

**REGIONAL PROGRAM FOR AGRICULTURAL TECHNOLOGY AND
NATURAL RESOURCE MANAGEMENT, 1998**

(TC-97-12-09-4-RG)

EXECUTIVE SUMMARY

REQUESTERS: Inter-American Institute for Agricultural Cooperation (IICA) and the Bank

EXECUTING AGENCIES: Inter-American Institute for Agricultural Cooperation and the Bank

FINANCING AMOUNT AND SOURCE: IDB (net income of the FSO, in foreign exchange) US\$ 3.4 million
Local counterpart contribution: US\$13.5 million
Total: US\$16.9 million

TERMS: As of the signing of the agreement.
Execution period: 36 months
Disbursement period: 42 months

OBJECTIVES: The program's objectives are to contribute to increasing the competitiveness of the agrifood sector and to achieving sustainable natural resource management in the countries of the region, through programs for research, technology development, and training in and the dissemination of agricultural technology, to be carried out by national, regional and international research organizations under the Regional Agricultural Technology Fund (FONTAGRO), and to ensure continuity of the activities carried out by the FONTAGRO Technical Secretariat during the period from 1999 to 2000.

DESCRIPTION: The program is divided into two components. (a) One component consists of 12 technology development projects (US\$3 million), which will be implemented by regional research consortia comprising public and/or private organizations from two or more countries of the region, as well as regional and international research centers. The projects were selected on the basis of technical merit, following strict competitive procedures with evaluation by independent peers. The criteria for project selection were socioeconomic impact, technical quality, institutional capacity and environmental impact, as set forth in the FONTAGRO operations manual and in accordance with the research priorities defined in

FONTAGRO's medium-term plan for 1998-2000. The research activities to be carried out cover genetic improvement and integrated pest management, fruit and vegetable production in agroindustrial systems, forest management, natural resource conservation and institutional strengthening and design of agricultural policies. This component will be executed by the IICA. (b) The second component consists of support for the FONTAGRO Technical Secretariat (US\$400,000) to ensure continuity of its activities for project proposal review, support for the FONTAGRO board of directors, and administrative activities during the period from 1999 to 2000. This component will be executed by the Bank, through the FONTAGRO Technical Secretariat.

**ENVIRONMENTAL/
SOCIAL REVIEW:**

The Committee on Environment and Social Impact (CESI) did not issue any comments or recommendations on this operation, considering the environmental criteria applied in evaluating the FONTAGRO proposals included in this program.

**BENEFITS AND
BENEFICIARIES:**

Based on the benefits obtained from the Bank's investment in research carried out by national, regional and international technology development centers over the past 25 years, in addition to the detailed investments in the proposed program, highly significant results are expected for the economies of the countries of the region, natural resource management and poverty alleviation. Specifically, these benefits will be achieved through the development of wheat germplasm with higher quality gluten and resistant to fusariosis; comparative research on the methods and impact of various public and private technology transfer mechanisms; identification of causal relationships between various types of rural poverty and natural resource management; development of integrated pest management systems to reduce tropical fruit diseases; identification of disease-resistant corn germplasm; development of new products and uses for sweet potato, through the selection of materials for agroindustrial processing; production of potatoes with specific characteristics for industrial uses; studies on the genetic variability of oak and *raulí*; identification of highly productive corn production areas in Central America; genetic improvement of papaya; and analysis of globalization and technology scenarios in the framework of the region's new trade policies. This financial support will provide for continuity of the Secretariat's technical and administrative activities during the period from 1999 to 2000, thereby ensuring consolidation of FONTAGRO.

RISKS: No risks are anticipated during execution of the operation, given the Bank's experience in financing projects of this type over the past two decades, and the experience in research procedures, of the executing agencies, which were selected through a competitive mechanism. There are inherent risks in the technology development process, but they are low given that the type of research to be carried out is medium-term and of a strategic nature.

ROLE IN THE BANK'S STRATEGY FOR THE REGION: This program falls within the process of consolidation of FONTAGRO being promoted by the majority of countries in the region, with technical, legal and administrative support from the Bank. FONTAGRO was created at a special session of the Bank's annual meeting of the Board of Governors in March 1998. Most countries in the region have pledged to contribute funds to the FONTAGRO capital fund, which will finance research projects based on the income generated by the fund. Contributions to the fund by the countries in the region over the next three years are expected to total over US\$100 million. Based on the Bank's experience financing international centers and regional research networks during the period from 1974 to 1997, this program constitutes the beginning of a new phase in the Bank's support for regional technology development, since it will grant financing on a competitive basis to research activities that are prioritized and cofinanced directly by FONTAGRO member countries of the region. The procedures that have been followed for the competitive selection of projects are consistent with the Bank's procedures.

SPECIAL CONTRACTUAL CONDITIONS: The Bank's contribution to the project component will be disbursed in accordance with the following schedule: 40% (US\$1.2 million) upon signature of the agreement between the Bank and IICA; 40% (US\$1.2 million) upon submittal and acceptance by the Bank of the mid-term report (18 months); and 20% (US\$0.6 million) upon submittal and acceptance by the Bank of the audited technical report.

It is proposed that up to 20% of the Bank's contribution be retroactively allocated to finance expenses incurred by the executing agency for eligible projects after November 1, 1998, prior to approval of the contribution (US\$600,000).

EXCEPTIONS TO BANK POLICY: None.

I. BACKGROUND

- 1.1 The agrifood sector has been extraordinarily important for the economic development of Latin America. Currently, agrifood production represents over 25% of gross regional product and over 40% of exports. In certain countries such as Colombia, Argentina, Nicaragua and Costa Rica, one or both indicators are even substantially higher.
- 1.2 Despite the sector's economic importance, there is, in general, a shortfall in investment in technology development in the region: an average of less than 0.5% of gross annual agricultural product is invested each year in science and technology in the sector, while in the United States, Japan and Australia annual investment ranges from 2% to 5%. Reversing this trend is key at a time when the economies of Latin America and the Caribbean are opening up and integrating, and when increased competition in the agrifood sector is essential to increase growth rates on a sustainable basis.
- 1.3 The IDB's activities in the area of agricultural research have been broad and most recently have focused on the development of national technology development systems, through loans granted to public research organizations, privatization of extension services, and the promotion of competition for research funds through national level competitive funds. As a complement to its lending activities, the Bank has provided support to the International Agricultural Research Centers, including the International Consultative Group on International Agricultural Research (CGIAR); regional technology development and training organizations (CATIE, CARDI, EARTH); and subregional cooperative programs for technology development. The tremendous multiplier effect of these activities has increased the returns on investment financed using Bank funds, at both the national and regional levels.
- 1.4 In recent years, the scarcity of local currency resources from the net income of the FSO has resulted in a drastic reduction in Bank financing in the regional program for agricultural technology transfer (US\$9.3 million in 1994, US\$7 million in 1995, US\$5.7 million in 1996 and US\$3.1 million in 1997). Given this situation, a group of countries, with the support of the IDB and other organizations, has promoted the creation of the Regional Agricultural Technology Fund (FONTAGRO). The goal for this capital fund is US\$200 million. It was formally created (as a regional program) on March 15, 1998 at a special meeting of the Bank's annual meeting of the Board of Governors held in Cartagena, Colombia. At that meeting, the majority of countries in the region, through their Ministers of Finance, pledged to provide their contributions to the fund over a period of three years, ending in the year 2000.

A. FONTAGRO

- 1.5 The purpose of FONTAGRO is to promote increased agrifood competitiveness, ensuring sustainable natural resource management and reducing poverty in the region, through technologies that serve as regional public goods, facilitating the generation and exchange of scientific knowledge within the region and with other regions. The capital fund was created through contributions from the countries of the region that will benefit from regional research activities to be financed through FONTAGRO, and through various contributions from countries and organizations from outside the region with an interest in agricultural technology development in Latin America and the Caribbean.
- 1.6 FONTAGRO is managed through a board of directors, which meets annually. The technical, legal, financial and administrative support necessary for operation of the board is provided by a technical and administrative secretariat, which during the initial operating period is headquartered at the Bank. The Bank, along with the IICA, the Rockefeller Foundation and Canada's International Development and Research Center (IDRC) are financing the costs of the secretariat. In 1996, with funding from project ATN/SF-5215-RG, the first operations manual was prepared, setting forth the fund's operating and administrative regulations; and in 1997, using funding from project ATN/SF-5666-RG, a portion of the technical secretariat's activities were financed, including preparation of the medium-term plan and a technical evaluation of the proposals for the research projects included in the proposed program. In addition, in 1997 the Bank's Board of Executive Directors approved document GN-1965-1, authorizing the use of proceeds from loans in the agriculture and science and technology sectors, financed in recent years by the Bank, to make contributions to the capital fund, as well as the Bank's administration of the fund resources during the initial consolidation period.
- 1.7 The competition for project financing by FONTAGRO is based on technical, economic, environmental and institutional criteria, as detailed in the fund's operations manual, which establishes the procedures to be followed in project identification, prioritization, presentation and selection, resource allocation and disbursement, and monitoring and evaluation of the results of the projects financed by FONTAGRO. The projects may be executed by national, regional or international entities, associated in research consortia. The priority research topics to be financed using FONTAGRO resources are designed to increase the productivity of basic categories and to ensure sustainable natural resource management.
- 1.8 FONTAGRO began formal operations in 1998, issuing the first call for proposals in a competition for research projects based on its 1998-2000 medium-term plan and the aforementioned operations

manual. Due to the current budgetary limitations of the majority of the fund's member countries, consolidation of the FONTAGRO capital fund, which was originally scheduled for late 2000, will be extended to 2002. Under the proposed program, the Bank will finance the regional research projects the proposals for which received the highest scores for technical merit in the 1998 call for proposals organized by FONTAGRO and have broad geographic and thematic coverage. Project financing at the regional level could thus be initiated while the capital fund is being consolidated, which will allow FONTAGRO to generate its own funding.

- 1.9 Based on the Bank's experience in financing international research centers and regional research networks during the 1974-1997 period, the program will begin a new phase in the Bank's support for regional technology development, in that it will finance research activities that are prioritized and cofinanced directly by the FONTAGRO member countries of the region.
- 1.10 The program's objectives fall within the Bank's areas of activity in the agrifood and rural sectors, and the conservation and management of the environment and natural resources. In this context, the program emphasizes the competitiveness of the agricultural sectors of the countries in the region, through research and the transfer of technology, with a view to reducing rural and urban poverty, and to achieving sustainable natural resource management. In addition, because of the nature of the research to be carried out, the type of technology to be developed and the transfer and training activities, the program complements the research activities of the national components (public and private) of the region's agricultural technology system.

II. OBJECTIVES AND DESCRIPTION

A. Objectives

- 2.1 The program's objectives are to contribute to increasing the competitiveness of the agrifood sector and to achieving sustainable natural resource management in the countries of the region, through programs for research, technology development, and training in and the dissemination of agricultural technology, to be carried out by national, regional and international research organizations under the Regional Agricultural Technology Fund (FONTAGRO), and to ensure continuity of the activities carried out by the FONTAGRO Technical Secretariat during the period from 1999 to 2000.

B. Description

- 2.2 The program is divided into two components. (a) One component consists of 12 technology development projects (US\$3 million), to

be carried out by regional research consortia comprising public and/or private institutions from two or more countries of the region, as well as regional and international research centers. The projects were selected on the basis of technical merit, following strict competitive procedures, with evaluation by independent peers. The criteria for project selection were socioeconomic impact, technical quality, institutional capacity and environmental impact, as set forth in the FONTAGRO operations manual and in accordance with the research priorities defined in FONTAGRO's medium-term plan for 1998-2000. The research projects to be carried out will cover the areas of genetic improvement and integrated pest management, improved fruit and vegetable production in agroindustrial chains, forest management, natural resource conservation, and institutional strengthening and agricultural policy formulation. This component will be executed by the IICA. (b) The second component consists of support for the FONTAGRO Technical Secretariat (US\$400,000) to ensure the continuity of its activities for project proposal review, support for the FONTAGRO board of directors, and administrative activities during the period from 1999 to 2000. This component will be executed by the Bank, through the FONTAGRO Technical Secretariat.

- 2.3 The projects were selected on the basis of technical merit, following competitive procedures, with evaluation in independent phases according to socioeconomic, institutional, technical and environmental impact, as stipulated in the FONTAGRO operations manual, and the research priorities defined in FONTAGRO's medium-term plan for 1998-2000. The procedures followed in the competitive selection of the projects are consistent with the applicable Bank procedures.
- 2.4 Of the 42 proposals received for the 1998 FONTAGRO call for proposals, 14 were rejected under the formal selection criteria. The remaining 28 were evaluated by two technical panels. The results of this evaluation were reviewed by the FONTAGRO board of directors at its annual meeting held in the Dominican Republic in June 1998, and the 20 highest-scoring proposals were selected.
- 2.5 The program fits into the process of consolidation of FONTAGRO being promoted by the majority of countries of the region with the Bank's support. FONTAGRO was created at a special session of the Bank's annual meeting of the Board of Governors, held in Cartagena in March 1998. Most of the countries in the region pledged to contribute to the FONTAGRO capital fund, which will finance research projects based on the income generated by the fund. Contributions to the fund by the countries in the region over the next three years are expected to total over US\$100 million.
- 2.6 Annex 1 shows the total budget for each of the 12 projects, the amount to be financed, the score obtained in the technical evaluation and whether the CGIAR international research center will participate. Annex 2 summarizes the objectives of each project and

the countries and organizations involved. (The name of the country to which the lead organizations of the research consortium belong appears in boldface).

- 2.7 The program includes resources to finance the FONTAGRO Technical Secretariat's expenses during the period 1999-2000, including the cost of technical review of the project proposals under the 1999 and 2000 calls for proposals, preparation of the technical studies for FONTAGRO's new medium-term plan for 2001-2005, and general support.

III. EXECUTION

- 3.1 The executing agency for the project component of the program will be the Inter-American Institute for Agricultural Cooperation (IICA) through its national offices in each country in Latin America and the Caribbean involved in the program. The executing agency will be responsible to the IDB for implementation of the activities described in the research project proposals (available in the FONTAGRO Technical Secretariat). The IICA, as the executing agency, will carry out this activity at no administrative cost whatsoever, since it is one of the FONTAGRO sponsors and cofinances the Technical Secretariat for this program jointly with the Bank.
- 3.2 The projects included in the program will be carried out by regional research consortia comprising public and private technology development organizations from two or more countries of the region, as well as regional and international research centers.
- 3.3 The IICA will prepare letters of agreement with each of the consortia (subexecuting agencies). All proposed activities will be carried out and cofinanced jointly by national, regional and international research organizations, as set forth in Annex 1 and in the project proposals. The proposals include a detailed description of the justification, objectives, activities, and participating entities, an execution schedule and information on the consortia executing research projects. The proposals will comprise the work plan for project execution.
- 3.4 The component for support for the FONTAGRO Technical Secretariat will be carried out directly by the Bank through the Sustainable Development Department. Disbursements will be made directly to the FONTAGRO Technical Secretariat through the unit responsible for disbursements (INT/RTC).
- 3.5 The program execution period will be 36 months as of the signing of the agreement between the IICA and the Bank.

IV. COST AND FINANCING

- 4.1 The total program cost will be US\$16,934,000, as shown in the following table:

Table I
Program Cost and Financing
(In thousands of US\$)

Project	IDB	Local Contribution	Total
<u>A. Research project component</u>			
Wheat fusariosis	350	1,983	2,313
Industrial quality of wheat	350	1,918	2,268
Extension research	100	619	719
Poverty and environmental degradation	300	794	1,094
Integrated pest management in Andean fruit	250	1,159	1,409
Corn, genetic resistance to insects	250	1,480	1,730
Development of sweet potato products	250	720	970
Potatoes, industrial uses	250	663	913
Nothofagus, genetic description	250	790	1,040
Corn, competitive areas	250	855	1,105
Papaya, genetic resources	200	1,973	2,173
Globalization and technology scenarios	200	600	800
<u>B. Component for support for FONTAGRO</u>	400		
<u>Technical Secretariat</u>			
a. Consulting services 250,000			
b. Technical meetings of researchers 100,000 in the region			
c. Publications, translations, 50,000 telephone, mail and misc.			
Total	3,400	13,534	16,934

- 4.2 It is proposed that the Bank grant financing of up to a total of US\$3.4 million from the net income of the Fund for Special Operations in foreign exchange. Using this funding, the Bank will contribute to the financing of the 12 research projects set out in Annexes 1 and 2 and expenses to support the Technical Secretariat in 1999 and 2000.
- 4.3 The local counterpart contribution totals US\$13,534,000, which will consist of counterpart contributions for each of the projects, to be made by the respective executing agencies (national, regional or international research centers), from the participating research organizations' own funds, not from FONTAGRO.

- 4.4 The Bank's funding of US\$3 million will be used to finance the following components of the 12 projects: (i) investment in equipment (inputs, instruments and machinery), in the amount of up to 50% of the total equipment budgeted for each project, provided that these expenses do not exceed 25% of the total cost of each project; (ii) consultants or specialists, in the amount of up to 50% of the total professional personnel expenses budgeted for each project; (iii) travel and per diems for local staff, in the amount of up to 20% of total budgeted professional personnel expenses for each project; (iv) dissemination expenses in the amount of up to 10% of the total budget financed with Bank resources; and (v) expenses to support the FONTAGRO Technical Secretariat. Construction investments will not be financed, nor personnel expenses of the staff of the agencies carrying out the projects. The Bank contribution to the project component will be disbursed in accordance with the following schedule: an initial disbursement of 40% of the total financing (US\$1.2 million), after signature of the letter of agreement with the IICA; a second disbursement of 40% (US\$1.2 million), after the Bank's approval of the mid-term report (18 months); and a third disbursement of 20% (US\$600,000), after approval of the final report from the executing agency.
- 4.5 For the project component, it is proposed that up to 20% of the Bank's contribution, US\$600,000, be retroactively allocated to finance expenses incurred by the IICA for eligible projects after November 1, 1998, prior to approval of the contribution.
- 4.6 The US\$400,000 allocated to the FONTAGRO Technical Secretariat will be broken down into three categories of expenditures: consulting services (US\$250,000), technical meetings of researchers in the region for the preparation, implementation and evaluation of regional technology development projects (US\$100,000) and general support to cover the costs of publications, translations, telephone, mail and miscellaneous expenses (US\$50,000).

V. MONITORING AND REPORTS

- 5.1 The research project component of the program will be monitored through the Bank's Country Office in Costa Rica, the country where the IICA head office is located. The COF/CCR will be supported in technical aspects of the program by the SDS/ENV. The IICA will execute the program through its head office and country offices, by signing letters of agreement with each of the research consortia responsible for the 12 projects comprising this program. The project proposals from the 1998 call for proposals approved by FONTAGRO will constitute the work plans during execution. Each consortium will submit a mid-term and final report to the IICA, as established in the FONTAGRO operations manual.

- 5.2 The component for support for the FONTAGRO Technical Secretariat will be monitored directly by the Bank through the units with technical responsibility (SDS/ENV) and basic responsibility (INT/RTC).
- 5.3 During execution of the research project component of the program, the IICA will submit the following reports to the Bank: (i) a mid-term technical/financial report (as a condition for the second disbursement), 18 months after program initiation, summarizing the progress achieved and expenses incurred during that period; and (ii) final technical and financial reports, upon program completion (as a condition for the third and final disbursement), describing the main results of the activities carried out in the projects that comprise the program, especially their socioeconomic impact and actions taken for their application and dissemination in the beneficiary countries.
- 5.4 During program execution, the IICA will be required to submit annual program financial reports to the Bank, audited by independent auditors acceptable to the Bank. The reports must be submitted within 90 days after the close of the respective fiscal year.

VI. BENEFITS AND RISKS

- 6.1 Based on the benefits obtained from the Bank's investment in research carried out by national, regional and international technology development centers over the past 25 years, in addition to the detailed investments in the proposed program, highly significant results are expected for the economies of the countries in the region, natural resource management and poverty alleviation. Specifically, these benefits will be achieved through the development of wheat germplasm of higher quality gluten and resistant to fusariosis; comparative research on the methods and impact of various public and private technology transfer mechanisms; identification of causal relationships between various types of rural poverty and natural resource management; the development of integrated pest management systems to reduce diseases in tropical fruits; identification of disease-resistant corn germplasm; development of new products and uses for sweet potato, through the selection of materials for agroindustrial processing; production of potatoes with specific features for industrial use; studies on the genetic variability of oak and raulí; identification of highly productive corn production areas in Central America; genetic improvement of papaya; and analysis of globalization and technology scenarios in the framework of the region's new trade policies. This financial support will provide for continuity of the Secretariat's technical and administrative

activities during the period from 1999 to 2000, thereby ensuring consolidation of FONTAGRO.

- 6.2 No risks are anticipated during execution of the operation, given the Bank's experience in financing projects of this type over the past 20 years, and the experience in research procedures of the executing agencies, which were selected through a competitive mechanism. There are inherent risks in the technology development process, but they are low given that the type of research to be carried out is medium-term and of a strategic nature.
- 6.3 The program is expected to have a positive or neutral impact on the environment, since the proposed projects are for research and training in and the transfer of agricultural technology, specifically geared toward the sustainable management of natural resources, and given that all the proposals were evaluated in accordance with environmental criteria established by the Bank.

Regional Program for Agricultural Technology and Natural Resource Management, 1998 — Projects Selected
(In thousands of US\$)

Project Title	Total Budget	Amount Requested	TOTAL SCORE (Max: 100 points)	RANK	Participation of the International CGIAR Center	Approved Amount	TOTAL CUMULATIVE BUDGET
...riosis (Proposal No. 29/98)	2,313.4	499.4	84.00	1	YES	350	350
...quality of wheat, Southern Cone (Proposal No. 39/98)	2,267.5	499.9	78.75	2	YES	350	700
...on LAC extension (Proposal No. 8/98)	718.5	300.0	75.75	3	NO	100	800
...d environmental deterioration in LA (Proposal No. 30/98)	1,093.8	493.5	74.00	4	YES	300	1,100
...ean fruit (Proposal No. 28/98)	1,409.2	500.0	73.00	5	YES	250	1,350
...tic resistance to insects (Proposal No. 42/98)	1,730.0	410.0	73.00	6	YES	250	1,600
...nt of sweet potato products in LA (Proposal No. 22/98)	970.0	500.0	71.25	7	YES	250	1,850
...ustrial uses (Proposal No. 5/98)	913.4	513.0	70.0	8	YES	250	2,100
..., genetic description (Proposal No. 26/98)	1,040.3	388.0	69.75	9	NO	250	2,350
...petitive areas (Proposal No. 13/98)	1,105.0	429.0	68.50	10	YES	250	2,600
...netic resources (Proposal No. 24/98)	2,173.3	500.0	67.00	11	YES	200	2,800
...on and technology scenarios (Proposal No. 4/98)	800.0	400.0	66.25	12	YES	200	3,000

Project Objectives and Participating Countries (with budget in thousands of US\$)

OBJECT	OBJECTIVE	PARTICIPATING COUNTRIES	Total Budget
Wheat germplasm resistant to fusariosis (29/98)	Develop wheat germplasm resistant to fusariosis, and by reducing its impact, improve the stability of yields and reduce the content of mycotoxins	Argentina , Uruguay, Mexico, Brazil, CIMMYT	2,313
Quality of wheat (39/98)	Develop germplasm and varieties of wheat of superior industrial quality, by determining the molecular factors associated with gluten quality	Argentina, Brazil, Uruguay , Chile, Paraguay and CIMMYT	2,268
Extension (3/98)	Through comparative research on the methods and impact of various extension services and technical assistance, both public and private, establish the most important factors in the modernization of rural extension services with a view to improving competitiveness and protecting natural resources	Mexico, Brazil, Colombia , IICA and FEDECAFE	719
Environmental (30/98)	Develop technologies and policies to reduce rural poverty and natural resource deterioration, identifying causal relationships between various types of rural poverty and natural resource management in various agricultural and socioeconomic contexts of Latin America	Venezuela, Ecuador, Peru, Colombia, Brazil, Chile , Argentina and RIMISP	1,094
Resistance to pests (28/98)	Develop integrated pest management systems to reduce the principal pests and diseases affecting tree tomato, <i>narajilla</i> and passion fruit. Identify phytosanitary problems, evaluation of agricultural monitoring technologies, design and implementation of IPM in crop fields.	Colombia, Ecuador , Venezuela	1,409
Resistance to leaf worm (42/98)	Identify corn germplasm with genetic resistance to leaf worm and other diseases. Incorporate these sources of resistance into lines and populations with varying adaptation characteristics and promote their use.	Colombia , Brazil and CIMMYT	1,730
Processing of sweet potato (22/98)	Develop new products and uses for sweet potato, by selecting materials for agroindustrial processing, dual-purpose materials, or materials for use as animal feed crops.	Argentina, Dominican Republic, Brazil, Venezuela, Peru and CIP	970
Industrial uses (5/98)	Improve the competitiveness and sustainability of the region's potato production with specific qualities for industrial uses in various procedures and uses. Disease resistance, shredding and chip-making qualities, native potatoes, field and post-harvest management.	Argentina, Venezuela, Chile, Colombia, Mexico, Ecuador, Bolivia, Peru and CIP	913
Genetic description (26/98)	Evaluate the genetic variability of oak and <i>rauli</i> by using molecular and isoenzymatic markers to establish criteria for the conservation, improvement and use of these species.	Chile and Argentina	1,040
Productive areas (13/98)	Identify areas of corn production in Central America with high levels of productivity by designing a set of technologies and policies (competitive production clusters).	Nicaragua , El Salvador, Guatemala, Costa Rica, Panama, Honduras and CIMMYT	1,105
Genetic resources (24/98)	Integrate regional efforts to address technological constraints on papaya-growing, for both fresh consumption and for industrial use (papaya juice). Collect, preserve and evaluate the variability of the <i>carica</i> genus and the variability of its different pathogens.	Brazil, Colombia , Costa Rica, Ecuador, Venezuela and IPGRI	2,173
Research and technology (4/98)	Improve efficiency in allocating research and technology development funding from the countries of the hemisphere, given the role of agriculture within the framework of trade policies, the FTAA, and the impact of these processes on competitive agricultural production in the region.	Costa Rica, Colombia , Argentina, Chile, IFPRI and IICA	800
			16,534

PROPOSED RESOLUTION

REGIONAL. NON-REIMBURSABLE TECHNICAL COOPERATION FOR THE 1998 REGIONAL
PROGRAM FOR AGRICULTURAL AND NATURAL RESOURCES TECHNOLOGY

The Board of Executive Directors

RESOLVES:

1. That the President of the Inter-American Development Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such agreements as may be necessary with respect to a non-reimbursable technical cooperation with the Inter-American Institute for Agricultural Sciences and to take such additional measures as may be pertinent for the execution of a component of twelve (12) technology development projects included in the plan of operations referred to in Document AT-_____ for the 1998 Regional Program for Agricultural and Natural Resources Technology.

2. That up to the sum of US\$3,000,000, or its equivalent in other convertible currencies, is authorized for the purposes of this resolution, chargeable to the net income of the Fund for Special Operations.

3. That the above-mentioned sum is to be provided on a non-reimbursable basis.

PROPOSED RESOLUTION

REGIONAL. NON-REIMBURSABLE TECHNICAL COOPERATION FOR THE 1998 REGIONAL
PROGRAM FOR AGRICULTURAL AND NATURAL RESOURCES TECHNOLOGY

The Board of Executive Directors

RESOLVES:

1. That the President of the Inter-American Development Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to take such additional measures as may be pertinent for the execution of a component to support the Technical and Administrative Secretariat of FONTAGRO included in the plan of operations referred to in Document AT-_____ for the 1998 Regional Program for Agricultural and Natural Resources Technology.

2. That up to the sum of US\$400,000, or its equivalent in other convertible currencies, is authorized for the purposes of this resolution, chargeable to the net income of the Fund for Special Operations.

3. That the above-mentioned sum is to be provided on a non-reimbursable basis.