

FARM MODERNIZATION AND DEVELOPMENT PROGRAM

(UR-0072)

EXECUTIVE SUMMARY

BORROWER AND GUARANTOR: The Eastern Republic of Uruguay.

EXECUTING AGENCY: Ministerio de Ganadería, Agricultura y Pesca (MGAP).

AMOUNT AND SOURCE:

IDB:	US\$32 million (OC)
Local counterpart funding:	<u>US\$17 million</u>
Total:	US\$49 million

FINANCIAL TERMS AND CONDITIONS:

Amortization period:	20 years
Disbursement period:	5 years
Interest rate:	variable
Inspection and supervision:	1%
Credit fee:	0.75%
Currency:	US\$

OBJECTIVES: The overall objective of the Farm Modernization and Development Program (PREDEG) is to raise the value of farm products and exports through investments designed to improve the subsector's competitiveness. Its specific objectives include: (i) boosting productivity in the subsector; (ii) increasing net income for producers and operators; (iii) raising quality and health standards to the levels required by MERCOSUR and other external markets; (iv) identifying commercially viable projects and financing strategic investments that add value to the subsector's products; and (v) securing expanded access to new international markets for such products.

DESCRIPTION: In pursuit of the proposed objectives, the program will consist of the following components:

1. Technological development (US\$22.64 million)

Support will be provided for the upgrading of technology throughout the farm production system by investing in:

- a. Introduction of improved plant varieties (US\$12.46 million)

The upgrading of deciduous orchards, vineyards, and citrus groves operated by eligible producers (with

15 hectares or less) through the introduction of genetically improved plant varieties tailored to external demand, will be supported through a subsidy program under which farmers are reimbursed for up to 25% of the costs the executing agency believes the producers have incurred in introducing the new varieties in their operations.

b. Validation and adaptation of new technology
(US\$1.26 million)

Initiatives aimed at testing farm production, market preparation, and processing technology developed by national researchers, producers, or industries, or by foreign technical research centers, to verify that they can be applied on a commercial scale will be supported by cofinancing validation projects selected on a competitive basis.

c. Technical assistance (US\$6 million)

Technical assistance in farming technology, agroprocessing industries, and business administration will be provided by private technical assistance companies, NGOs, and private sector experts in response to needs for improved technology identified by producers and operators.

d. Training (US\$2.92 million)

Courses will be offered to producers, agroindustrial processors, exporters, and specialists providing technical assistance to the subsector on new technologies and business management in the areas addressed by the program.

2. Quality control (US\$1.8 million)

Support will be provided for the development of a regulatory framework governing product and processing standards in the subsector, and harmonization of Uruguay's quality and plant health provisions with standards agreed to under MERCOSUR. Specific activities under this heading will include: (i) disseminating and enforcing these standards; (ii) improving quality controls and plant health inspection of fresh fruits and produce; and (iii) certifying genetic strains and phytosanitary conditions and restocking with new fruit and produce varieties. The new materials will be produced by private sector nurseries and seed growing stations, and will be required to meet productivity, pest, and

disease resistance and quality standards and gain acceptance in foreign markets.

3. Marketing development (US\$10 million)

a. Trade promotion and market information projects (US\$1.45 million)

Financing will be provided for development of a system to analyze and improve the dissemination of trade and market information. This heading will also include promotional activities abroad (participation in trade fairs, trade missions to open new markets and establish commercial contacts, etc.) to provide information on the subsector's products.

b. Pilot projects in export markets (US\$2.17 million)

Logistical support and investment will be provided to groups of producers and operators in the subsector to help them take advantage of trade opportunities identified in foreign markets.

c. Preinvestment studies (US\$400,000)

Agroindustrial or commercially viable projects will be identified and developed for submission to financial entities (e.g. fruit and produce collection and processing stations) capable of expanding export opportunities.

d. Financing of strategic investments (US\$6 million)

A seed capital fund will be established to attract private sector participation in the financing of service centers (fruit and produce collection and processing stations) or other industrial operations to improve post-harvest handling and marketing of the subsector's products.

4. Institutional strengthening (US\$500,000)

Activities (consultancies and training programs) will be conducted to strengthen the program executing agency and the other entities and units working as subexecuting agencies on specific components.

EXECUTION:

The executing agency for this program will be the Ministry of Agriculture and Fisheries (MGAP) through the executing unit (PREDEG). To help carry out the program, the MGAP will rely on its Planning and

Budget Office (OPP) and the National Development Corporation (CND), both of which will act as subexecuting agencies, as well as on other agencies and associations such as the National Farm Board (JUNAGRA), National Citrus Growers Planning Commission (CHNPC), National Wine Growers Institute (INAVI), the Program to Promote Non-traditional Exports (PENTA), Program for Testing of Alternative Farming Methods (PROVA), the Agricultural Services Directorate (DGSA), and the Agricultural Planning Institute (IPA), all of which have links to the Ministry.

**SOCIAL AND
ENVIRONMENTAL
REVIEW:**

Pursuant to a recommendation of the Environment Committee (CMA) at its meeting of October 1, 1996, an environmental and social impact assessment (ESIA) has been prepared and was made available to the public on August 21, 1997. The environmental summary was approved by the Committee on Environment and Social Impact (CESI) on October 10, 1997, and its main recommendations are reflected in this project report.

BENEFITS:

By supporting the development of technology and trade in the farming subsector, the program will significantly improve the competitiveness of its main products. In so doing, it will help to increase both production and the level of exports, which in turn will boost the income of producers and operators in the subsector; create more employment in the production, processing, and marketing phases of the farm product distribution system; and generate added fiscal revenues and foreign exchange for the economy in general.

RISKS:

1. Willingness of operators to modernize: The success of the program will depend upon the decision by operators in the subsector to make the investments required to modernize farms, processing industries, and marketing operations. The risk of their deciding otherwise will be lessened by: (i) the net economic benefits that modernization is expected to generate; and (ii) the various means employed by the program to stimulate interest among operators in making the needed investments.
2. Contribution by beneficiaries to cofinancing of program activities: The sustainability of certain components will depend upon convincing program beneficiaries to help finance their operations. Failure to obtain this support could adversely affect specific goals of the program. The large number of producers that have

registered to participate in the different components of the program, with full knowledge of the financial obligation this entails, is proof of their willingness to provide the necessary co-financing.

3. Small producers' limited access to credit due to lack of collateral: This factor could limit the ability of small farmers to obtain the resources needed to modernize their operations. To minimize this possibility, the program will train producers in business and organizational methods to familiarize them with credit operations. As a parallel activity, the executing agency will also establish a credit guarantee fund with resources from the MGAP and the Banco de la República Oriental del Uruguay (BROU) to help small producers gain access to loans.
4. Lack of coordination between institutions: Although the majority of the institutions participating in the program are linked through the MGAP, there is some duplication of effort and coordination problems that could hamper efficient execution of the program. The means of execution chosen and the institution-strengthening activities to be carried out under the program are designed to improve coordination among these institutions and thus reduce the risk in this area.

**THE BANK'S
COUNTRY AND
SECTOR STRATEGY:**

The proposed program is in line with the strategic guidelines agreed to between the Bank and the country in that it seeks to improve agroindustrial competitiveness in the farming subsector, in the context of the increasing liberalization of Uruguay's economy and the globalization of markets. The program is designed as an instrument to help the subsector meet the challenges and take advantage of the opportunities generated by Uruguay's membership in MERCOSUR.

**POLICY CRITERIA
WITH RESPECT TO
POVERTY AND SOCIAL
ASPECTS:**

Pursuant to the Eighth Replenishment document (AB-1704), it has been determined that the proposed project does not qualify as a poverty-targeting program, either geographically or in terms of its beneficiaries, nor is it aimed specifically at women.

**EXCEPTIONS TO BANK
POLICY:**

The program does not contemplate any exceptions to the Bank's policies.

**PROCUREMENT OF
CONSTRUCTION
WORKS, GOODS AND
CONSULTING
SERVICES:**

The Bank's current procedures will be applied in the procurement of goods and the hiring of consulting services to be financed with program resources. The program does not call for construction works. International competitive bidding will be compulsory wherever the Bank's resources are to be used for the purchase of goods costing US\$250,000 or more, or the recruitment of consulting services valued at US\$200,000 or more. The Bank will perform an ex post evaluation of the consultancies entailing contracts of US\$20,000 equivalent or less, in the case of individual consultants, and US\$50,000 in the case of consulting firms.

**SPECIAL
CONTRACTUAL
CONDITIONS:**

Prior to the first disbursement, the executing agency must submit the following to the Bank:

- a. evidence that the program's Operating Regulations agreed with the Bank have been placed in effect by the appropriate ministerial resolution (paragraph 3.14);
- b. evidence that it has signed operating agreements with the IPA, the INAVI and the CND (paragraph 3.15);
- c. report on program review indicators agreed upon with the Bank and including an updated Logical Framework (Annex II-1) and annual work plan (AWP) for the first year of the program (paragraph 3.16); and
- d. evidence that the program's financial/accounting system, including the chart of accounts, has been established and is being applied in a comprehensive manner by the executing unit, the CND, the OPP, and the IPA (paragraph 3.17).

Other special conditions require the executing agency to submit to the Bank:

- a. the program's AWP for the following year by November 30 each year, including details for each of the components and a description of the progress achieved in carrying out the AWP for the preceding year (paragraph 3.18);
- b. evidence of having committed all of the program resources allocated for the restocking subsidy for eligible producers (improved plant varieties component), no later than thirty (30) months after the first disbursement of resources without possibility of extension (paragraph 3.19); and

- c. evidence that all expenditures and commitments for goods and consulting services – for recognition after April 1, 1997, in the case of local counterpart funding (US\$1.4 million) and after July 1, 1997, in the case of the Bank's financing (US\$1.4 million) – followed procurement procedures which are substantially in accord with the conditions subsequently established in the loan contract (paragraph 3.20).

I. FRAME OF REFERENCE

A. The agricultural sector

- 1.1 With growth averaging 5.7% over the period 1994-1996, far outstripping the growth rate for the economy as a whole (1.6%), the agricultural sector has been a key factor in Uruguay's economic growth. In addition to generating close to 10% of the country's GDP, the sector also accounted for some 80% of Uruguay's export total, between primary products and processed goods. The sector's total contribution to GDP is divided between two subsectors, with around 55-60% coming from livestock and 40-45% from agriculture *per se*.
- 1.2 Moreover, the growth rates in these two subsectors have followed different trajectories. While increasing investment in traditional animal products such as meat and wool has been associated with technical changes and improved productivity at the farm level, the greatest relative growth in the subsectors has been in those activities where investments have resulted in vertical integration of the production process – including primary, processing, and marketing phases. This has been the case, for example, with rice, barley, dairy products, and citrus fruits, and it is this model of development that the program will promote among farmers.

B. Agricultural policy

- 1.3 Over the last ten years, sectoral policy in general has been increasingly dictated by macroeconomic policies, and more recently has had to adjust to regional requirements agreed to under MERCOSUR. Macroeconomic policies continue to push for more liberalized trade and globalization of markets, and seek to restore the competitiveness of primary production activities through fiscal measures designed to reduce the so-called "Uruguayan cost" of doing business. At the sectoral level, the policy is to continue the gradual deregulation of the sector while supporting efforts to stimulate private investment in technology and marketing, in order to take advantage of the opportunities and meet the challenges afforded by globalization and membership in MERCOSUR.

C. The farming subsector

- 1.4 Employing close to 40,000 individuals, most of them small and medium-sized producers and operators, together with permanent and temporary workers, the farming subsector is one of the principal sources of rural employment and income in Uruguay. The main centers of activity are concentrated in the departments of Montevideo, Canelones, and San José – and to a lesser degree in Paysandú, Salto, and Bella Unión – and include around 80,000 hectares of land. This land is dedicated primarily to production systems which, in varying proportions, combine orcharding, truck

gardening, vine-growing, beekeeping, and raising of farmyard animals (pigs and poultry).

- 1.5 Uruguay's farm subsector enjoys the natural resources and agro-ecological conditions needed to increase production and become more competitive. The export potential of the subsector has yet to be fully developed in various product areas such as citrus and deciduous fruits (apples, peaches, pears, and plums), produce (tomatoes, sweet peppers, strawberries, garlic, onions, and potatoes), and viticultural products (table and wine grapes). In other areas of truck farming (potatoes, garlic, and market vegetables), as well as in the raising of farm animals, production could be more efficient in supplying domestic markets.
- 1.6 In the areas of greater export potential, the country's agroindustrial process can attain competitive status alongside other recognized regional exporters (Argentina and Chile) in serving seasonal demand in Europe and the United States. In fact, it is already doing so in the citrus sector (70% of whose production is exported, bringing in some US\$50 million in foreign exchange). Similar progress is now being seen in wine-making, where exports have risen from 200,000 bottles in 1995, to 400,000 in 1996, to one million in 1997. It should also be possible to exploit seasonal troughs in regional markets for products such as tomatoes, sweet peppers and strawberries in Buenos Aires, and pears, peaches, and plums in Puerto Alegre and São Paulo. At present, however, the subsector is unable to fully exploit these opportunities to generate added foreign exchange due to a number of problems with technology, product quality, and marketing and financial restrictions, which limit its ability to mount a more a competitive production process.
- 1.7 Most of these restrictions arose during the period when Uruguay operated a closed economy dominated by trade-distorting policies and high tariff barriers, with limited-growth production strategies aimed at the country's small domestic market. This approach resulted in a highly compartmentalized production and marketing system which failed to generate the economic and organizational incentives appropriate to greater capitalization and modernization of farming, and made it difficult to successfully integrate the subsector into foreign markets.
- 1.8 As a result of these restrictions, producer incomes are low, the level of poverty in the subsector is high, and there is a growing tendency among smaller farmers to abandon their operations altogether. It is estimated that of the total number of poor families in rural areas of Uruguay (i.e. with family income below the poverty line of US\$3,200 equivalent), some 25% fall within the small producer category. This high level of poverty is associated with the decline in permanent employment for the smallest producers as the traditional family farm has become less competitive. In the last decade alone, this situation has led 8,000 producers with

farms of less than 10 hectares to abandon their land and move into the cities.

- 1.9 The recent measures to open up Uruguay's economy, together with growing regional integration, have brought these deficiencies to light and led producers and operators to accept that the subsector must modernize if it is to survive and prosper in the new environment. Efficient reorganization of production and marketing systems has become all the more pressing now that the tariffs which protected the subsector are being gradually reduced and will disappear entirely in 2001. As a result, small farmers are now anxious not only to take advantage of the export opportunities afforded by MERCOSUR, but also to find ways to hold their own against competition from neighboring countries.

D. Problems detected in the subsector

- 1.10 An analysis of production, processing, and marketing conducted by the MGAP, with the help of producers and operators, identified the following four constraints on sustainability and development of the subsector: (i) productivity levels that are below potential; (ii) product quality not up to international requirements; (iii) absence of coordination between production, processing, and marketing activities; and (iv) lack of credit access for small producers.

1. Productivity levels that are below potential

- 1.11 With few exceptions, the farming subsector suffers from: (i) the use of low-yield genetic materials with little resistance to pests and diseases, which reduces the value of production; and (ii) the prevalence of systems of production based on traditional family farming methods with low levels of technology.
- 1.12 Inadequate coverage by the public extension services has been particularly damaging to small producers, and lack of coordination in the methods and practices promoted by public and private agricultural extension officers have contributed to: (i) limited improvement of the genetic and health characteristics of plant varieties used in agriculture; (ii) slowness in adopting production technology suited to the subsector (for improving soil use and irrigation technology, and more effective control of pests and diseases); and (iii) inadequate postharvest management of production.
- 1.13 The problems just indicated are responsible for: (i) keeping productivity indicators for individual farms and the subsector as a whole 20-50% below the levels attainable with genetically improved stocks and more efficient production technology that are either currently available in the country, or can be imported; (ii) increasing unit costs, especially those attributable to the use of agrochemicals to control pests and disease (with all this

implies for the environment); and (iii) undermining the commercial viability of farm production and lowering producers' net income.

2. Product quality not up to international requirements

- 1.14 The subsector lacks a well-organized regulatory framework that would help ensure orderly development of primary production and industrial product processing in accordance with international standards. Plant and animal health control procedures need to be strengthened as well, especially as MERCOSUR begins introducing more rigorous standards for intraregional trade. This is particularly important since the subsector currently uses inappropriate and genetically unimproved stocks, as well as inadequate postharvest handling methods.
- 1.15 A history of producing exclusively for the domestic market has kept producers and farm operators unfamiliar with the quality standards, packaging, and transport requirements of other markets.

3. Absence of coordination between production, processing and marketing activities

- 1.16 The subsector lacks a reliable information system on prices and markets that would enable producers and operators to effectively base decisions concerning resource allocations and organization of production on observed market demand.
- 1.17 Problems between producers and processors in coordinating the postharvest handling of products are affecting the quality of the goods produced. This is particularly critical because of the perishable nature of most fresh fruits and vegetables and also helps to reduce the volume and quality of raw materials used in the agroindustrial processing industry.
- 1.18 Little has been accomplished thus far in developing and marketing the subsector's products. No effective mechanisms are in place for connecting with foreign markets or learning how to penetrate them.

4. Lack of credit access for small producers needing working capital and investment in their operations

- 1.19 The investments required by individual producers for farm modernization will be costly and require credit for working capital and investment in the production process. Although the Uruguayan financial system is adequately supplied with credit facilities, including resources provided under the Multisector Global Credit Program financed in part by the Bank (Loan 705/OC-UR), there are signs that small farmers have difficulty accessing these resources. The main problem is that these farmers cannot provide sufficient guarantees for loans. The amounts required for the necessary investments far exceed the value of assets which producers could offer the financial system by way of collateral.

E. The country's strategy for overcoming these problems

- 1.20 To overcome the abovementioned problems, the government - in coordination with the producers and operators in the subsector - has formulated the present program which seeks to support small farm modernization and development through: (i) introduction of new technology for farming, agroindustrial processing, and marketing; (ii) improvement of product quality and health standards; (iii) expansion of agroindustrial activities (fruit and produce collection and processing stations); (iv) greater emphasis on marketing; and (v) upgrading business management skills. In parallel with this program, the government will help small farmers gain access to resources through the financial system by establishing a credit guarantee fund to be financed initially with resources from the Ministry of Agriculture and Fisheries (MGAP) and the Banco de la República Oriental del Uruguay (BROU).

F. The government's program and the Bank's strategy

- 1.21 The Government of Uruguay's development strategy for the period 1995-1999 focusses on overall macroeconomic restructuring and a long-range program to **increase the competitiveness of its economy**. The objectives of this strategy are to promote **export-based economic growth**, lower inflation, reinforce public finance, introduce structural reforms to encourage savings and investment, and improve the efficiency of public service and **private sector investment**.
- 1.22 The Bank's strategy for Uruguay is to promote **investment as a means of stimulating growth**, attempting in particular to boost the capacity of Uruguay's economy to **exploit the opportunities offered by MERCOSUR and other external markets**. This strategy calls for action in three areas of priority: (i) support for continuing public sector structural reforms; (ii) backing for initiatives to **improve the private investment climate** by helping business develop capacity (especially among small and medium-sized enterprises), and become more competitive, especially by modernizing production and thereby reducing the so-called "Uruguayan cost" of doing business; and (iii) support for efforts to improve the delivery and quality of **social services**, with particular emphasis on ensuring availability of the human capital needed for sustainable growth in the new global market.

G. Design of the program

- 1.23 The proposed program is consistent with the strategic guidelines adopted by both the country and the Bank, and is based on the need for increased competitiveness in the farming subsector in a more open Uruguayan economy, particularly in the context of MERCOSUR.

H. Value added by the program

- 1.24 The program seeks to eliminate the main obstacles to competitive advantages for the subsector through investment in the three phases of agribusiness (production, processing and product marketing). A variety of operations will fortify the alliance between the public and private sectors in pursuit of the objectives indicated above.
- 1.25 These operations will include: (i) subsidies for modernization of the smallest farms; (ii) creation of a seed or risk capital fund to stimulate private investment in strategic agroindustries and marketing enterprises; and (iii) training in business organization and credit technology to promote group action of the cooperative or farm association type that will help small farmers gain access to credit.
- 1.26 The alliance between the public and private sectors for development of fruit and vegetable farming can be seen in all aspects of the program. The program itself was designed in response to demand from producers for modernization of the subsector. This demand was identified in a number of surveys conducted among producers, as well as in the advance indication by farmers of their willingness to participate in the various components to be financed under the program. As a sign of their interest in seeing this program carried out, the producers indicated in both surveys and meetings that they would be willing to take part in a cofinancing arrangement for most of the planned activities.
- 1.27 In fact, private sector participation and investment in farm modernization will significantly exceed the level of financing proposed under the program, which will cover only 20-30% of the total investment required. This is in line with the public sector intention of financing only those services for which the market cannot be expected to provide resources under normal competitive conditions.

I. Institutions participating in the execution of the program

- 1.28 The executing agency for the Farm Modernization and Development Program (PREDEG) will be the Ministry of Agriculture and Fisheries (MGAP), acting through an executing unit. The latter unit will coordinate the activities of various institutions participating in the program. Among these are two government entities which will serve as subexecuting units, and which are not part of the institutional framework responsible for the agricultural sector, namely: the Planning and Budget Office (OPP), which will participate in the program through the National Preinvestment Fund (FONADEP); and the National Development Corporation (CND).
- 1.29 Other institutions that will participate in execution of the PREDEG, and which are linked to the MGAP, include: the National Farm Board (JUNAGRA), the National Citrus Growers Planning

Commission (CHNPC), the National Wine Growers Institute (INAVI), the Program to Promote Non-traditional Exports (PENTA), the Program for Testing Alternative Farming Methods (PROVA), the Agricultural Services Directorate (DGSA), and the Agricultural Planning Institute (IPA).

J. The Bank's experience with operations in the agricultural sector

- 1.30 The Bank has provided Uruguay with resources totalling over US\$220 million to cofinance investments, small projects, MIF operations, and IIC technical-cooperation operations in the sector, whose total cost exceeds US\$350 million. Of these operations, only the Infrastructure Program for Dairy Enterprises (914/OC-UR), four small projects, and the MIF and IIC operations are still being carried out. The operations of the IDB Group have helped to improve animal and plant health protection in the sector, including eradication of foot-and-mouth disease in the country, and have had a favorable impact on export growth for dairy products and rice.
- 1.31 Notwithstanding the progress achieved, problems in program execution have frequently caused delays in the completion of projects. One of the most important of these problems has been the institutional and financial weakness of several executing agencies. The lessons learned from past experience have been taken into account in formulating the institutional framework for this program, which seeks to create a mechanism for ensuring flexible execution and includes institutional strengthening to compensate for deficiencies observed in the past.

II. THE PROGRAM

A. Objectives

- 2.1 The overall objective of the Farm Modernization and Development Program (PREDEG) is to increase the value of farm products and exports through investments designed to improve the subsector's competitiveness.
- 2.2 The specific objectives of the program include: (i) boosting productivity in the subsector; (ii) increasing net income for producers and operators; (iii) raising quality and health standards to the levels required by MERCOSUR and other external markets; (iv) identifying commercially viable projects and financing strategic investments that add value to the subsector's products; and (v) securing expanded access to new international markets for such products.
- 2.3 To achieve these objectives, the program employs a strategy which calls for the introduction of new technology, better business organization, and improved postharvest handling and processing of products, as a means of overcoming the problems and limitations affecting performance throughout Uruguay's entire agroindustrial process.

Monitoring and Evaluation

The baseline study for the program was established by means of a survey of 600 producers spread throughout the affected regions, and included data from census reports.

The Logical Framework for the program (Annex II-1) sets out the proposed indicators for monitoring of the overall program, and for each component.

At the overall program level, it is suggested that three indicators be evaluated in aggregate: producer income, commercial transactions in the sector, and value of exports.

B. Structure of the program

- 2.4 The proposed program is organized around the following areas of activity: (i) *development of technology*; (ii) *quality control*; (iii) *marketing development*; and (iv) *institutional strengthening*.

1. Development of technology (US\$22.64 million)

- 2.5 To upgrade technology throughout the farm production system, this component will finance the following investments:

a. Introduction of improved plant varieties (US\$12.46 million)

- 2.6 Support will be provided for upgrading deciduous orchards, vineyards and citrus groves operated by eligible producers through the introduction of genetically improved plant varieties tailored to external demand, by means of a subsidy program under which farmers

are reimbursed for up to 25% of the costs the executing agency believes these producers have incurred in introducing the new varieties in their operations.

- 2.7 The physical goals under this subcomponent include development of 2,700 hectares of stone and pomiferous fruit trees (apples, pears, peaches, and plums) in varieties with high export potential; 1,800 hectares of wine and table grapes; and 1,600 hectares of citrus trees. This subcomponent is expected to benefit around 1,500 producers in all (500 broadleafed fruit tree growers, 800 vineyard operators and 200 citrus growers). This will include around 60 nursery operators who produce certified or registered materials (some 20 viniculturists, 30 specialists in broadleafed fruit and citrus trees, and 10 specializing in citrus crops only). The executing unit responsible for the PREDEG will carry out this subcomponent with technical assistance from the INAVI, CHNPC, and JUNAGRA.

b. Validation and adaptation of new technology (US\$1.26 million)

- 2.8 The program will provide support for initiatives aimed at testing farm production, market preparation, and processing technology developed by national researchers, producers, or industries, or by foreign technical research centers, to verify that they can be applied on a commercial scale. This support will consist of cofinancing for selected technology validation projects covering up to 50% of the costs of production activities (US\$50,000/project) carried out on producers' farms or in the plants of agroindustrial operators, with technical support and monitoring as required.
- 2.9 Selection of projects for cofinancing will be on a competitive basis, with interested producers or operators submitting proposals. To obtain funding under the program, applicants must submit a well-defined project prepared according to pre-established guidelines, fully justifying the technological, economic, financial, and organizational aspects of their projects and indicating potential impact.
- 2.10 The selection of projects will take into account how they relate to the priorities and objectives of the program; their potential benefits; the institutional and organizational capacity of the applicant; and potential impact on subsector modernization. Specific criteria will be followed, according to the grading scales and weighting indicated in the Operating Regulations.
- 2.11 The goals of the subcomponent call for the cofinancing of 130 technology validation projects over the five-year execution period of the program, divided among the different production and agroindustrial activities. The executing unit will be responsible for execution, with technical support from the PROVA.

c. Technical assistance (US\$6 million)

- 2.12 Under this subcomponent, support will be provided for technical assistance in farming technology, agroprocessing industries, and business administration. Services in these areas will be provided by private technical assistance firms, NGOs, and private sector experts in response to needs for improved technology identified by producers and operators.
- 2.13 The cost of technical assistance will be shared between beneficiaries and the program, with the latter's share decreasing over time and varying according to the type of beneficiary. The Operating Regulations for the program set out the cofinancing matrix to be used, which varies according to the year and type of beneficiary while maintaining an overall average of 50% of the costs to be covered by the program. The financial resources provided under this subcomponent will be used to hire technical assistance experts and firms. Financing for environmental monitoring of the Program will also be included.
- 2.14 The goal of the subcomponent is to provide technical assistance for some 2,500 farmers in various production categories, plus 40 operators of agroindustrial and marketing enterprises, including collection and processing stations for fruits and vegetables, and equivalent operations in other categories to be promoted under the program. The executing unit will be responsible for execution of this subcomponent with technical support to be provided by the INAVI, CHNPC, JUNAGRA and the IPA.

d. Training (US\$2.92 million)

- 2.15 This activity will include courses for producers, agroindustrial processors, and exporters on new technologies and business management in areas relating to the program's objectives. It will also include short training sessions for the experts providing technical assistance to ensure consistency in the methods and contents of the technology transfer portion of the program. The Operating Regulations for the program set out the cofinancing matrix to be applied, which assigns 20-80% of costs to the program depending on the type of beneficiary, while maintaining an overall average of 55% for the program's share of costs. The financial resources provided under this subcomponent will cover the cost of registration for courses and the hiring of instructors.
- 2.16 The objective under this subcomponent is to provide training for 4,500 producers and owners of nurseries, 2,400 farm operators and processors, 480 professional experts and technical instructors, and 100 agroindustrial operators. The executing unit will be responsible for implementing this subcomponent with technical support from the INAVI, CHNPC, and JUNAGRA.

2. Quality control (US\$1.8 million)

- 2.17 This component will support the MGAP's Agricultural Services Directorate (DGSA) in its efforts to develop a regulatory framework governing product and processing standards for the subsector, and harmonization of Uruguay's quality and plant health provisions with the MERCOSUR standards. Specific activities to be financed under this heading include: (i) dissemination and enforcement of the standards; (ii) improvement of quality controls and plant health inspection of fresh fruits and produce; and (iii) certification of genetic strains and phytosanitary conditions, and restocking with new fruit and produce varieties produced by private sector nurseries and seed growing stations that meet productivity, pest and disease resistance, and quality standards, as well as foreign market preferences.
- 2.18 The goal in this component is to formulate and apply standards for products, inputs, and processes, and to create systems for certification of propagation materials and for quality assurance, certification, and control for fresh fruits and vegetables. It will also include activities to make the 4,500 beneficiaries under the program aware of these standards and systems, including producers, agroindustrial processors, marketing and export service operators, and the technical personnel and certification firms authorized to conduct quality control procedures. The restocking of farms with new produce varieties produced by private sector nurseries and seed growing stations is expected to benefit 1,500 truck farmers with some 6,000 hectares under vegetables. The resources provided will be used to purchase laboratory equipment and pay for consultants and training. The executing unit, acting through the DGSA, will be responsible for execution of this component.

3. Marketing development (US\$10 million)

- 2.19 This component will include financing for investments to: (i) provide producers and operators in the subsector with better knowledge of markets; (ii) make changes in the agroprocessing system; and (iii) support efforts to promote their products and obtain greater access to external markets. The activities identified are set out below.
- a. Trade promotion and market information projects (US\$1.45 million)
- 2.20 Financing will be provided for development of a system to analyze and improve the dissemination of trade and market information (US\$600,000) using basic data from existing information systems in Uruguay and abroad. A private sector contract will be let for this activity and program financing will be confined to startup costs, with responsibility for funding and operation transferred to the beneficiaries thereafter. This heading will also include

promotional activities (US\$850,000) outside Uruguay (participation in trade fairs, trade missions to open new markets and establish commercial contacts, etc.) to provide information on the subsector's products.

- 2.21 With regard to information in general, the goal will be to devise and place in operation a system for the dissemination of market information (with connection to data banks). In the trade promotion area, plans are to carry out 24 promotional programs in different export markets over the five-year execution period of the program. The resources provided under this subcomponent will be used to hire specialized technical firms and purchase office and computer equipment. The executing unit will be responsible for carrying out this subcomponent with technical assistance from the PENTA.

b. Pilot projects in export markets (US\$2.17 million)

- 2.22 Logistical and investment support will be provided to enable groups of producers and operators in the subsector to take advantage of trade opportunities identified in foreign markets. Once these opportunities have been identified, the organization of export operations, carriage, market-testing shipments and customer service in foreign markets will be planned and implemented. Three participants will be involved in the planning: a private sector export service to handle trade aspects from point of origin to destination, the producers organization, and a private sector marketing agent.
- 2.23 This subcomponent will be carried out by private companies selected on a competitive basis. The cost of the pilot projects will be cofinanced by the program and the producers, chambers of commerce or marketing agents who will benefit from them. Pilot export projects will be carried out in the following phases: (i) initial identification of product categories with export potential; (ii) exploration of markets, opportunities and clients; (iii) supply contracts with producers; (iv) marketing operations (importer/client); (v) defining the operation (product, packaging, date, volumes, etc.); (vi) identification of the production technology and postharvest handling requirements; (vii) drawing up the schedule of shipments and logistical arrangements; (viii) execution (postharvest handling and shipment); (ix) reception of the product at destination followed by consumer testing; and (x) evaluation and feedback.
- 2.24 The goals here are to cofinance up to a maximum of 80% of the technical assistance component and 50% of the expenses associated with the export process for 25 projects over five years, with an average duration of two years per project. The financial resources under the subcomponent will be used to hire specialized technical firms and cover the costs involved in preparing products for market

and conducting pilot export projects. The executing unit will be responsible for carrying out this subcomponent.

c. Preinvestment studies (US\$400,000)

- 2.25 The preinvestment studies will be used to identify viable agroindustrial and trade sector projects opening export opportunities. These studies will be carried out by private firms selected on a competitive basis. They will also include support for financial engineering services to identify possible sources of funding for such projects, possibly by means of joint ventures with financial agencies or local or international private sector agroindustrial firms.
- 2.26 The goal under this subcomponent is to identify and carry out 16 technical studies in support of investment decisions, especially for investments in fruit and produce collection and processing stations. The beneficiaries will be the producers and commercial operators involved in the resulting projects. The financial resources provided in this subcomponent will be used to hire specialized firms. Responsibility for the studies will be delegated to the OPP-FONADEP by the executing unit.

d. Financing of strategic investments (US\$6 million)

- 2.27 This component will establish a seed capital fund (consisting entirely of local counterpart resources) for attracting private sector participation in the financing of service centers (fruit and produce collection and processing stations) or other industrial operations, to address problems identified in the post-harvest phase.
- 2.28 The seed capital provided will be channelled through the **Agricultural Production, Processing, and Marketing Board (APICE)**, which will be managed by the **National Development Corporation (CND)**. The CND will act as a temporary partnership of corporations - which could include producer associations, agroindustrial companies, or marketing agents - of financing industrial ventures assigned priority based on market demand. The CND's participation will be limited to putting up risk capital for up to 30% of project cost. Such capital may under no circumstances exceed US\$1.5 million per project, and will be subject to an exit plan within a period not to exceed five (5) years. The resources under this subcomponent will be used for the necessary capital contributions.

4. Institutional strengthening (US\$500,000)

- 2.29 This component will finance various activities (consultancies and training programs) to strengthen the program executing agency subexecuting agencies for specific components, including:

(i) JUNAGRA, providing support for restocking with new plant varieties, technical assistance, and identification of training needs; (ii) INAVI, which will participate in the grape growing and vineyard management activities; and (iii) CHNPC, in activities involving the citrus industry.

C. Costs and financing

- 2.30 The total cost of the program is estimated at US\$49 million. An amount equivalent to US\$32 million (65% of the total) will be financed by the Bank in United States dollars from the resources of the Single-Currency Facility under Ordinary Capital. The local counterpart will consist of US\$17 million (35% of the total). The total cost includes US\$5.5 million in administrative expenses, US\$34.9 million for direct costs and repayment (US\$127 million) of the PPF with which the Bank supported preparation of the Program (990/OC-UR). It also includes US\$2.5 million in provisions for inflation and contingencies, and US\$6.1 million in financing costs. These estimates are made on the basis of a 20-year amortization and execution period of up to five years. The interest rate is variable, in accordance with the Bank's policies. The loan will also be subject to a credit fee of 0.75% plus a fee of 1% for inspection and supervision.

Table II-1
Program costs (in US\$ thousands)

Category	IDB	Local	Total	%
1. ADMINISTRATION	3,578	1,892	5,470	11.2
2. DIRECT COSTS	21,032	13,920	34,952	71.3
2.1 Development of technology	14,920	7,720	22,640	46.2
2.1.1 Introduction of improved plant varieties	6,000	6,460	12,460	25.4
2.1.2 Validation and adaptation of new technology	1,260	-	1,260	2.6
2.1.3 Technical assistance	4,740	1,260	6,000	12.2
2.1.4 Training	2,920	-	2,920	6.0
2.2 Quality control	1,797	-	1,797	3.7
2.3 Marketing development	3,815	6,200	10,015	20.4
2.3.1 Trade promotion and market information projects	1,445	-	1,445	2.9
2.3.2 Pilot projects in export markets	2,170	-	2,170	4.4
2.3.3 Preinvestment studies	200	200	400	0.8
2.3.4 Financing of strategic investments	-	6,000	6,000	12.3
2.4 Institution-strengthening	500	-	500	1.0
3. REPAYMENT OF PPF	127	-	127	0.3
4. UNALLOCATED	1,783	590	2,373	4.8
4.1 Contingencies	1,142	75	1,217	2.5
4.2 Scaling	641	515	1,156	2.3
5. FINANCIAL COSTS	5,480	598	6,078	12.4
5.1 Interest	5,160	-	5,160	10.5
5.2 Inspection and monitoring	320	-	320	0.7
5.3 Credit fee	-	598	598	1.2
TOTAL	32,000	17,000	49,000	100.0
PERCENTAGE	65.3	34.7	100.0	

III. EXECUTION OF THE PROGRAM

A. The borrower and the executing agency

- 3.1 The borrower will be the Government of the Eastern Republic of Uruguay. The program will be carried out by the MGAP acting through the **PREDEG executing unit**, a division of the ministry. To assist it in carrying out its duties, the executing unit will have the policy and strategic guidelines of the **MGAP**, as well as guidance from a **coordinating board** made up of the PREDEG coordinator and the presidents of the **JUNAGRA**, **INAVI**, **CHNPC**, and **PENTA**.
- 3.2 The executing unit will also receive advice from a **private sector advisory committee** made up of representatives from the nine organizations into which the subsector's producers, agroindustrial operators, and marketing agents are grouped. These organizations are the Cooperativas Agrarias Federadas, the Rural Development Commission, the Farm Confederation of Uruguay, the Uruguayan Board of Trade, the National Directorate of Wine-Growing Cooperatives, the Manufacturers Association of Uruguay, the Asociación Rural del Uruguay, the Unión de Exportadores del Uruguay, and the Uruguayan Federation of Regional Centers for Experimental Farming (FUCREA).
- 3.3 The executing unit, its coordinating board and the private sector advisory committee were created by means of Decree 57/996 on February 15, 1996. This decree sets out the operating regulations and institutional structure of the executing unit, including the coordinating board and advisory committee. All three bodies have been established and are operational.
- 3.4 In carrying out the program, the executing unit will be responsible for administrative, financial, and technical activities, and will delegate the following specific functions to the entities which currently have primary responsibility for them, appointing them subexecuting agencies: (i) the National Development Corporation (CND), through the APICE Fund (strategic investments); and (ii) the Planning and Budget Office (OPP), through the National Preinvestment Fund (FONADEP) (preinvestment studies).
- 3.5 The executing unit will have the technical support of the following units and entities: (i) JUNAGRA; (ii) CHNPC; (iii) PENTA; (iv) PROVA; (v) DGSA; (vi) INAVI; and (vii) the Agricultural Planning Institute (IPA).
- 3.6 The executing unit will be responsible for coordinating the activities of participating units and entities, and will represent the Government of Uruguay vis-à-vis the Bank with respect to technical and financial aspects of the program. In addition to the executing unit, the CND and OPP will administer program resources,

and will maintain separate bank accounts and accounting records for the Bank's resources and local counterpart funding. These accounts will be consolidated to facilitate the executing unit's task of preparing financial reports on the program.

B. Means of execution for each component

- 3.7 The means of execution will be set out in detail in the program's Operating Regulations. Bank procedures will be followed for the procurement of goods and equipment and the recruitment and hiring of the consulting services indicated for each component.

1. Development of technology

- 3.8 The activities of the technology development component include the introduction of improved plant varieties, the validation and adaptation of new technology, technical assistance and training. Proposals for introduction of improved plant varieties and technical assistance programs formulated by the beneficiaries will be submitted to the JUNAGRA, INAVI, or CHNPC; assessed by these organizations; and forwarded to the executing unit for its review and approval. The IPA, acting on behalf of the executing unit (which will have support from JUNAGRA, INAVI and CHNPC), will hire firms or individuals to provide technical assistance, in accordance with the Bank's procedures. These technical assistance services will be provided by individual experts, private sector consulting firms, or NGOs. The activities involved in validating and adapting technology will be carried out under contracts issued by the executing unit with the support of the PROVA.

2. Quality control

- 3.9 The technical execution of this component will be carried out by the DGSA, which will be responsible for drafting and distributing standards, carrying out inspections to ensure the quality of products, and identifying and certifying genetically improved materials. The executing unit, with the help of the DGSA, will contract for training services for professionals, producers, and private certification companies. The DGSA will be supplied with equipment and support (consulting) services to assist it in carrying out its duties.

3. Marketing development

- 3.10 Activities in this component include development of a market information system, pilot export projects, preinvestment studies, and financing of strategic investments. The executing unit, with the support of the PENTA, will hire firms to install the market information system and to carry out the pilot export projects.
- 3.11 The OPP will be responsible for administering the resources allocated for preinvestment studies, as well as for letting the

appropriate contracts and supervising the execution of these studies.

- 3.12 Proposed strategic investment projects will be reviewed by the executing unit based on technical criteria, and by the CND on the basis of financial criteria. These criteria will be specified in the Operating Regulations. The proposed projects must be approved by both entities before they can receive program resources administered by the CND through the APICE Fund.

4. Institutional strengthening

- 3.13 The institutional strengthening component will consist of short-term consulting contracts and training programs to enhance the management capacity of the executing unit and the JUNAGRA, INAVI and CHNPC.

C. General program conditionality

1. Conditions precedent to the first disbursement

- 3.14 The executing agency must present the Bank with proof that the Operating Regulations for the program agreed to with the Bank have been placed in effect by the appropriate ministerial resolution.
- 3.15 The executing agency must provide the Bank with evidence that the operating agreements have been signed with the IPA, INAVI, and CND.
- 3.16 The executing agency must provide the Bank with an initial report on the performance indicators for the program, which must include the updated Logical Framework (Annex II-1) and annual work plan (AWP) for the first year of the program, as approved by the Bank.
- 3.17 The executing agency must present evidence to the Bank that the program's financial/accounting system, including the chart of accounts, has been established and is being adhered to fully by the executing unit and the CND, OPP, and IPA.

2. Other conditions applicable during the execution period

- 3.18 By November 30 of each year, the executing agency must submit to the Bank the program's AWP for the following year, including particulars for each component and a description of the progress achieved under the AWP for the previous year.
- 3.19 Within thirty (30) months after the first disbursement of the financing (without possibility of extension), the executing agency must provide the Bank with proof that all of the resources intended to finance the subsidy for restocking the farms of eligible producers (subcomponent under the introduction of improved plant varieties) have been duly committed.

- 3.20 To obtain recognition for goods purchased and consulting services hired beginning April 1, 1997 (in the case of recognition against local counterpart funding (US\$1.4 million)), and beginning July 1, 1997, (for recognition against the Bank's financing (US\$1.4 million)), the executing agency must provide the Bank with evidence that such expenses or commitments were incurred using procurement procedures substantially analogous to those subsequently established in the Loan Contract.

3. Reports and monitoring

- 3.21 Control and monitoring of program execution shall be exercised by the Bank's Country Office in Uruguay. The MGAP, through its executing unit, must submit semiannual comprehensive reports to the Bank beginning six months after the start of the execution period.
- 3.22 Within thirty (30) months after signature of the Loan Contract, or when 50% of the program's resources have been committed, whichever occurs first, the Bank and the executing agency will conduct an evaluation of progress in executing the program. If significant deficiencies are detected, the Bank will require the executing agency to take appropriate corrective measures.
- 3.23 For up to two years after completion of program execution, the MGAP - through its executing unit - shall maintain a data base which permits evaluation of the degree to which program goals and objectives defined in the Logical Framework have been accomplished. This data base and the monitoring system used for this purpose must contain socioeconomic and environmental indicators which are relevant to the types of projects and beneficiaries under the program.

D. Inspection and supervision

- 3.24 The Bank will establish such inspection procedures as it deems necessary to ensure satisfactory execution of the program. The MGAP, the executing unit and the other units and entities involved must provide all of the cooperation needed to this end. The budget shall contain an allocation of US\$320,000 under the Bank's accounts for the purpose of such inspection and supervision.

E. External auditing

- 3.25 The program's financial statements must be audited by the Tribunal de Cuentas de la República. These statements must be submitted annually within a 120 days following the close of the government's fiscal year (December 31st) throughout the execution period.

F. Disbursement schedule

- 3.26 The execution and disbursement period for the program will be five years. Disbursements will be authorized periodically, taking into

consideration the recommendations contained in this document and the corresponding regulations, as well as the timely availability of counterpart resources.

Table III-1 Disbursement schedule (US\$ thousands)				
Year	IDB - OC	Local	Total	%
1	4,800	3,840	8,640	17.6
2	7,050	3,970	11,020	22.5
3	7,240	4,160	11,400	23.3
4	6,838	2,882	9,720	19.8
5	6,072	2,148	8,220	16.8
Total	32,000	17,000	49,000	100.0
%	65.3	34.7	100.0	

G. Recognition of expenses and retroactive financing

- 3.27 The executing agency has incurred a number of expenses relating to the launching of several of the investments included in the program. These expenses include payment of honorariums to the staff of the executing unit, subsidies for producers who have begun restocking with new plant varieties, approval of the first strategic investments and initial activities for recruitment of technical assistance, training services, and institutional strengthening. The amount of these expenditures or commitments that may be recognized against the local counterpart or for retroactive financing by the Bank, and the conditions and dates after which they could be acceptable to the Bank, are indicated in paragraph 3.20.

H. Project preparation advance

- 3.28 In accordance with the Bank's procedures for project preparation, 5% of the total financing will be advanced in the form of a revolving fund.

I. Acquisition of goods and services

- 3.29 The procurement of goods and equipment, and the contracting of consulting services to be paid for with program resources must be carried out in accordance with the Bank's procedures. International competitive bidding will be compulsory for goods valued at US\$250,000 or more, and for consulting services worth US\$200,000 or more, where the contract is to be let by a government agency. The program does not include any construction projects. Bidding competitions for contracts below the thresholds cited above will be conducted in accordance with Uruguayan law, provided that

it is consistent with the Bank's procedures. Evaluation of the consulting services hired under the Program for amounts of US\$20,000 equivalent or less, in the case of individual consultants, and US\$50,000 or less, in the case of consulting firms, will be conducted by the Bank ex post. Contracts for goods and services will be grouped in the manner indicated in the Procurement Plan set out in Annex III-1.

J. Maintenance of goods and equipment

- 3.30 The executing agency will undertake to ensure that financing agreements include the requirement that goods and equipment financed with program resources be properly operated and maintained in accordance with generally accepted technical standards.

K. Environmental considerations

- 3.31 Pursuant to a recommendation of the Environment Committee (CMA), an environmental and social impact assessment (ESIA) has been prepared and was made available to the public on August 21, 1997. The PREDEG did not receive any comments in response to the ESIA. An environmental summary was also prepared and was approved by the CESA on October 10, 1997. Copies of the ESIA and the environmental summary were sent to the PIC on October 20, 1997.
- 3.32 Among the environmental and social protection measures incorporated in the program are the following: (i) inclusion of topics relating to the following training and technical assistance activities: (a) effective handling of agrochemicals and integrated pest control, and (b) measures to protect and conserve soil and water resources; (ii) implementation of a system for evaluation and control of the environmental and social impact of individual projects; (iii) coordination with other organizations with important mandates relating to irrigation and environmental assessments; (iv) procedures and goals for ensuring participation by women in all components of the program; and (v) hiring of environmental experts by the executing unit to deal with various environmental aspects of the program.

L. Ex post evaluation

- 3.33 In accordance with IDB policy, and in consultation with the borrower and executing agency, the Bank decided not to include an ex post evaluation as part of the program's activities. However, as indicated in paragraph 3.23, MGAP will have information on the subsector, market conditions, costs, and outcome of projects under the program, and relevant economic parameters will be available if evaluation of the economic impact becomes necessary after completion of the program.

IV. THE EXECUTING AGENCY

A. The MGAP and its agencies

- 4.1 The principal function of the MGAP, the Program's executing agency, is to improve agricultural production in Uruguay, while ensuring that the sector's activities do not endanger the preservation of natural resources. To achieve this objective, the MGAP has a number of specific duties, including the formulation of agricultural policies; research and transfer of technology to small and medium-sized farmers; animal health inspections and phytosanitary controls; and inspection and control of farm inputs. These functions are carried out by either the departments of the Ministry directly, or its autonomous boards, agencies, or commissions.

1. The PREDEG coordinating unit

- 4.2 The PREDEG coordinating unit, which will act as the executing unit for this program, was created to coordinate the efforts of the different units and entities that work to assist the farm sector. Budget Act 16.736 of January 5, 1996, allocated funds in advance to that unit in order to provide the counterpart resources required for execution of the program.
- 4.3 The structure of the executing unit is divided into three areas: (i) production and trade development; (ii) human resource development; and (iii) administration and finance. There is also a monitoring and evaluation unit and a communication and information unit. Within the production and trade development area are three subareas: economic affairs and marketing; technical assistance; and production modernization. The human resource development area has two subareas: training and institutional strengthening. The personnel in these subareas, in coordination with other entities and units participating in the program, will be responsible for coordination of the activities in the different components.
- 4.4 The PREDEG will have a coordination committee composed of technical personnel from the production and trade development and human resource development areas and from the units and entities involved. The director of the executing unit will chair this committee. To ensure comprehensive support for farmers, the PREDEG will set up technical committees with its own specialists and, where necessary, those of other units and entities involved in the program. These committees will report to the operational coordination committee.
- 4.5 The executing unit of the PREDEG has a total of 19 employees, 15 of whom are professional personnel while 4 are administrative support staff. With its present technical staff, plus the additional

personnel scheduled to join the program, the executing unit will be able to meet all technical requirements arising during execution of the program.

- 4.6 The executing unit will institute an accounting system for financial control of the Bank's contribution and counterpart funding. It will also maintain separate bank accounts for the resources from the loan and those of the local counterpart. The transfer of resources to the CND and the OPP will be recorded in the executing unit's accounting system, as well as in the subsidiary accounting systems of these entities. The Agricultural Planning Institute will maintain a suitable financial system for recording the contracting of consulting services, and for safekeeping of deposits for cofinancing of these advisory services with producers.

2. The JUNAGRA

- 4.7 The mandate of the JUNAGRA is to support development of the farm sector. Established under Law 16.105 of January 23, 1990, the JUNAGRA replaced the commission which used to manage the Agricultural Promotion Plan created under Law 13.737 of January 9, 1969. The technical assistance activities which the JUNAGRA provides to farm producers are appropriate to local needs and indicate its ability to carry out the tasks assigned to it as part of its participation in the PREDEG.
- 4.8 The JUNAGRA will support activities under the technology development component, relying on its infrastructure and a staff which includes 60 technical experts and 8 administrative employees in 11 regional offices spread around the country. JUNAGRA's annual budget is devoted primarily to staff payroll and other operating expenses. Its budget in recent years has varied from US\$1.3 million in 1994, to US\$700,000 in 1996. The Board derives its income from the MGAP budget, plus contributions from international agencies. The reduction in its 1996 budget resulted from the termination in 1995 of international contributions it had been receiving since 1994. It has been determined that the JUNAGRA has the necessary level of personnel and adequate facilities to support the executing unit in carrying out the indicated activities.

3. The CHNPC

- 4.9 The CHNPC is a National Planning Commission attached to the MGAP. Created by Law 13.930 on December 31, 1970, the CHNPC conducts activities designed to improve the country's production of citrus crops. Its principal activities include providing technical assistance to citrus growers at all levels: fresh fruit production, processing, and marketing.
- 4.10 The CHNPC has a small staff headed by a General Secretary with 11 technical and nine administrative employees. The commission's

annual budget is allocated to it by the MGAP, and fluctuates between US\$230,000 (1994) and US\$370,000 (1996).

- 4.11 Based on its experience in supporting activities in the citrus industry, the CHNPC is felt to have the necessary resources to fulfill its duties on behalf of the executing unit by providing technical assistance under the program.

4. Other agencies of the MGAP

- 4.12 The PENTA was established with financing from the World Bank by means of Presidential Decree 552 of November 15, 1989, to carry out export incentive programs for agricultural products. The PENTA is a program attached to the MGAP which will help the executing unit to coordinate the approval and execution of pilot export projects, and to develop marketing information systems - both activities under the marketing development component.
- 4.13 The Program for Testing Alternative Farming Methods (PROVA) is a division of the MGAP established by Presidential Decree on January 28, 1993. Its purpose is to evaluate alternatives for diversification under a variety of agricultural product headings, by means of contracts with private sector firms to conduct the appropriate testing. The PROVA will participate in the validation and adaptation of new technology activities under the technology development component of the program.
- 4.14 The DGSA is another unit of the MGAP responsible for quality and health, certification and standards for plant products. The DGSA operates the country's plant health protection service, including phytosanitary inspection at points of entry. With the assistance of other public entities involved in certification of new plant varieties, the DGSA will help the executing unit in carrying out the quality control component of this program.

B. Other participating entities

1. The INAVI

- 4.15 The INAVI is an autonomous public corporation created under private law 15.903 of November 10 1987 and attached to the MGAP with a mandate to support the grape-growing sector. The INAVI conducts research, carries out extension and technology dissemination activities, and also oversees compliance with viticultural standards within the sector. The Institute has 87 employees, 66 of whom are professional 21 administrative support staff.
- 4.16 The INAVI has a well-developed financial system and operating procedures. It currently manages a budget of approximately US\$2.8 million per year, 74% of which comes from a fee collected on each bottle of wine produced in Uruguay.

- 4.17 Under the present program, the INAVI will provide support for technical assistance activities and supervise the introduction of new grape varieties. It has been determined that the INAVI has suitably qualified personnel capable of fulfilling the duties assigned under the program.

2. The CND

- 4.18 The National Development Corporation (CND) is a public entity created under private law 15.785 of December 4, 1985, to support business development in Uruguay through loans and capital investment programs. The CND is organized into four administrative departments which oversee the analysis of project proposals submitted for financing and monitor the portfolio of projects in progress. The Corporation has a permanent staff of 30, most of whom have graduate degrees in business administration.
- 4.19 At the close of 1996, the CND held shares in, and was a lender to, 14 companies. The amount of its investments at that time was US\$4.9 million, and loans outstanding totalled US\$12.4 million, including a 1988 loan of US\$7.6 million classified as a write-off. The Corporation's current portfolio is divided between old ones (between 1988 and 1993) and new ones (between 1993 and 1997). In 1997, the CND made four new investments, boosting the value of its investment portfolio by US\$1.1 million. The old portfolio consists of 9 investments, in which the CND holds an average of 55% of total capital. the majority of these investments were in projects deemed to be generators of employment, which in the event did not pan out. The Corporation has already sold its interest in one of these enterprises, is preparing to sell two more, and has written off its stake in various others. Those investments classified as part of the new portfolio are in projects with clearly defined profitability goals and predefined exit strategies. The CND holds an average 35% of the capital in these companies, and they are currently operating at a profit. In three of these companies, the CND has already sold its shares to the members. In one case, an investment made in 1993, the CND earned a total of 300% on its original investment.
- 4.20 The conclusion to be drawn from the above is that the CND has improved the efficiency of its loan and investment portfolio substantially. Its new investments since 1993 reflect selection on the basis of profitability criteria and under conditions in which the Corporation is a minority and short-term shareholder. Generally, these investments have either been sold or have clear-cut exit strategies.
- 4.21 The CND keeps corporate accounting records. In 1996, the Corporation had assets of US\$53.8 million and equity of US\$30.5 million. The current ratio was greater than 1, which is adequate for a financial enterprise. The results for 1996 showed earnings of US\$260,000, which is considered low because the

Corporation is still having to make financial adjustments due to unprofitable investments in the past.

- 4.22 Again, it has been determined that the current personnel and accounting systems of the CND are adequate and will permit the Corporation to meet its responsibilities under the program. These responsibilities include registering, maintaining and controlling the counterpart resources transferred to finance investments in the farm sector through the APICE Fund.

3. The OPP

- 4.23 The FONADEP is a fund established in 1986 to finance preinvestment studies and administered by the preinvestment division of the OPP. The original financing for the Fund came from a loan granted by the Bank (786/SF-UR). Currently, the preinvestment division is operating the Fund with resources recovered from earlier loans.
- 4.24 Under the program, responsibility for the preinvestment studies subcomponent will be delegated to the OPP, to be executed by means of the FONADEP in coordination with the PREDEG. The resources allocated for financing these studies will be transferred to the OPP for that purpose.

4. Agricultural Planning Institute

- 4.25 The IPA was created as an autonomous entity under private law 16.736 of January 5, 1996. The principal functions of the Institute are extension and technology transfer to aid agricultural production, prepare rural development projects and plans, and cooperate with public and private entities and international organizations in the execution of specified activities.
- 4.26 Prior to its current legal status, the IPA had existed since 1960 as a program financed by the World Bank to carry out seven projects in support of the meat, wool, dairy, and pig farming subsectors. The Institute was converted into an autonomous specialized agency in 1996 with the power to contract for services on behalf of various projects in the agricultural sector.
- 4.27 The IPA handles services by hiring individual technical consultants - the same method to be used by the PREDEG to provide technical assistance to individual farmers. The IPA already has systems in place for contracting, supervising, and paying a substantial number of individual consultants. These systems meet the financial and administrative requirements of the World Bank and are deemed easily adaptable to the IDB's requirements.
- 4.28 Under the execution scheme for the present program, the IPA will be engaged as a hiring agency for the technical assistance services for producer groups. The IPA will receive a fee for its services from the MGAP in local resources not included in the program

counterpart contribution. The IPA will receive the cofinancing deposits made by producer groups and will pay the technical experts once the PREDEG verifies completion of the activities specified in the relevant contracts. The MGAP will reimburse the IPA, with Program resources, for such payments.

- 4.29 It has been confirmed that the Program support IPA has the personnel and systems required to perform the functions specified in its contract with the MGAP.

V. FEASIBILITY OF THE PROGRAM

A. Technical feasibility

- 5.1 Individually, the principal activities planned under this program are not difficult to execute, and some have been carried out in Uruguay for a long time now, although with a different focus than that proposed here. The program's technology development, quality control, marketing development, and training activities will better enable beneficiaries to analyze their problems with farm and agroprocessing technology, identify solutions, and solve the problems without depending on protection of the state. These are novel concepts for agricultural development in Uruguay, and the current political-economic conditions favor a successful introduction of this new approach.
- 5.2 The program's emphasis on providing temporary instruments of support on the one hand, and on the organization and training of human resources on the other, is designed to ensure continuity and produce a multiplier effect based on progress achieved during execution.

1. Technology development

- 5.3 In preparing estimates for the technology development component, simulations of agricultural production under the program assumed that the areas under cultivation would remain unchanged during execution. Increases in production achieved would thus be attributable solely to increased productivity per unit of surface area as a result of investment in new varieties, adoption of irrigation technology in certain cases, plus the introduction of suitable management practices, all of which would increase the rate of soil use without compromising the production capacity of this resource.
- 5.4 The assumptions with respect to the new technologies are on the conservative side and assume a gradual shift from traditional methods to other, more modern production techniques. This dampening of expected productivity gains results in more realistic projections based on actual resource availability and agroecological conditions in the regions where the program will be carried out. The assumptions were based on detailed analyses of the survey data gathered during program preparation, when some 600 producers were interviewed. Consideration was also given to the methods in current use, and a realistic assessment of the possibilities for modifying them through investments in technological development supported by the program.

2. Marketing development

- 5.5 The technical feasibility of the marketing development component depends upon the quality of the technical assistance received by groups operating upstream within the agroindustrial system. The personnel that will be responsible for organizing and providing that assistance have a good track record in the field, albeit acting under different technical concepts. The training and technical assistance given these personnel, as well as that received by the beneficiaries, will be crucial in overcoming the existing limitations.

B. Environmental feasibility

- 5.6 The Environmental and Social Impact Assessment (ESIA) concluded that the adverse effects of the Program would be limited in nature and manageable under an environmental control plan containing the necessary mitigation measures. Moreover, that plan will also include activities and methods for ensuring that the desired positive effects are in fact realized.
- 5.7 The program is deemed viable from the environmental point of view in that environmental aspects have been included in most of its components, and because the recommendations of the ESIA are now reflected in it. The environmental procedures defined by the methods and evaluation criteria of the projects and arising during the program will also be applied. These procedures and criteria, which form part of the Operating Regulations for the program, also include plans for coordination with other organizations involved in environmental aspects, for the evaluation and management of potential cumulative effect, as well as with agencies that work with women to encourage their participation in the program. Equally important, the system for supervision and evaluation of the program will include the monitoring of environmental and social aspects.
- 5.8 With respect to participation by women, the program has as a goal to ensure that the number of women participating in each component of the program is at least equal to the proportion of female producers in the subsector, as determined in the survey of potential program beneficiaries. In the component for introduction of improved plant varieties, the minimum goal will be 10%, which is the proportion of female owners of farms identified in the abovementioned survey.

C. Institutional feasibility

- 5.9 The organization structure of the PREDEG's executing unit, the quality of its technical staff and its position as an advisory unit to the Minister of Agriculture and Fisheries, ensure that this body has sufficient capacity and competence to successfully carry out its coordinating tasks under the proposed program. Since the unit

is already in operation, it was possible to verify its effectiveness in coordinating the activities of the units and entities involved in the program, as well as its capacity to direct bidding competitions, let contracts and administer consulting services.

- 5.10 The financial transactions of the Program will be streamlined with a financial and accounting system capable of recording and controlling the program resources, and integrating data from the different units and entities involved in its execution.
- 5.11 The public entities and units that will participate in the execution of the program (the JUNAGRA, INAVI, CHNPC, IPA, PENTA, CND and OPP) have broad experience in carrying out activities similar to those assigned to them under the present program. The Program also includes institutional strengthening activities that will contribute to efficient and effective execution of the program.

D. Financial feasibility

- 5.12 The financial feasibility of the program will depend upon the ability to supply the local counterpart as planned. The total cost of the program will be US\$49 million, US\$17 million of this in counterpart funding. As Table III-2 shows, the annual flow of counterpart funds fluctuates between a maximum of US\$4.4 million in the third year, and a minimum of US\$1.4 million in the last year of the execution period. The local counterpart portion of program resources will come from the MGAP's annual budget.
- 5.13 The financial administration of the government of Uruguay is based on five-year budgetary planning, with the current budget covering the period from 1996 through the year 2000. The structure of the MGAP's budget includes current revenues from the ordinary budget of the central government, and extra-budgetary income received from fees for services provided by the ministry. Revenues from the ordinary budget are used primarily to cover personnel costs, forestry subsidies and counterpart expenditures under investment projects. The extra-budgetary income earned is applied primarily toward other current expenses of the ministry.
- 5.14 The MGAP's budget execution, including capital investments, declined from US\$99.1 million in 1994, to US\$61.9 million in 1996. This drop is explained by the fact that in 1994 the MGAP carried out various projects with external financing totalling US\$48.4 million. When these projects ended in 1996, foreign financing for projects administered by the ministry dropped to less than one million dollars. During the last three years, the MGAP has recorded a surplus each year, after income and expenditures for investments, which has varied from US\$3 million in 1994, to US\$1.1 million in 1996.

- 5.15 The projections of extra-budgetary income and MGAP's related current expenses rose by 75% and 46%, respectively, between 1996 and 1997. This is because in 1997, the ministry initiated new services which call for ministry personnel to make field visits, for which it is charging a fee. Based on income from extra-budgetary fees recorded between January and August 1997 (US\$14 million) it was possible to verify that the projected increases are reasonable.
- 5.16 The current national budget for the five-year period 1996-2000 includes provisions for the MGAP to execute six projects with external financing, including the PREDEG. The revised budget act and the annual amendments for the MGAP make provisions for capital expenditures - primarily to provide counterpart funding for projects with external financing - which are considered adequate for these six projects. In the case of the PREDEG, the amount approved in the official budget exceeds the annual requirements specified in this project report. These provisions cover the first three years of the execution period for the program. The government has given an undertaking that the provisions for the counterpart required to cover the final two years of the program will be included in the next national budget which will be for the years 2001-2005.
- 5.17 The projections for the four years from 1997 through 2000 show a surplus each year. They also show that the ministry will generate sufficient income of its own each year to finance current expenses and the counterpart costs relating to the projects scheduled to be carried out during the period. Based on these observations, the program may be safely deemed financially viable.

E. Socioeconomic feasibility

- 5.18 The socioeconomic evaluation was based in large part on the results of the surveys carried out among potential beneficiaries of the program. These surveys, in addition to providing a clear picture of the beneficiaries, enabled the authorities to establish baseline values for the program against which its future impact may be compared. They also made it possible to base the analysis on realistic and conservative assumptions concerning the competitiveness of the farm products to be modernized, and the social impact that can be expected to result if the program were not carried out.
- 5.19 The socioeconomic analysis included: (i) an analysis of the competitive advantages of selected farm products to determine whether or not investing in modernizing their production is justified for the Uruguayan economy; (ii) study of specific modernization projects; (iii) analysis of the impact of the proposed subsidy for restocking with new fruit varieties; and (iv) study of the aggregate impact of the program in terms of its potential for generating fiscal proceeds, foreign exchange and

employment. The section below summarizes the results of the analyses carried out. Additional information on this topic is available in the Department's technical files.

1. Indicators of competitiveness in the production of the subsector

- 5.20 Studies prepared in connection with MERCOSUR show that various of the activities engaged in by Uruguay's farmer have already achieved a good degree of competitiveness (citrus fruits, pears, peaches, grapes, poultry and apiary products). Others such as table grapes, apples and certain other fruits and vegetables traditionally relegated to the internal market, are not competitive under the production, agroindustrial and marketing systems in current use.
- 5.21 The analyses carried out during the preparation of this program indicate that the market-opening measures being taken by Uruguay could enhance the export potential of most of the subsector's products within the confines of MERCOSUR, provided existing restrictions are overcome.
- 5.22 Table V-1 present indicators of competitiveness for selected products, estimated on the assumption that the investments proposed in the program are made and duly adopted by producers in the areas of development of technology, improvement of quality and marketing development. Certain of the indicators are based on the use of the domestic resource cost (DRC) method to generate a unit of foreign exchange for production under given farm categories. According to this method, any product with a $DRC \leq 1$ is considered competitive. These indicators demonstrate that at the overall level, carrying out the program will improve the competitiveness of farm production in Uruguay.

Table A-V-1 Indicators of competitiveness for selected products			
CATEGORY	INDICATOR USED	UNIT OF MEASURE	RESULTING VALUE
Citrus fruit	DRC	Coefficient	0.22
Peaches	DRC	Coefficient	0.42
Apples	DRC	Coefficient	0.36
Pears	DRC	Coefficient	0.42
Wine grapes	DRC	Coefficient	0.13
Garlic	DRC	Coefficient	0.37
Sweet onion	DRC	Coefficient	0.19
Potatoes	DRC	Coefficient	0.43

DRC = domestic resource cost (values ≤ 1 indicate the product is competitive)

2. Economic analysis of specific modernization projects

- 5.23 The analysis of specific modernization projects was based on a comparison of the economic costs and/or benefits with and without each project. The costs considered in the evaluation were the incremental investment and production costs valued at economic prices, foreign currency. For each project the following were determined: (i) the technology package to be transferred; (ii) technology adoption curves; (iii) incremental investments required for the new technologies; and (iv) the benefits expected from their adoption (increase in productivity, reduction in the cost of production, fewer production losses due to improved pest and disease control, increased value of production due to improvement in quality, etc.). The results of the cost-benefit and sensitivity analysis are presented in Table V-2.

Table V-2 Results of cost-benefit and sensitivity analysis¹ of selected modernization projects			
Heading	NPV	EIRR	EIRR Sensitivity
Citrus fruit	1,015	16.1	13.1
Peaches	7,762	31.8	25.2
Apples	15,178	30.8	26.7
Pears	7,913	24.3	20.5
Wine grapes	16,360	22.6	17.8
Pigs (150 sows)	81,993	23.1	15.6

NPV = net present value

EIRR = economic internal rate of return

- ¹ Sensitivity is estimated assuming an increase in costs and simultaneous decrease in profits of 10%

3. Economic analysis of the subsidy

- 5.24 The program includes resources to finance a **subsidy covering up to 25%** of the costs incurred for restocking with new fruit varieties, by producers farming less than 15 hectares. The amount set aside for this subsidy has been estimated at **US\$12 million**. The size of the subsidy (25%) was determined as the average proportion (the range was from 21% to 30%) which the cost for new plants of the different types of fruit trees (citrus, grape vines and broadleaved species) will represent, within the total cost for restocking each farm.
- 5.25 It should be noted that this subsidy: (i) will be transparent, since it will be granted only by way of a reimbursement of small producers who meet the eligibility requirements established in the Operating Regulations for the program, and who carry out the restocking of their farms according to its guidelines; (ii) will

cover only part of the cost of introducing new plant varieties; and (iii) will be of limited duration since only those producers who submit restocking plans to the PREDEG within thirty (30) months after the start of the program will qualify.

- 5.26 The rationale for this incentive was evaluated by analyzing its function as: (i) a factor for encouraging rapid adoption of improved production technology; (ii) a mechanism for compensating small farmers for loss of income during the period between removal of old plants and the coming into production of the new varieties; and (iii) an incentive whose absence would entail social costs (externalities) in terms of potentially greater abandonment of farms by small producers and subsequent increase in demand for social services as they move into urban areas.
- 5.27 The principal results of the analysis are as follows:
- a. The presence of a subsidy such as that proposed in this program will help to reduce the level of risk aversion engaged in by small producers and will close the gap between their current propensity for restocking (every 10-16 years) and the levels followed by large and medium-sized producers (5-7 years). Thus, the subsidy will speed up the rate of adoption of new technology and be an effective factor in achieving the goals of the program.
 - b. Although it will not cover all of the loss in income suffered by the small producers who remove all or a part of their old plants and must wait for the new varieties to enter into production, the subsidy will provide some compensation for the losses incurred. The amount of this compensation will vary according to the size of the farm and the level of investment in restocking under the program. This amount can vary from 35% of the losses observed in citrus-growing operations, to 69% of those seen in other orchard farms.
 - c. Without the program, it has been estimated that the loss in competitiveness for the smaller farms would lead some 720 families (or 3,240 persons at an average of 4.5 members per family) to abandon their operations, assuming an annual desertion rate of 3% during the program's execution period. The migration of these families to the cities would add an estimated US\$39 million in social costs, measured in terms of increased demand for basic services (health, sanitation, education, housing and employment) in urban areas where such services are already under great strain. Under a more conservative scenario, if the desertion rate were only one-third the projected figure (i.e. only 1% per year instead of 3%), the proposed subsidy would still be less than the social costs (US\$13 million) avoided by retaining 240 families of small producers (1,080 persons) on the land. These indicators are even more conservative in view of the fact that the estimate of

the social costs of desertion ignores the impact it would have on the rural communities left behind by small producers who abandon the land.

4. Overall economic analysis

- 5.28 The overall economic analysis of the program includes consideration of its expected effects of the generation of fiscal proceeds, foreign exchange earnings and employment. In terms of fiscal results, it was determined that the increase in tax proceeds associated with increased value of the subsector's production generated by the program's investments would total approximately US\$60 million during the five years after its execution. Since implementing the program will have a fiscal cost of approximately US\$40 million, this leaves a positive balance of around US\$20 million that will be generated by the program, underscoring the economic advantage in carrying out the proposed investments.
- 5.29 In terms of generating foreign exchange, it is estimated that once the program's investments achieve their full impact under the various product headings in the subsector, they will generate US\$70-100 million per year in additional exports.
- 5.30 The investments proposed under the program will also have a positive impact on employment by generating between 2,000 and 3,000 new jobs, particularly in agroindustrial and marketing operations as a result of new growth in the subsector.

F. Program beneficiaries

- 5.31 The principal beneficiaries under the program will be the producers, operators and wage earners directly employed in the farming sector. However, since the program will have an impact throughout all phases of the farm production and processing system, it is also expected to bring benefits for other operators or technicians who provide services to the subsector in their various areas of expertise. 1/

G. Risks of the operation

- 5.32 **Willingness of operators to modernize:** The success of the program will depend upon the decision by operators in the subsector to make the investments required for modernizing farms, processing industries and marketing operations. Failure to make the necessary

1/ A more complete listing of the Program's beneficiaries, including a summary of survey findings, is contained in the document entitled "Caracterización Ex-Ante de los Beneficiarios del PREDEG" which is available from the Department's technical files.

investments, or the failure of farmers to invest sufficiently under the program, would hamper achievement of its objectives and goals.

- 5.33 This risk will be lessened by: (i) the net economic benefits expected from modernization including increase in the value of production and in sales on foreign markets, staying competitive in the internal market, and maintaining employment levels in rural areas; and (ii) the various means employed by the program to stimulate interest among operators in making the needed investments.
- 5.34 **Contribution by beneficiaries to cofinancing of program activities:** The majority of the program's activities require cofinancing on the part of the beneficiaries of same. The sustainability of certain components would be compromised if such cofinancing were not forthcoming.
- 5.35 The possibility of this occurring is deemed minimal in view of the large number of producers that have registered to participate in the project to introduce new plant varieties, validation of new technology, technical assistance and training activities to be offered under the program. This advance registration is the result of several announcements made by the MGAP which clearly indicated the cofinancing conditions under which the program will operate. Hence the interest expressed is deemed an indicator of acceptance of these conditions and readiness to cover the corresponding proportion of costs. Their willingness to do so was likewise confirmed in producers' responses to the survey taken in preparation for the program.
- 5.36 **Small producers' limited access to credit due to lack of collateral:** This factor could limit the ability of small farmers to obtain the resources needed to modernize their operations, affecting the achievement of program objectives. To minimize this possibility, the program will follow two courses of action:
- a. The program will include the provision of training for producers in business and organizational methods to familiarize them with credit operations and alternative, cooperative-type mechanisms (access to credit by groups of producers) that have been used in other subsectors to overcome this restriction.
 - b. As a parallel activity of the program, the executing agency is now completing the establishment of a credit guarantee fund of around US\$3 million provided by the MGAP and the Banco de la República Oriental del Uruguay (BROU) to help small producers gain access to loans through either the BROU or other financial institutions (IFIs) present in the country. With the support of producers' associations in the subsector, the MGAP is negotiating with other IFIs to expand the resources under this fund.

- 5.37 **Lack of coordination between institutions:** Although the majority of the entities and units involved in the project are attached to or form part of the MGAP, they are varied in nature and any lack of coordination could interfere with efficient execution of the program. The means of execution proposed for the program, together with the Operating Regulations, are intended to prevent this risk from materializing. At the same time, the institution-strengthening activities to be carried out under the program are designed to correct the deficiencies identified during preparation of this operation.

**LOGICAL FRAMEWORK: PROGRAM FOR MODERNIZATION OF FARMING
UR-0072**

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
GOAL			
the value of the subsector's sales on foreign markets and investments which improve its efficiency.	Income of producers, commercial transactions in the subsector, value of its exports.	National surveys and statistics on the agricultural sector.	An adequate macroeconomic environment maintained and agricultural policies investment in the farm sector attractive.
PURPOSE			
small and medium-sized producers to new production technologies, and entrepreneurs in the agroprocessing and technologies.	<p>1.1 Farm productivity in MT/ha increased by at least 30% between 1998 and 2005: garlic from 4 to 5.2; onions from 15 to 20; potatoes from 10 to 15; tomatoes from 35 to 50; peaches from 10 to 20; apples from 14 to 25, pears from 17 to 25; and citrus fruit from 10 to 15.</p> <p>1.2 The value of farm production accounts for a greater share of GDP, rising from 28% in 1998 to 35% in 2005.</p>	System for follow-up to the program, sampling survey in the year 2001.	Availability of production technologies in horticulture, fruit growing and animal husbandry; critical mass of private agents for training.
an orderly system for marketing fruits and vegetables which ensures quality for the consumer.	2.1 By 2002, all fruits and vegetables have been classified in a grading system and are being marketed in accordance with SNACC and MERCOSUR standards.	Regulatory framework in effect.	MERCOSUR fully in force.
greater access to external markets for the products of the agroindustrial system.	<p>3.1 Between 1998 and 2005, subsector exports have increased by at least 20% (citrus fruits: 20,000 MT; deciduous fruits: 3,000 MT; vegetables: 17,000 MT; honey: 4,000 MT; and wine: 1 million bottles.</p> <p>3.2 By 2007, the subsector is generating approx. US\$50 million in additional exports annually.</p>	MGAP, BROU, and records of farm exports.	Private sector responds and utilizes resources available for implementing the program.
the best possible conditions for the execution of the program by strengthening the actors involved in its implementation.	4.1 By the end of 2001, the executing units, JUNGARA, INAVI, and CHNPC have completed their institutional strengthening (technical assistance and training) and are effectively executing the Program.	Annual report of the PREDEG.	Existence of sufficient operating and supervisory capacity in the PREDEG.

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
RESULTS			
on of improved fruit varieties.	1.1 Restocking completed for 2700 ha of broadleafed fruit trees, 1800 ha of vineyards and 1600 ha of citrus groves.	Information and monitoring system for the program.	Plantlets available in the market.
of new technology.	1.2 A total of 130 projects will be cofinanced, of which 60% have introduced new technology in the production process.	System for follow-up to the program and surveys.	Producers seek to use available fu
assistance	1.3 A total of 2500 producers and 40 agroindustrial operations receiving assistance, with a significant rise in quality of service.	System of program monitoring and surveys.	Available private sector experts with and producers accept the cofinanc arrangement.
	1.4 Training provided for 4500 producers, 2400 operators, 480 experts and 100 business owners in the areas of management, technology, natural resources and the environment.	System of program monitoring.	Beneficiaries sign up for the course and agree to pay for their registration.
CCC" has been legally d and is operational.	2.1 Product certifications granted for the local market and exports.	Approval and publication of the appropriate legislation in the Diario Oficial, and issuance of official certification by the IPA.	
and raising awareness of the	2.2 Awareness of the SNACCC widespread among intended audience.	Survey of awareness among the public targeted by the SNACCC.	
on of propagation materials fruit farming.	2.3 All (100%) of the material used in the restocking of fruit varieties have gone through the certification process.	Reports from the INADE and the DGSA.	
ormation and promotion of	3.1 Information network operating and farm producers represented at 24 promotional events (trade fairs and publicity campaigns) in foreign markets.	System of program monitoring.	
25 export projects in operation.	3.2 Records show that each project has generated at least 2 shipments of new products.	System of monitoring the program and the BROU.	
m of 16 studies approved and l through the preinvestment	3.3 Of the preinvestment studies carried out, at least 5 have given rise to export-oriented farm enterprises.	FONADEP documentation.	

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
m of 8 projects approved the APICE Fund.	3.4 Plants or stations providing export priority services in operation.	Documentation on the creation of new stations.	
operating and with capacity for g and controlling program in place.	4.1 Preparation of progress reports begins with the first disbursement.	Interim evaluation of the program carried out by the Bank and annual reports submitted by the firm hired to conduct monitoring.	Close coordination and cooperation the PREDEG and the subexecuting working on the program.

COMPONENTS	1998				1999				2000				2001				2002			
	Amount		Quarter AEA		Amount		Quarter AEA		Amount		Quarter AEA		Amount		Quarter AEA		Amount		Quarter AEA	
	IDB	LOCAL			IDB	LOCAL			IDB	LOCAL			IDB	LOCAL			IDB	LOCAL		
1. <u>Development of technology</u>																				
	a. Technical assistance	230	70	II	400	100	II	400	100	II	300	100	II	210	50	II				
		240	70	III	400	100	III	400	100	III	400	100	III	220	60	III				
		230	60	IV	400	100	IV	400	100	IV	300	100	IV	210	60	IV				
b. Training	440	-	I	880	-	I	820	-	I	510	-	I	270	-	I					
2. <u>Quality control</u>																				
	a. Technical assistance	48	-	II	39	-	I	40	-	II	35	-	I	-	-	-				
		47	-	II	38	-	II	33	-	IV	-	-	-	-	-	-				
	b. Training	48	-	I	47	-	II	50	-	II	29	-	I	-	-	-				
c. Equipment	116	-	II	244	-	I	150	-	I	53	-	I	-	-	-					
	58	-	III	123	-	III	52	-	III	-	-	-	-	-	-					
d. Promotion	20	-	I	80	-	I	50	-	II	80	-	I	50	-	I					
	-	-	-	40	-	III	50	-	III	70	-	III	-	-	III					
3. <u>Information and trade promotion</u>																				
	a. Technical assistance	41	-	I	97	-	I	46	-	I	13	-	I	13	-	I				
		41	-	II	97	-	II	-	-	-	-	-	-	-	-	-				
	b. Training	35	-	II	35	-	II	33	-	II	8	-	II	-	-	II				
c. Equipment	22	-	II	25	-	II	5	-	I	17	-	II	5	-	I					
d. Promotion	52	-	I	68	-	I	68	-	I	58	-	I	60	-	I					
	50	-	II	67	-	II	67	-	II	58	-	II	59	-	II					
	50	-	IV	68	-	IV	65	-	IV	58	-	IV	60	-	IV					
4. <u>Institution-strengthening</u>																				
	a. Technical assistance	31	-	I	62	-	I	22	-	I	20	-	I	-	-	I				
		31	-	II	62	-	II	22	-	II	-	-	-	-	-	-				
	b. Training	26	-	I	35	-	I	31	-	I	4	-	I	-	-	I				
	25	-	III	34	-	III	-	-	-	-	-	-	-	-	-					
c. Equipment	60	-	II	35	-	I	-	-	-	-	-	-	-	-	-					

PROPOSED RESOLUTION

URUGUAY. LOAN /OC-UR TO THE ORIENTAL REPUBLIC OF URUGUAY
Farm Modernization and Development Program

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 Oriental Republic of Uruguay, as Borrower, for the purpose of granting a financing to cooperate in the execution of a Farm Modernization and Development Program. Such financing will be for the amount of up to thirty two million dollars of the United States of America (US\$32,000,000) from the Single Currency Facility of the Ordinary Capital resources of the Bank and it will be subject to the "Terms and Financial Conditions" and the "Special Contractual Conditions" of the Executive Summary of the Loan Proposal.