will be financed by the program's PPF resources. Through the strengthening of CIPREDA, the Bank will have lent the country important support to increase the specialized technical capacity of the government to execute development projects in the country's agricultural sector (particularly with regard to the administrative, financial, and accounting management of those projects).
- 3.12 To implement this operational structure of the program and complete elements of the plans of operation, there is financing for a PPF that focuses primarily on ensuring fulfillment of the conditions of

the program. The conditions precedent to the first disbursement of the financing will be: (i) entry into force of the ministerial agreement between MAGA and MINECO establishing the operational structure needed to execute the program and staffing of the administrative coordination unit (UCA) with the minimum personnel agreed upon with the Bank; (ii) entry into force of the financial administration agreement between CIPREDA, MAGA, and MINECO to support the UCA in program execution; and (iii) fulfillment of the conditions precedent to the first disbursement of at least one of the program components. Both personnel and operating costs of the UCA and UTEs will be covered by program resources during the corresponding execution period. The itemized budget of UCA expenses for that period is available in the technical files. An estimated 30 professional/weeks from the administrative budget will be required annually for program administration by the Bank.

- 3.13 The content of the agreement referred to in subparagraph 3.12(ii) must reflect, among other requirements, that: (i) CIPREDA will establish a specialized unit in its organizational structure to administer the program resources with at least four full-time administrative and accounting staff members, with the necessary professional experience; (ii) the program administration will receive comprehensive logistical support for management, supervision, and control from CIPREDA's overall organizational structure; and (iii) in return for its financial and accounting administration of program resources, CIPREDA will receive remuneration not to exceed the equivalent of three per cent (3%) of the amounts disbursed from the program resources.

E. External auditing of the program

- 3.14 The program's financial statements will be audited annually, throughout the entire disbursement period, by a firm of independent public accountants acceptable to the Bank, to be hired by the central executing agency. A contractual clause to that end will accordingly be included in the loan contract, pursuant to the respective Bank policy. The funds allocated to cover the cost of those professional services will be covered by program resources, as indicated in the itemized budgetary breakdown of costs in Annex II.

F. Procurement of goods and services

- 3.15 Procurement of all goods and services, including the consulting services to be financed using program resources, will be carried out following the procedures agreed on with the Bank and set forth in the loan contract. International competitive bidding will be required for the procurement of goods in amounts equal to or greater than US\$250,000. There are no works in the program. For the awarding of contracts for consultants in amounts equal to or greater than US\$200,000, an announcement must be published in the *United Nations Development Business*.

IV. FEASIBILITY AND RISKS

A. Environmental and social feasibility of the program

- 4.1 Implementation of the activities proposed in the operation will have a clearly positive impact on the environment and society. The components of the subprogram to support the restructuring and management of MAGA will correct shortcomings in the design and/or implementation of environmental policies and standards that have lead to the degradation of natural resources and the environment and contributed to rural poverty. The technical support and trade development components will help independent merchants and/or microenterprises gain access to the import and export business.
- 4.2 The proposed measures for strengthening the environmental policy area (APA) in MAGA's policy and strategic information unit (UPIE) will contribute to the formulation of feasible social and environmental sector policies. With the support of international and national specialists to be hired under the program, MAGA will prepare its strategic environmental and social management plan for the food and agriculture sector, in coordination with other State institutions involved in environmental management and the management of renewable natural resources. Institution of the procedures for assessment of the environmental and social impact of the projects to be carried out by MAGA will contribute to improving the ministry's performance of the mandates conferred upon it by law to protect and improve the environment and with regard to the peace agreements. The proposed activities to train MAGA officials will allow the ministry to begin to exercise its authority in the environmental and social management aspects stipulated in its internal regulations (Government Agreement 278-98).
- 4.3 AGROCYT includes specific topics on the management of natural resources and socioeconomic issues among its priorities. The fund also considers social criteria for the eligibility and selection of research projects, including ethnicity, gender, and socioeconomic bracket. ^{6/} According to the procedures included in the fund's manual of operations, a specific social impact study can be requested from the research applicants that includes mitigating measures for use when necessary. Besides these socio-economic evaluation criteria for research proposals, an increase in the weight given to projects of consortia of producers or entrepreneurs and those that benefit geographic areas with low rates of human

^{6/} Twenty percent of the weight of the evaluation of proposals will be for economic and social factors, including: economic feasibility (8%), social feasibility (4%), distributional impact (2%), contribution to achieving national goals (3%), and regional, departmental, or local impact (3%).

development, social exclusion, or the participation of women will be considered.

- 4.4 Since AGROCYT's priority lines of research will include issues pertaining to the management of natural resources, the component is expected to contribute to generating innovative practices for the sustainable use of those resources. The procedures in the fund's manual of operations include criteria for determining the need for environmental impact assessments of the research projects. These criteria will be part of the eligibility and selection criteria for the projects to be financed. 7/
- 4.5 The actions proposed in the component for plant and animal health services and food safety will strengthen MAGA in its implementation of the standards and procedures needed to control the registration, import, formulation, distribution, and inappropriate use of chemical and pharmaceutical products for agriculture and ensure the safety of products for national consumption and export. While these measures will contribute to reducing health risks, optimal, selective use of pesticides will help reduce soil, water, and air pollution.
- 4.6 The expansion of coverage of and access to public plant and animal health services will provide opportunities for producers traditionally excluded from these services, enabling them to reduce plant and animal health risks and reduce or prevent the rejection of Guatemalan products by importing countries and the resulting economic losses. The activities to promote proper management of pesticides will also contribute to a reduction in cases of poisoning of users and consumers of those products.
- 4.7 The pilot program for direct support for forestry will create income opportunities for small- and medium-sized owners/occupants of forested land in the upper basins, providing alternatives that are environmentally better suited to their current agricultural practices, many of which are characterized by marginal economic yields and by being environmentally harmful to forest land. The environmental aspects of this component will contribute to the conservation of natural forests in the upper and middle basins that store surface water for domestic, agricultural, and industrial use. They will also guarantee the maintenance of the other environmental services provided by the forests, including the recharging of aquifers; protection against flooding, soil erosion, and sedimentation of bodies of water; carbon sequestration, and sheltering of the biodiversity.

7/ Twenty percent of the weight of the evaluation of proposals will be for environmental protection factors: the level of environmental risk (9%), effectiveness of palliative measures (6%), and the capacity of the agency to detect/mitigate negative impact (5%).

- 4.8 The process proposed for implementing the plan for comprehensive management of water natural resources will involve all sectors of the population and governmental and nongovernmental institutions with mandates and/or interest in these resources. The new framework will be consistent with similar legislation and regulations, in keeping with international standards on this subject, including the equitable supply of resources to all sectors of the population, protection of human health and the standard of living.
- 4.9 The actions proposed in the technical cooperation subprogram to develop trade in food and agriculture include measures for social inclusion. The component on administration of import regulations includes studies of measures that would provide independent merchants, such as microentrepreneurs, with access to the market. The single export window will facilitate export procedures, formalities, and costs to help small-, medium-, and large-scale producers and enterprises. The links with the regional offices of the trade information systems and electronic processing will make these services more accessible to producers with limited resources.
- 4.10 Regarding the CESI/TRG requirements, under point 3(1) of the minutes from its meeting 11/98, the operation's environmental and social management plan includes a program to monitor the profiles of participants in/beneficiaries of the proposed activities, particularly in the three investment components. During the preparation of the project, a monitoring program was identified whereby periodic evaluations are done of ethnic, gender, and socio-economic indicators by geographic location. The scope of the components' activities will be verified through annual reports and midterm evaluations, thus maximizing their scope in terms of social and economic inclusion and, in the case of the midterm evaluation, making it possible to adjust actions based on lessons learned from the experience.
- 4.11 The operation's environmental and social management plan includes the strengthening of MAGA's environmental policy area (APA), which is to conduct a program to monitor a series of environmental and social indicators to evaluate the scope of the actions proposed in the three investment components. The forms and procedures for applying for resources under AGROCYT will include criteria to assess the environmental impact, which must be examined in the final reports of each research project. The follow-up on implementation of the fund's environmental procedures, and the analysis of the final reports of the respective projects, will provide the basis of the component's environmental management and monitoring. Under the public plant and animal health services and food safety component, plans are to monitor: (i) the records of the PLAGSALUD program of the Ministry of Public Health and Social Assistance (MINSALUD) on the number of cases of pesticide poisoning; (ii) the records of the analytical laboratories on the detection of toxic waste in food and agricultural products; and

(iii) the records of AGEXPRONT on the number, category, and reasons for nontraditional Guatemalan products being rejected by importing countries. The analysis of these records/indicators will help to evaluate the scope and environmental impact of the proposed plant and animal health control actions.

B. Technical feasibility

- 4.12 The competition mechanism proposed for AGROCYT will improve the quality and targeting of food and agriculture research at the national level. Because of the competitive nature of AGROCYT and using the technical-quality criteria for project evaluation, funds will be allocated to the most suitable organizations and the best research projects, within the priority areas.
- 4.13 The success of the pilot program for direct support for forestry will depend on the program's impact on maintaining the forest cover in the regions selected, thus preventing the negative effects of deforestation. Since the environmental value of forests is not reflected in the market, the direct support for forestry serves as a mechanism to compensate for what the market does not do, thus making it possible for owners to take the measures needed to sustainably manage their forests. The support is a standard amount per eligible hectare, in order to minimize operational and discretionary problems. The amount is an approximation arrived at by estimating the opportunity cost of keeping the forest standing. The program plans studies and consultations to develop mechanisms that make the support financially sustainable; an example might be possible contributions from the different beneficiaries of the forestry environmental services. Regarding the technical aspects of the management practices, technology has been developed in various research centers in the region, such as the Centre for Training and Research in Tropical Agriculture (CATIE), the Centro de Manejo, Aprovechamiento y Pequeña Industria Forestal [center for forest management, use, and small industry] (CEMACIP), and universities. These technologies have been tested in Guatemala.
- 4.14 As part of MAGA's restructuring, the standards and regulations and rural operations units responsible for the plant and animal health area, have basic staffing, which will be bolstered by early 1999. Although these professionals have experience, they will be trained to address the concerns of producers and agroindustry. Comprehensive epidemiological knowledge will make it possible to consolidate actions, fulfill international commitments, and negotiate with technical and scientific backing. It will also show that the country is free of various plant and animal health problems, which will make it easier to market products. Integrating MAGA's central diagnostic laboratories with LUCAM will ensure they operate at full capacity. However, the technical calibre of these laboratories in certain areas will need to be improved through consulting services and fellowships. There are also private laboratories that have the personnel and equipment

needed to be accredited, particularly in product analysis and control. Professional associations, universities, and organizations of producers are also interested in supporting and participating in the delegated administration of the regional laboratories. This will be done through a process already agreed upon, which includes promotion, selection of groups, rehabilitation of facilities, and advisory services on analysis methods and administrative procedures by LUCAM.

- 4.15 Integration of actions at the central level with those in the regional departments will be guaranteed through the technical unit and continual monitoring of the actions, which, in addition to surveillance, will include supervision of expenditures and the use of pharmaceuticals and pesticides, thus reducing environmental pollution and making marketing and public health safer and more secure. With the WTO Agreement on the Application of Sanitary and Phytosanitary Measures, the experience of the North American Free Trade Agreement (NAFTA), and regional integration, the private sector is aware of the need for inspection and quality control systems, and the need to cover the costs of those services. There are qualified professionals in private practice with experience in control and inspection programs who are willing to be trained in specific areas prior to accreditation. OIRSA is supporting execution of the agricultural quarantine subcomponent, and the Animal and Plant Health Inspection Service (APHIS) and the Food and Drug Administration (FDA) are willing to collaborate with the component both on surveillance and with PBP and hazard analysis critical control point (HACCP). There is also support from the Food and Agriculture Organization (FAO) for preventing exotic diseases, and from the Pan American Health Organization (PAHO) and the Pan American Institute for Food Protection and Zoonoses (INPPAZ) for quality control and product analysis and controlling diseases that affect human health.

C. Institutional and financial feasibility

- 4.16 From an institutional standpoint, the program is geared to making MAGA and MINECO effective instruments in the provision of support services to private sector institutions so they can increase their productive capacity and competitiveness in both domestic and foreign markets. The institutional evaluation of the MAGA found that it is legally and institutionally capable of serving as the program's central executing agency. Similarly, MINECO and, as expressly delegated by the ministry, AGEXPRONT have the institutional capacity to jointly carry out the two technical cooperation components for the development of trade, of lesser financial importance. These institutions have said that they can coordinate the execution of the planned activities through the UCA, which will be established under a ministerial agreement concluded between the two offices.

- 4.17 As a private association that represents nontraditional exporters in Guatemala, in recent years AGEXPRONT, as delegated by MINECO, has been providing single export window services for exporting enterprises in the textile sector, and in the process has gained positive and efficient experience in this area. It was because of this experience and other factors that MINECO decided to delegate full operational management of the VUPE to AGEXPRONT. This agency also has experience managing Bank projects, since it is the executing agency of MIF-financed project ATN/ME-5911-GU.
- 4.18 MAGA and MINECO are able to execute the program basically because they both have, within their current organizational structures, units whose functions are directly related to specific nature of the various components of the program. Furthermore, these units will be strengthened for execution of the components (through the UTEs), by adding more human resources, equipment, and funding for operational and advisory expenses.
- 4.19 For that purpose, as described in section C of chapter III, an institutional and operational structure is planned to execute the program. It will function for the duration of the disbursement period and with jurisdiction in MAGA and MINECO. That structure will have two levels: (i) a decentralized operational-technical level for the technical execution of each component; and (ii) a centralized operational-administrative level for the program's administrative requirements as a whole. Program resources will provide the two levels of this structure with qualified technical and administrative personnel and equipment and will cover the expenses and the appropriate standards of operations, as well as CIPREDA's advisory services. The Bank's evaluation of CIPREDA, outlined in section III.D of this document, concluded that CIPREDA had the capacity and the appropriate organizational, administrative, technical, and accounting instruments to serve as the financial administrator of the projects it is administering. In any event, to reinforce its capacity to administer the program, specific aspects of its organizational, operational, and technical structure will be strengthened through the operation's PPF.
- 4.20 The final design and launch of this structure by the program's executing agencies, will be required under the Bank contract as a condition precedent to the first disbursement of the loan. The program's institutional and operational feasibility assumes that the aforementioned structure will be actively operating throughout the execution period.
- 4.21 The program's financial feasibility is predicated upon it having all financial resources deemed necessary to execute its various components. For that purpose, as the operation was being prepared, calculations were made for the expenditures budgeted under each program component, including contingencies and cost escalation.

- 4.22 Of these program-related costs, 78.6% are to be financed by the Bank and 21.4% by the local counterpart. Therefore, their financing is deemed reasonably feasible. In fact, 54.7% of the local counterpart financing will come from the central government's fiscal revenues. Therefore, the amount corresponding to this percentage must be included, in keeping with the figures in the annual timetable of disbursements projected for the program, in the general budget of expenditures of the MAGA and the MINECO. The other 45.3% of the local counterpart will go toward execution of the AGROCYT competitive fund component and be contributed by the public and private institutions that receive the fund's financing and by AGEXPRONT in the case of the VUPE component.

D. Economic feasibility

- 4.23 One of the reasons given in section II.B.1 of this document for establishing AGROCYT in Guatemala was that investment in research in the food and agriculture sector was low for what the sector contributed to the GDP. The rate in Guatemala (0.16%) is less than one third of the average for Latin America (0.50%). Most of the research to be funded will result in technologies that cannot be appropriated privately. As a result, state investment is needed to develop them (although they could be developed by the private sector using fiscal resources). The other element that justifies this component is the high economic rates of return that historically have been shown and documented in the research literature in the sector. Finally, the competitive access mechanisms suggests that, within national priorities, the best research projects will be selected, thus increasing the probability of a high rate of return on this component's investment.
- 4.24 The economic feasibility of the plant and animal health activities is analyzed through the social return on the investments in the component. With moderate achievement of the component's physical goals, society will profit from the planned investments, obtaining an IRR of 39% and a NPV of US\$5.5 million, at a discount rate of 12%. The itemization of the estimates has been included in the component's technical annex. The quantifiable benefits, however, stem from fewer losses and greater productive efficiency, both of which help accomplish the program's objective of making the food and agriculture sector more competitive.
- 4.25 Estimates are that vaccinating another 60,000 pigs reduces the risk of mortality in 3,000 animals. This translates into roughly US\$357,000 six years into the program. In addition, the planned 3% reduction in the incidence of brucellosis and tuberculosis in specialized dairy herds and on dual-purpose farms would generate annual profits equivalent to US\$558,000 by preventing bovine abortions and increasing milk production. In agriculture, the change realized by promoting efficient use of pesticides to control whiteflies has been quantified, and represents a savings in annual production costs of US\$259,000, using the export melon crop as a

representative example of the impact. Also considered was the benefit of controlling the Mediterranean fruit fly, since this would enable exports to be sent to areas declared fly-free. This benefit was quantified based on the lower freight rates to traditional ports in the southern United States, as opposed to ports in the north where access is not restricted because of fruit flies. The difference in these freight rates reflects the program's benefits (US\$563,000 in year six). Another result of controlling the Mediterranean fruit fly could be the elimination of the treatments that enable fruit to be exported to areas where the presence of the fruit fly is confirmed, using special procedures such as hydrothermal treatments. If areas can be declared fly-free, the cost of the treatment would be saved; using mango exports as a basis, the savings would be US\$1.3 million in year six.

- 4.26 Conceptually, the benefits of maintaining the forest cover in the upper and middle portions of the basin should be evaluated based on the water function of the forest and the other environmental benefits it produces, such as protecting biodiversity, carbon sequestration, and erosion prevention. In the case of water benefits, one environmental benefit is the difference in the water recharge and water regulation between an area with forest cover and an area without adequate cover. An upper/middle basin protected by natural forest reduces the maximum flow during the rainy season, increases and prolongs the minimum flow during the dry season, and lets water with fewer sediments drain. Measuring just the physical impact of these environmental benefits requires long-term scientific research. In Guatemala, research is under way, financed by CONCYT, that should begin to quantify, in specific cases, part of this physical impact. In addition, the pilot program provides for a water study comparing micro-basins with and without (or with little) forest cover. In any event, the benefit of the additional water received by beneficiaries downstream of natural forests is an externality that can not be appropriated by forest owners.
- 4.27 Given the difficulty of quantifying these benefits, to determine the amount of direct support per hectare, the opportunity cost of keeping the forest standing was used. The resulting value compared favorably to levels of support in similar programs in Costa Rica and to the water benefits of reforestation from the Bank-financed "environmental program" project in Colombia (774/OC-CO and 910/SF-CO, 1993).
- 4.28 The opportunity cost was approximated using corn as an alternative crop to forests (basic grains, and corn in particular, have been prevalent in pushing back the agricultural frontier (deforestation) in Guatemala). Using available data in the INAB, the resulting value of the opportunity cost was \$55/ha, which is the level used for the support. The "environmental program" project estimated the net present value of water benefits and reduced sedimentation from reforestation in Colombia at \$80/ha. Given the data used for this estimate (benefits begin several years after planting, the water

benefits are valued using only the value of rural water and only during two summer months), the comparable value for Guatemala will likely be much higher, since the environmental benefits of preventing deforestation (externality) begin immediately; the water benefits are obtained for a period of over two months a year, and they are valued primarily in urban centers, where the value of water is greater than in rural areas.

- 4.29 The other reference used is from Costa Rica, the site of a program similar to that in the pilot program and where US\$50 per hectare per year is paid for forest protection. The program, called *Certificado de Protección del Bosque*, prioritizes important areas for protecting water resources, biodiversity and, among other areas of influence, protected wild areas. The opportunity cost will go down and the environmental benefits will increase the farther the holdings in question are from the current agricultural frontier (for example, towards the upper reaches of the basin). Thus, the plan used to determine the amount of support per hectare provides greater incentive to eligible areas and owners in areas where the environmental benefits are greatest. Given the foregoing, the conclusion was that the environmental benefits of the program's direct support would very likely exceed the opportunity cost of keeping the forest standing (used to quantify the uniform amount of support).

E. Risks

- 4.30 Guatemala is in a period of reconciliation following 36 years of armed conflict. Through the peace agreements signed in December 1996, the government committed itself, among other things, to implementing an economic policy that would lead to an annual growth rate of 6% for the 1997-2000 period. The project is consistent with and part of the ensuing economic transition and, as such, may be affected by changes to that policy. This risk is not specific to this project and is currently of little importance.
- 4.31 As part of this transition process, the sweeping changes in the state apparatus, particularly the reforms in MAGA, pose a risk for project execution, since in the near-term they could affect its administrative, financial, and technical strength and therefore its overall capacity to carry out the actions proposed. Therefore, the project includes strong support for MAGA for project execution through the administrative coordination units and the technical execution units. Resources from the Project Preparation Facility (PPF) will also be used to put those units into operation prior to the first disbursement of the loan. At the macroeconomic level, the trend towards the appreciation of the real exchange rate (34% between 1990 and 1997) has a negative effect on the sector's competitiveness and, if it continues, could reverse or offset any improvement in competitiveness brought about thanks to project-supported government measures.

- 4.32 AGROCYT's competitive fund is consistent with both the scientific and technological policy promoted by CONCYT and the food and agriculture sector policy being implemented by MAGA. Therefore, no policy- or priority-related incompatibility is anticipated, or that the high priority that both agencies place on the establishment of a competitive line for allocating resources for food and agriculture research will be questioned.
- 4.33 The risks of the fund have to do with whether there will be sufficient demand for financial resources for research, and with the mechanism for operating the competition system. As to the first risk, the potential demand for financing was estimated based on detailed interviews with the main research agencies in the country, each of which reported the number of projects it estimated it would present to the system and their likely amount. As for the second risk, the SNCT, which will operate the AGROCYT line, has acquired considerable experience in receiving, evaluating, and allocating resources in the competitions for the FONACYT lines, and is showing satisfactory operational capacity.
- 4.34 Another element of risk in AGROCYT's operational structure stems from the fact that it will be managed jointly by two agencies, each of which answers to a different organ: the Ministry of Agriculture and Food (MAGA) and the SNCT, which is a unit attached to the Office of the Vice President of the Republic. This type of situation always creates opportunities for potential misunderstandings. The stages covered to date and the design of the component's operational procedures ensure that these risks will be minimal. Both the Ministry and the Secretariat have voluntarily taken on the tasks and responsibilities corresponding to each of them in this regard. There have been negotiations between the two and an agreement has been prepared that spells out their respective rights and authority. The two parties have also agreed to a budget of operations. Moreover, the design of the component assigns completely different functions to the two agencies. MAGA takes the technical and political lead, particularly through its role on the managerial committee of AGROCYT (for example, research priorities) and by nominating the manager of the technical management unit. The SNCT undertakes financial management of the fund, through the trust, uses proven administrative procedures, negotiates and signs contracts, makes disbursements against those contracts, and supervises their performance.
- 4.35 In the plant and animal health component, the process of decentralizing plant and animal health surveillance and quarantine protection actions that OIRSA will handle, rely on the fact that the central and regional diagnostic laboratories will put into operation properly. Failure to do so on time and in the correct way would delay achievement of the component's goals. To deal with this situation, in addition to investments made to repair facilities and for technical training, delegating the

administration of the infrastructure will be done via a swift process.

- 4.36 The integration process with Honduras, El Salvador, and Nicaragua, which features, among other aspects, the free flow of animals, plants, and products across Guatemala's southern border, could affect the plant and animal health situation and, as a result, the program's goals. The execution of this component, particularly the quarantine and surveillance, will minimize this risk and deal with potential emergencies.
- 4.37 One of the main risks to the pilot program for direct support for forestry is the demand from individuals, communities, families, or enterprises that control natural forests in eligible areas for access to the program. This risk has two sides; the first has to do with the level of support per hectare and whether or not sufficient incentive is being provided to encourage potential beneficiaries to join the program; the second has to do with the level of the transaction costs for that access and the operational capacity to implement (and disseminate) the program.
- 4.38 The (uniform) level of the support is considered to provide sufficient incentive to promote demand for the program, particularly in the upper reaches of the basins involved. Regarding operational capacity, a promotional and publicity plan will be developed and executed in the priority areas; executing agencies with experience in rural development and forestry projects will be selected; strategic areas in which to focus the program's efforts and resources will be identified; and technical assistance will be provided to small land owners and communities. Furthermore, the program will supervise the work of the executing firms and communities and will take the necessary measures if problems in execution are detected. Since the pilot program will begin its activities roughly two years after PINFOR, the experience of that institution will provide greater dissemination of forestry support, facilitating the initial work in the pilot program's areas.
- 4.39 As for transaction costs and operational capacity for implementation, there are also elements that tend to minimize this risk. The transaction costs are lower than those for the national PINFOR program. For example, one important limitation of PINFOR is the requirement that the property be registered in the property records office. The pilot program will accept a wider variety of documents to authenticate land tenure, which will be defined in the manual of procedures and supervision. This operational procedure will make the program more accessible for beneficiaries of all kinds, especially in particular small- and medium-sized owners and communal forests with no record of ownership.

LOGICAL FRAMEWORK
PROGRAM TO SUPPORT THE PRODUCTIVE RECONVERSION OF FOOD AND AGRICULTURE IN GUATEMALA
(GU-0070)

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
<p>the competitiveness of the food ure sector and the contribution r in Guatemala to economic e gross domestic product and to isms to ensure environmental y in the long term.</p>	<p>The institutional support and economic incentives developed through the program increase the competitiveness of the Guatemalan food and agriculture sector and its contribution to the country's economic growth. The average annual rate of growth of the agricultural GDP during the project's execution period exceeds the historical variable rate for 1987-1997.</p>	<p>Annual statistical bulletin published by the Bank of Guatemala.</p>	<p>The domestic macroeconomic environ being consolidated with a framework appropriate policies, and the incentive programs for competitiveness are bei maintained in an ongoing manner to i the productivity of the food and agricu sector in Guatemala. The trend toward appreciation of the exchange rate retu normal, thus facilitating the competitiv the sector. The financial resources re the food and agriculture sector for cap formation are available through mecha the national financial system.</p>
<p>increased capacity to itively produce technology in the . To consolidate and deepen rms in MAGA to allow for greater y in the provision of public and animal health services. To the positive externality of water rent uses with the management al forests and to produce with ct support for forestry mental externalities with isms identified to be paid by the f water below natural forests. mental management will be d with the adoption of a national policy for the comprehensive ement of water resources.</p>	<p>A. The investment in agricultural research increases from 0.16% to 0.20% of the sectoral GDP. The participation of nongovernmental agencies increases in producing technology that can not be appropriated. The requirements of the sanitary and phytosanitary measures agreement of the WTO are addressed; 1,200 dairy farms are freed of brucellosis and bovine tuberculosis; and 1,200 specialized farms are freed of swine fever, and areas are kept free of fruit flies and whiteflies; 50,000 hectares of natural forest are certified, under sustainable management in the regions selected for the pilot program. It is proposed that in year three there be a comprehensive plan for managing water resources, with the consensus of the interested sectors that are part of the participatory process supported by the program. That plan includes a draft bill on the comprehensive management of water resources.</p>	<p>A. Annual reports compiled by the project's central administration unit, supported by the reports of the council of science and technology, MAGA's management office on standards and regulations, the national forest institute, the special execution unit of the plan for the comprehensive management of water resources, and the Ministry of the Economy.</p>	<p>A. MAGA will concentrate on strateg regulatory functions and has the to follow up on and evaluate its o The fiscal fragility of Guatemala is strengthened and the counterpart resources for investment in the fo agriculture sector, along with the operational capacity of MAGA, ac with the support of the technical cooperation lent by the project, e achieve the objectives of efficienc year 2005.</p>

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
<p>the efficient management of the regulatory framework of foreign trade to be possible to lower transaction costs and thus contribute to the competitiveness of the sector, and the need to have new instruments to improve the efficiency of trade and a greater capacity for international trade negotiations.</p>	<p>B. The new management of the VUPE reduces the costs of export authorization and the time required for the process by 20% of the levels prior to the delegation of the VUPE to AGEXPRONT. The domestic price to consumers of the 22 goods imported under tariff quotas reflects a more efficient transfer of international prices and a drop in levels of protection. The UDACA has a greater capacity to provide guidance to the private sector in new exports.</p>	<p>B. Reports of the VUPE and the analysis of the correlation of international and domestic prices of the 22 products under tariff quotas involved and the impact of the new negotiations on exports, based on the annual statistical bulletin published by the Bank of Guatemala, complemented by the annual reports and statistics prepared by the Ministry of the Economy and presented to the program's administrative coordination unit, MAGA, and the Ministry of the Economy.</p>	<p>B. The food and agriculture sector responds positively to the new policy instruments and to the efficiency of MAGA's public services. Guatemalan agricultural goods are more competitive in the market through a drop in transaction costs for domestic procedures; there is transparent competition reflected in the prices of imported goods, which benefits Guatemalan consumers. New instruments studied jointly with the private sector are used to increase trade efficiency, and Guatemalan goods gain better access to international markets.</p>
<p>RESULTS</p> <p>The program receives support for the efficient operation of the technology transfer, restructuring the provision of plant and animal health services, managing positive environmental externalities that improve the management of the direct support to the private sector, preparing a national water strategy and adopting new legislation on the comprehensive management of natural resources; and the program is efficiently administered and coordinated by a central administrative unit.</p>	<p>A.1 The research institutions finance 35% of the cost of the research projects; research resources are allocated to priority areas, and the institutional supply of research resources is diversified, including public enterprises, university research center, and private-sector enterprises.</p> <p>A.2 MAGA formulates the policy on public plant and animal health services in 1999, designs new foreign trade policies with mechanisms that contribute to guaranteeing food safety, and promotes and ensures the implementation of the standards, in pursuit of efficiency and competitiveness. Plant and animal health services are adapted to the requirements of trade liberalization; WTO discipline, using the new regulatory framework for foreign trade; quality standards; and the guarantee of quality throughout food and agriculture chains.</p>	<p>A.1 Annual execution reports presented for the consideration of MAGA and CONCYT by the managerial committee of the competitive fund.</p> <p>A.2 Annual reports of MAGA prepared by the plant and animal health area of the unit on standards and regulations.</p>	<p>A.1 The results obtained through the technology transfer have an important impact in solving the problems of Guatemalan farmers, and the farmers respond positively, actively participating in the coordination of real demand for technology.</p> <p>A.2 The countries that purchase Guatemalan food and agricultural goods recognize quality-control measures throughout the food and agriculture chain. The control systems implemented allow for the elimination of the problems of pest infestations, and diseases, without increasing the abuse of agrochemicals. There are no emergency sanitary measures that may diminish the impact of the food and animal health services.</p>

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
	<p>A.3 Plans for managing natural forests are prepared, and the direct support for forestry for 50,000 hectares of natural forest is administered.</p> <p>A.4 The special execution unit is organized to prepare the comprehensive plan for water resources management.</p> <p>A.5 A total budget of US\$42 million is invested between years one and five; US\$8.8 million in national counterpart funds is allocated in the national budget; and US\$33.2 million is disbursed from the loan.</p>	<p>A.3 Annual execution reports prepared for the incentive program for the development of the national forest institute.</p> <p>A.4 Annual reports of the special execution unit established in MAGA through a ministerial agreement.</p> <p>A.5 Annual reports of the program's central administrative unit.</p>	<p>A.3 The beneficiaries of the externalities obtained through the forest incentive program recognize the merit of the new mechanisms identified to lend financial sustainability to the pilot project.</p> <p>A.4 There is political resolve regarding reforms to water resources management and the consultation mechanisms are efficient and achieve a consensus accepted by the representatives of users and the administrators of the resource.</p> <p>A.5 The technical cooperation lent to the program's central administrative unit makes it possible to supervise the resources allocated with the greatest efficiency.</p>
<p>the development of trade in agriculture to facilitate the competitiveness of the sector reflected in increased exports and the efficient administration of import and export procedures, functioning in a modern way, and the negotiations strengthened and efficiency in agrifood trade is explored.</p>	<p>B. Export procedures are simplified by organizing four new decentralized offices; the drawback documents are processed after exportation; and the formalities regarding prior review by the national council on protected areas (CONAP) are reduced; losses of weight and value of the documents after exportation are adjusted with greater efficiency; and the 22 products controlled by tariff quotas are imported with greater transparency. The country's capacity to negotiate with the WTO has been strengthened and new measures have been taken to improve efficiency.</p>	<p>B. Annual reports prepared by the Ministry of the Economy.</p>	<p>B. The purchasing countries do not use paratariff measures to restrict their markets of fresh food and agricultural products from Guatemala. The local international prices remain stable and allow Guatemalan consumers to negotiate prices with greater transparency. The private export sector is responding to new mechanisms for management of agrifood efficiency and an increase in exports of the new products negotiated.</p>

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
<p>TRUST FOR THE STRUCTURING AND MANAGEMENT OF MAGA</p> <p>competitive technological management fund for food and agriculture to finance operations to structure and transfer technology.</p> <p>guarantee active public plant and animal health services and food safety.</p> <p>over the direct support for forestry owners of natural forests.</p>	<p>A.1 The competitive fund, the managerial committee of which meets periodically, is designed. It is supported by a technical secretariat with the capacity to finance 110 operations presented by private enterprises and public agencies, distributed in 20 projects for a total sum of US\$1.06 million in year one; 25 projects for US\$1.45 million in year two; 30 projects for US\$2.25 million in year three; 20 projects for US\$1.5 million in year four; and 15 projects for US\$1.1 million in year five. A trust fund is used for a total of US\$8.44 million, which covers up to 50% of operational costs and up to 80% in the case of water resources management and subsistence agriculture.</p> <p>A.2 Plant and animal health standards and procedures are established; four regional laboratories are transferred to groups of producers; coordination is carried out with the groups of producers to execute actions to declare property disease-free; professionals and laboratories are accredited; and private service units are contracted to perform the quarantine control on all imported products.</p> <p>A.3 The studies to prioritize strategic areas are conducted during year one for US\$48,000; the eligibility criteria and the program's operational system is prepared in year one for US\$17,000; the equipment for implementing the component is procured for US\$97,000 in year one. The payments for the environmental externalities generated by the pilot project begin in year one with US\$270.00 and year two for US\$1.1 million; and the mid-term evaluation of the component is conducted in year four.</p>	<p>A.1 Annual execution reports presented for the consideration of MAGA and CONCYT by the managerial committee of the competitive fund for research.</p> <p>A.2 Annual reports of MAGA prepared by the plant and animal health area of the managerial office on standards and regulations.</p> <p>A.3 The mechanisms for recognizing the externalities of private forest management is published in the Central American Journal, and official organ of the Republic of Guatemala.</p>	<p>A.1 The supply of technology in Guatemala increases in keeping with the technology demanded by the public and private sectors. As a result of the new technology produced, the farmers generate higher revenue in a sustainable manner.</p> <p>A.2 There are no sanitary emergencies or climate problems that dilute the efficiency of the provision of public services by MAGA; the associations of producers and representative groups of farmers collaborate with the MAGA's sanitary control actions; and professionals and private laboratories that have been accredited support MAGA's actions.</p> <p>A.3 There are no climatological phenomena that affect the quality of the natural resources or that lead to the pushing back of the agricultural frontier, particularly uncontrolled forest fires or pests to native species. No price, financial or credit policy measures are issued that affect the profitability of forest resources or the alternative use of forest land.</p>

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
<p>comprehensive management of water resources is administered by consensus of users and administrators.</p> <p>central administrative unit to operate the program.</p>	<p>A.4 A new agreement is reached in 2000 to recognize the alternative uses of water and its economic value; for 60 months the services of persons are contracted to compose the coordinating team in 1999 for US\$168,000; there are 312 months of counterpart of personnel in 1999, for US\$441,000; and national consultants are contracted for 78 months, as well as international consultants for six months in 1999 and 2000 for US\$306,000. Local training events are held; eight persons are sent abroad for training; and 16 consultations and a technical seminar are held in 1999 and 2000 for a total of US\$127,000.</p> <p>A.5 A central administrative unit is organized that is made up of an international consultant and two national consultants that operate over the five years of the project, with a investment of US\$426,000.</p>	<p>A.4 The proposed consensus for the administration of water resources is reached with the main groups and agencies involved in the use and management of water, and the national plan for managing water resources is adopted by the executive branch to form a national water policy.</p> <p>A.5 Annual project execution reports, prepared by the central administrative unit for MAGA and the Ministry of the Economy.</p>	<p>A.4 The national and international experts are able to head the consultation group to integrate both public and private communities and users; government institutions participating in the administration of water resources in an efficient operational manner to resolve intersectoral conflicts and reduce the impact of pollution and the degradation of the quality of water resources.</p> <p>A.5 PPF resources allow for the establishment of a bridge between the analysis of the program and the beginning of disbursements. The support of the consulting firm or specialized agency has been contracted eases the process and allows for effective coordination among the components; and the administrative capacity of CIPRED is efficient.</p>

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
<p>TECHNICAL COOPERATION FOR DEVELOPMENT OF TRADE IN AND AGRICULTURE</p> <p>... a modernized single export that provides efficient, ... d services, with automatic ... ion of exports, using high- ... gy and procedures adapted to ... D commitments.</p> <p>... nister import tariff quotas with ... ency, identify new areas of ... gotiations, and explore new ... es to increase agrifood trade ... y.</p>	<p>B.1 Export documents are processed with remote links between the public units and exporting enterprises in the year 2000, as a result of the investment of US\$491,900 in computer equipment and US\$100,000 for training groups of persons involved in the electronic authorization of export documents.</p> <p>B.2 Opportunities are identified and used to manage tariff quotas with four consultants and training in the amount of US\$249,800 in years 1 and 2. The UDACA, DAEM, and DCNI are provided with computer, communications, and transportation equipment to administer the quotas and trade negotiations, along with training, in the amount of US\$110,900 in year 1. Priority areas are identified for negotiations of the new agricultural round of the WTO with three consultants and training in the amount of US\$270,200 in year 1. New measures are explored to increase agrifood trade efficiency, with two consultants and training in the amount of US\$105,100 in years 1 and 2. The component is efficiently administered and monitoring conducted for five years, in the amount of US\$154,000.</p>	<p>B.1 The annual project reports, prepared by the person heading AGEXPRONT's single export window for the Ministry of the Economy.</p> <p>B.2 Annual submittal of import contracts on tariff quotas, and the agreements under the WTO negotiations and other efficiency measures identified by the office of multilateral economic affairs with the tariff quota administrative unit, for the Ministry of the Economy.</p>	<p>B.1 The new exports procedures accepted by the private sector are accepted by delegating units of the government, which reduces unnecessary procedures.</p> <p>B.2 The number of entrepreneurs importing goods controlled by the tariff quotas increases, including microentrepreneurs, as a result of the competition; the greater transparency in the prices of imported goods in the Guatemala. Coordination with the private sector is achieved for the new trade negotiation issues.</p>

GUATEMALA
PROGRAM TO SUPPORT THE PRODUCTIVE RECONVERSION OF
FOOD AND AGRICULTURE (GU-0070)
PROCUREMENT PLAN

Main project procurement	Source of Financing (%)		IPB or other method	Prequalification requirement YES/NO	Estimated date of publication in the AEA (quarter and year)
	IDB	LOCAL			
THE COMPETITIVE TECHNOLOGICAL DEVELOPMENT FUND FOR FOOD AND AGRICULTURE COMPONENT					
A. <u>Goods</u>					
VEHICLES					
-1 vehicle, US\$20,000	100		LPC	NO	III/1999
COMPUTER EQUIPMENT					
-assorted types for US\$17,500	100	100	LPC	NO	III/1999
OFFICE EQUIPMENT					
-US\$19,000 for a photocopy machine and furniture	100	100	LPC	NO	III/1999
B. <u>Consulting services</u>					
-to evaluate projects annually for four years, US\$19,200 (individual consultants)	100		LPC	YES	III/2000 III/2001 III/2002 III/2003
THE PUBLIC PLANT AND ANIMAL HEALTH SERVICES AND FOOD SAFETY COMPONENT					
A. <u>Goods</u>					
VEHICLES					
-1 lot of 31 vehicles (US\$387,000)	100		IPB	NO	III/1999
-1 lot of 23 vehicles (US\$287,130)	100		IPB	NO	III/2000
COMPUTER EQUIPMENT					
3 lots:					
-Lot (offices) (US\$84,100)	100		LPC	NO	IV/1999
-Lot (Lab R, Q, J, Z) (US\$6,200)	100		LPC	NO	II/2000
-Lot (Lab A, P) (US\$4,200)	100		LPC	NO	II/2001
LABORATORY EQUIPMENT, REFRIGERATION, AIR CONDITIONING, AND GLASS MATERIALS					
7 lots					
-Central lab (US\$55,500)	100		LPC	NO	III/1999
-Offices (US\$13,200)	100		LPC	NO	IV/1999
-Regional lab Q (US\$26,000)	100		LPC	NO	II/2000
-Regional lab J (US\$8,600)	100		LPC	NO	II/2000
-Regional lab Z (US\$28,300)	100		LPC	NO	III/2000
-Regional lab A (US\$26,200)	100		LPC	NO	I/2001
-Regional lab P (US\$25,300)	100		LPC	NO	II/2001
FIELD, OFFICE, QUARANTINE, FURNITURE, COMMUNICATIONS, AND AUDIOVISUAL EQUIPMENT					
3 lots:					
-Lot (central offices/lab) (US\$49,300)	100		LPC	NO	IV/1999
-Lot (lab R, Q, J, Z) (US\$9,400)	100		LPC	NO	III/2000
-Lot (lab R, A, P) (US\$5,000)	100		LPC	NO	II/2001
INPUTS					
3 batches of antigens					
-Batch, US\$2,800	100		LPC	YES	III/1999
-Batch, US\$4,700	100		LPC	YES	I/2001
-Batch, US\$3,200	100		LPC	YES	I/2001

Main project procurement	Source of Financing (%)		IPB or other method	Prequalification requirement YES/NO	Estimated date of publication in the AEA (quarter and year)
	IDB	LOCAL			
Laboratory (glass in the first year), chemical, field, dissemination, and computer materials 4 lots					
-Lot, US\$45,700	100		LPC	NO	III/1999
-Lot, US\$50,300	100		LPC	NO	I/2000
-Lot, US\$35,200	100		LPC	NO	I/2001
-Lot, US\$35,300	100		LPC	NO	I/2002
B. Consulting services					
-Consulting firm or specialized agency to administer the technical assistance (international consultants and fellowships abroad), US\$575,800	100		IPB	YES	III/1999
THE DIRECT SUPPORT FOR FORESTRY COMPONENT					
A. Goods					
VEHICLES					
-1 vehicle (US\$25,000)	100		LPC	NO	III/1999
COMPUTER EQUIPMENT					
-1 lot (US\$11,700)	100		LPC	NO	III/1999
-GPS system and base station (US\$27,300)	100		LPC	NO	III/1999
FIELD EQUIPMENT					
forest and field measurement equipment (US\$4,400)	100		LPC	NO	III/1999
OFFICE EQUIPMENT					
-assorted types (US\$3,600)	100		LPC	NO	III/1999
B. Consulting services					
International consultants, individual Sustainability mechanisms (US\$30,000)	100		LPC	YES	III/2001
National consultants, individual					
-Technical support for small communities/owners (US\$176,500)	100		LPC	YES	IV/1999
-Sustainability mechanisms (US\$54,000)	100		LPC	YES	III/2001
-Consultation activities (US\$100,000)	100		LPC	YES	I/2002
-Water basin studies/analysis (US\$50,000)	100		LPC	YES	IV/1999
-Mid-term evaluation (US\$45,000)	100		LPC	YES	II/2002
-Development of financing proposal (US\$29,000)	100		LPC	YES	I/2003
-Evaluation of forest incentives program (PINFOR) (US\$12,500)	100		LPC	YES	II/2002
Consulting firms					
-Water basin studies, field measurements (US\$182,000)	100		NPB	YES	IV/1999
-Formulation and field verification of promotion and publicity (US\$60,000)	100		LPC	YES	III/1999 and I/2000
-Promotion and publicity in priority regions in local populations and native languages (US\$140,000)	100		LPC	YES	II/2000 and II/2001
-Promotion and publicity in urban centers of the benefits of forests and their relation to the production of water (US\$162,500)	100		LPC	YES	I/2002 and II/2004
-Study of municipal water recharge areas (US\$200,000)	100		IPB	YES	I/2000
THE COMPREHENSIVE MANAGEMENT OF WATER RESOURCES COMPONENT					
A. Goods					
VEHICLE					
-3 vehicles (US\$45,000)	100		LPC	NO	III/1999
OFFICE EQUIPMENT					
-assorted types (US\$1,500)	100		LPC	NO	III/1999

Main project procurement	Source of Financing (%)		IPB or other method	Prequalification requirement YES/NO	Estimated date of publication in the AEA (quarter and year)
	IDB	LOCAL			
B. <u>Consulting services</u>					
-3 individual consultants for six months (US\$72,000)	100		LPC	NO	III/1999
THE PROGRAM COORDINATION AND ADMINISTRATION COMPONENT					
A. <u>Goods</u>					
VEHICLES					
-1 vehicle (US\$18,600)	100		LPC	NO	III/1999
COMPUTER EQUIPMENT					
-1 lot of PCs with software, printers (US\$12,200)	100		LPC	NO	III/1999
OFFICE EQUIPMENT					
-assorted types (US\$8,200)	100		LPC	NO	III/1999
B. <u>Consulting services</u>					
-2 individual international environmental consultants (US\$20,000)	100		LPC	YES	III/1999
-Several individual environmental consultants (US\$6,000 per year)	100		LPC	YES	III/1999 to III/2003
SINGLE EXPORT WINDOW (VUPE)					
A. <u>Goods</u>					
COMPUTER EQUIPMENT					
-1 lot (US\$449,246)	100	100	IPB	NO	III/1999
THE ADMINISTRATION OF EXPORT REGULATIONS COMPONENT					
A. <u>Goods</u>					
VEHICLE					
-1 vehicle (US\$20,000)	100		LPC	NO	III/1999
COMPUTER EQUIPMENT					
-assorted types (US\$58,900)	100		LPC	NO	III/1999
B. <u>Consulting services</u>					
-4 individual consultants to manage tariff quotas (US\$204,500)	100		LPC	YES	III/1999
-3 individual consultants for trade negotiations (US\$201,400)	100		LPC	YES	III/1999
-2 individual consultants to support trade efficiency (US\$95,100)	100		LPC	YES	III/1999
NOTES:					
IPB: International public bidding, for amounts over US\$200,000 for consulting services and US\$250,000 for goods. NPB: National public bidding, for amounts between US\$143,000 and US\$250,000. LPC: Local price comparison, for amounts up to US\$143,000, in keeping with the state contracting law.					

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GU-0070
Original: Spanish

PROPOSED RESOLUTION

GUATEMALA. LOAN ___/OC-GU TO THE REPUBLICA DE GUATEMALA
Food and Agriculture Sector Investment Loan

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the República de Guatemala, as Borrower, for the purpose of granting it a financing to cooperate in the execution of a Program for Food and Agriculture Sector Investment Loan. Such financing will be for the amount of up to US\$33,000,000, from the resources of the Single Currency Facility of the Bank's Ordinary Capital, and will be subject to the "Terms and Financial Conditions" and to the "Special Contractual Conditions" of the Executive Summary of the Loan Proposal.