

PROVINCIAL AGRICULTURAL SERVICES PROGRAM

(AR-0061)

EXECUTIVE SUMMARY

BORROWER AND GUARANTOR: The Argentine Nation

EXECUTING AGENCY: Secretariat of Agriculture and Fisheries (SAGyP), with the participation of the provincial governments.

AMOUNT AND SOURCE:

IDB:	US\$125 million (OC)
IBRD:	US\$125 million
Local contribution:	US\$ 86 million
Total:	US\$336 million

FINANCIAL TERMS AND CONDITIONS:

Amortization period:	20 years
Disbursement period:	5 years
Grace period:	5 years
Interest rate:	variable (OC)
Inspection and supervision:	1% of the loan
Credit fee:	0.75%

OBJECTIVES: The objective of the program is to raise the value of exports of agricultural products by improving the quality of such products and increasing the volume of production.

DESCRIPTION: The program comprises execution of projects designed to resolve the problems that are holding back the provinces' agricultural development. The specific purpose of each project is to foster changes that will lead to improvement of the quality and an increase in the volume of production, and to establish operating and financial mechanisms that will strengthen and improve the services that the provinces furnish to the agriculture sector.

Three different approaches will be followed in the execution of the program: provincial investment projects; projects that will be carried out by regional agencies; and others of national scope that will be executed by national agencies. In addition to regional and national institutional strengthening and technical assistance programs, each project would include specific institutional strengthening components.

The program is focused on provincial investment projects and will seek to stimulate physical

investments, chiefly in works to modernize and rehabilitate irrigation and drainage systems, together with other support services, including animal health, plant health, information systems, trade promotion, institutional strengthening and training.

The provincial investment programs have been identified from among the "Provincial Agricultural Development Programs". These programs have been prepared by the provinces to identify problems and constraints on their agricultural development and propose agricultural development projects and policies. These programs will be periodically reviewed and updated. Eligibility criteria have been developed that include economic factors so as to maximize efficiency and foster, throughout the program and in the projects that are prepared, an appropriate geographic spread and a balanced distribution of the resources among the different provinces.

**ENVIRONMENTAL
CLASSIFICATION:**

The Environment Committee approved the environmental report on April 18, 1995, the operation earlier having been classified in Category III.

**EXCEPTIONS TO
BANK POLICIES:**

The program does not envision any exceptions to current policies. However, in order to speed its execution and facilitate effective supervision by the Bank, a change is proposed in the review procedures for: the selection and contracting of consulting services that would enable ex post review, by sampling, of contracts of individual consultants below US\$30,000 and of consulting firms below US\$100,000 (paragraph 3.35).

BENEFITS:

The main benefit that Argentina will obtain from increasing the quantity and improving the quality of its exportable products will be possibility of access to the international market on better terms than at present. Agriculture offers Argentina the best economic development prospects and will enable the country to increase its foreign exchange earnings by utilizing its so far underused potential in this field. The strengthening of agricultural services will help to modernize the sector from the production and commercial standpoints and close the present technology gap which undermines competitiveness in various regions, while training the provinces to take over services that are increasingly being decentralized from the national government to the provinces and promoting greater participation by the private sector in the management of these services.

RISKS:

The main risk lies in the fact that the provincial governments have not had extensive experience in running projects in their territory and may not possess the expertise to execute the projects under their responsibility. To reduce as far as possible the likelihood of this risk materializing, right from the start of preparation of this program the SAGyP has been conducting training activities in related areas and these activities will be continued during the execution stage. Moreover, since the provinces, in executing the projects in their area, have to accept responsibility for servicing the debt connected with the provincial investment projects and part of that arising from the regional and national projects, this program will have to be closely coordinated with the other investment requirements in each province.

There is a risk of a return to the former policy of discrimination against agriculture, which would change the profit margins for farmers and lessen their incentive to invest. However, such a change is considered unlikely in view of the trade liberalization reforms already implemented. To manage the risk of improper operation and maintenance of the works, annual operating and maintenance plans will be required and the users will be responsible for management. There are also environmental risks associated with each specific project; these have been identified and commented on in the environmental report and the requisite guidelines have been specified for the environmental assessments.

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

The proposed program is consistent with the strategy of the government and the Bank in Argentina as regards support for macroeconomic stability and reforms to modernize the public sector, especially the agriculture sector. The program has been designed in light of the priorities expressed in the Provincial Agricultural Development Programs (PPDA) prepared by all the provinces, the projects selected being those that are specifically best suited for resolving the problems identified. In the sizing of the program, both the provincial and national borrowing capacity and the loans that the Bank and other international agencies have granted Argentina have been taken into account. The Bank, in preparing this operation, worked in close coordination with the World Bank, seeking to use uniform procedures and

parameters for the loans provided by the two Banks in all aspects of the program.

IMPACT ON POVERTY: Pursuant to the Eighth Replenishment document (AB-1704), it has been determined that the proposed program does not comply with the criteria of a program designed to alleviate poverty, (paragraph 5.30).

PROCUREMENT OF CIVIL WORKS, GOODS AND CONSULTING SERVICES: The current Bank procedures will be followed for procurement of goods and contracting of services, and for consulting services to be financed with proceeds from the loan; these procedures will form an integral part of the loan contract. The ceilings above which procurement for this project will require international competitive bidding will be: US\$350,000 for goods; and US\$5 million for works. The documentation for bids on goods and services in amounts below those ceilings will be verified after the fact (paragraphs 3.33 and 3.34).

SPECIAL CONTRACTUAL CONDITIONS:

Conditions precedent to the first disbursement:

- a. Evidence that the program's central executing unit (CEU) has been formed and its key staff appointed in accordance with the terms agreed upon with the Bank (paragraphs 3.2, 3.27(a) and 3.34);
- b. evidence that the Provincial Advisory Commission (CAP) has been formed in accordance with the terms agreed upon with the Bank (paragraph 3.3);
- c. evidence that the national SAGyP has formally approved the financing of the Bank's Group A projects (paragraph 3.3);
- d. submission of the framework agreement duly signed by at least one of the provinces in the Bank's Group A and the agreement to be concluded by the province with the agencies responsible for the execution of the projects located within its jurisdiction (paragraphs 3.7, 3.8 and 3.14);
- e. submission of evidence that the manual of operating procedures for the program agreed upon with the Bank has been put into effect (paragraphs 3.8 and 3.27(b)); and
- f. evidence of an agreement having been reached with the IBRD, or some other alternative credit source, on the financing referred to in paragraph 2.23.

Other contractual conditions:

- a. In the case of Group A projects that will be financed with Bank funds, within six months of the effective date of the contract the following shall be submitted: (i) the cost-recovery plans and schedules for these projects; and (ii) the framework agreement signed by the borrower with the province and the agreement to be signed by that same province with the agencies responsible for execution of the projects located within its jurisdiction (paragraph 3.20);
- b. in the case of the other projects envisaged in the program, the requirements specified in paragraph (a) above shall be met prior to calling for bids on works or before procuring the goods for the other eligible projects (paragraph 3.10(c));
- c. before execution of the irrigation project for the productive reactivation of the Alto Valle in the province of Rio Negro can begin, evidence shall be submitted that the eligibility criteria therefore as agreed upon with the Bank have been satisfied (paragraph 4.16);
- d. the obligation to maintain the works and equipment included in the program and to submit annual reports (paragraph 3.18);
- e. in any project that results in direct benefits to the private sector, the fees for services delivered shall produce at least sufficient revenues to cover the operation, administration and maintenance costs and, whenever possible, the cost of the investment (paragraph 3.20);
- f. in the case of water projects, submission by the provinces of studies of alternatives to optimize the use of water resources, including alternatives related to the volume of water used, among other variables (paragraph 3.22);
- g. performance of the ex post evaluation of the program, two years from the final disbursement of the financing (paragraphs 3.39 and 3.40);
- h. recognition of expenditures incurred since September 1, 1994, of up to US\$400,000, chargeable to the local contribution, and since March 1, 1995, of up to US\$2 million chargeable to the Bank's financing (paragraph 3.32);

- i. submission of the evaluation indicators for the program's Group A projects, six months after the effective date of the contract (paragraph 5.7);
- j. monitoring of program execution, including submission of the annual operating plan of the program (paragraphs 3.28 and 3.29) and annual review of the benchmarks for compiling the program data (paragraph 3.31);
- k. establishment of a deadline of 42 months for physical initiation of the works and 54 months for commitment of the resources of the financing for projects that do not involve works (paragraph 3.11);
- l. reimbursement of the funds previously disbursed against loans PPF 821/OC-AR and 762/OC-AR (paragraph 2.22).

I. FRAME OF REFERENCE

A. Macroeconomic context

- 1.1 As a result of the government policy in effect since 1991, and especially the Convertibility Plan, the Argentine economy is currently characterized by GDP growth and price stability. In 1994 the consumer price index rose by 3.9% and the economy grew by 7.4%. The main factors in GDP growth were investment and exports while the most dynamic sectors were construction, mining and quarries, and some branches of industry. In the agriculture sector, the 3.8% growth posted represented a recovery compared with the sluggish trend observed over recent years.
- 1.2 In 1995 certain variables are displaying negative behavior which will require action by the government to maintain the impetus of the Convertibility Plan. The variables in question are the fiscal position, which is showing signs of deterioration, the external accounts, the rise in unemployment and the slowing of investment rates and GDP growth. In this context, increasing exports is an important component in the continuity of the present economic policy since equilibrium in the external accounts favors convertibility and expansion of the economy. Given Argentina's comparative advantages in agriculture, a good proportion of the potential for a sustained increase in exports lies in this sector, which provides justification for efforts to raise its productivity. 1/

B. The agriculture sector

- 1.3 In 1994 agricultural output accounted for 6.9% of GDP, with its significance for the provinces ranging from minimal in the case of Tierra del Fuego to approximately 50% of GDP generated in the Pampas. Despite the modest percentage of GDP that it represents, the sector features prominently in Argentina's exports (60.3% of the total), of which 23.6% involves agricultural primary products and 36.7%, manufactures of agricultural origin.
- 1.4 The most important agricultural region is the Pampas, which contains 80% of the country's best soils and 50% of its arable land, and produces the greater part of the country's cereals (wheat, corn and sorghum), oilseeds (soybean and sunflower) and meat, these being the products that make up the bulk of the agricultural exports. At the same time, this has been the region that suffered most under earlier economic policies aimed at using agricultural surpluses to subsidize industrial development.

1/ More details on the recent economic situation in Argentina can be found in document PR-2036 of May 2, 1995, on the privatization of provincial banks.

- 1.5 Significant agricultural activities are carried out in other regions. The subtropical northeast produces crossbred cattle (zebus), cotton, rice, maté, tobacco and citrus fruits. The Andean zone is arid and needs irrigation, except in some valleys - sugarcane, tobacco and citrus are produced in the north while the southern part of the zone concentrates on horticulture and grape and wine production. Patagonia is relatively arid - vegetables are grown under irrigation but for the most part the land is best suited for extensive grazing.
- 1.6 The structural reforms of the past five years have eliminated most of the discriminatory factors that adversely affected agriculture. These reforms provide an opportunity for rapid growth of the sector and include: (i) elimination of the multiple general and specific export taxes (and their variable and very high rates - for wheat, for instance, they ranged between 5% and 56% between 1976 and 1987), which meant that profits were lower and more uncertain; (ii) the reduction to 15% of the tariffs on agricultural equipment competing with equipment produced in Argentina (protection was 53% for tractors); (iii) removal of the 15% tariff on agricultural equipment not produced in the country; (iv) removal of the tariff ranging from 25% to 35% formerly imposed on the importation of fertilizers that competed with those produced in Argentina; (v) reduction of the tariff ranging from 25% to 53% on pesticides competing with national products and lifting of the 15% tariff on products not manufactured locally; (vi) a 30% reduction in the cost of fuel for trucks and agricultural equipment as a result of the reduction of taxes on diesel fuel; (vii) elimination of provincial taxes on farms and gross income; and (viii) reduction of between 30% and 80% of the social security tax payable by employers on rural labor.
- 1.7 During the project preparation period, consultants hired by the Bank and independent consultants prepared studies of the main constraints facing the agriculture sector. In light of the changes in the trade and tax policy indicated in paragraph 1.6 above, the majority of the macroeconomic restrictions that affected the production and export of agricultural products have been eliminated. The two remaining constraints are the scarcity of credit and the price ratio of tradable to nontradable goods, both of which are the result of the national economic adjustment policy. It is expected that the patterns of these two indicators will be monitored through project execution. The provincial studies and those of the consultants pointed to regional constraints. Such constraints (or problems) are shown in the form of a diagram in the sector problem chart and served as the basis for the drafting of each province's Provincial Agricultural Development Program (PPDA). Solving these problems is the objective of the projects under the provincial agricultural services program (PROSAP) (see program objectives and projects in the project logframe summary in Annex III-1).

- 1.8 Irrigation has been, and still is, a major factor in Argentina's agricultural development: in at least eight provinces, agriculture is only possible with irrigation. In addition, large, potentially arable areas suffer from flooding and seasonal waterlogging. The infrastructure of the majority of the systems is in poor shape, with salinization or drainage problems and inefficient water use. Transfer of management of the irrigation systems to the users, rehabilitation of damaged systems, and improvement of their administration are priority aims of the sector development strategies. Moreover, in the country's humid zone, the need to lessen the impact of flooding on agricultural production has led to drainage projects in areas liable to flooding.
- 1.9 The irrigation projects systematically include measures to encourage the beneficiaries to become involved in the management of operation and maintenance of these systems and their financing, in addition to technical assistance for production, applied research and training. Technically, the essential approach of the investments is to bring about greater efficiency in water use and to achieve better control of groundwater levels in order to combat or reverse the soil salinization process.
- 1.10 In Argentina, the provinces are sovereign as regards water management and use, with the exception of navigability matters. To date, the fees on improvements in irrigation and drainage infrastructure have been based solely on the area registered (with irrigation rights) and not on the volume of water used, although the latter is necessary in order to link the fees more closely with the economic value of the resource. Moreover, in Mendoza, where water is extremely scarce, a study is being conducted to set appropriate fees to be implemented by the Dirección General de Irrigación [Irrigation Department] (DGI). The project submitted by the Province of Mendoza to the PROSAP includes installation of measurement structures with a view to progressively implementing payment for the service based on volume used. A similar study will be conducted in each province with a water project.
- 1.11 While there is still an Undersecretariat for Water Resources (SRH) at the federal level, there has been a lack of consistency and overall vision in water planning and use at the national level. PROSAP's national component for institutional strengthening includes a study at the national level, similar to the one in Mendoza, to establish a national master plan during the execution of PROSAP for administration of water resources that is consistent with the provincial programs. As of now, in addition to formulating the agricultural strategy necessary for their inclusion in the program, the provinces have been asked to set their investment projects within the framework of an operating plan with a medium-term horizon for development of their water resources with respect to agricultural use.

- 1.12 Foot-and-mouth disease has greatly reduced Argentine beef exports, obliging the country to sell its beef almost exclusively in the so-called "foot-and-mouth market", which means selling at a third of the international price. In recent years Argentina has begun what could be a final effort to eradicate this problem, starting with consolidation of the regions free of the disease. There are also other diseases that affect the productivity and market value of cattle and sheep; these are in general of regional incidence and impact the economies of the provinces involved.
- 1.13 The country has major fruitgrowing regions affected by pests and diseases that lessen the value of production and in many cases make exports out of the question. The traditional measures have had a limited impact which has not hindered the persistence and expansion of the pests and loss of Argentina's comparative advantages vis-à-vis other countries that have made a more consistent effort. The Instituto Argentino de Sanidad y Calidad Vegetal [Argentine Institute for Plant Quality and Health] (IASCAV) is the principal agency in this area, its chief activities being the national programs against cancrrosis in citrus crops and fruit flies, and the binational program with Paraguay against the boll weevil.
- 1.14 In the commercial development field, the lack of support services holds back emergence of new options. Discovering new markets, finding buyers, creating demand for one's product by distinguishing it from those of competitors, getting into these markets at the right times and with acceptable transport costs, and offering products suited to consumers' tastes and preferences, are all requisites that have to be met simultaneously in order to successfully launch a product in a new market. There are virtually no promotion and commercial development services at the provincial level and those at the national level are limited in terms of resources and scope.
- 1.15 The information on hand concerning production techniques and available markets is incomplete because the State has allowed the statistical systems to deteriorate considerably. The lack of information not only affects the producers, but also the State's ability to keep track of what is actually happening in the economy and to pick up the signals coming in from the markets and thereby be able to formulate policies and program its actions efficiently.

C. Problems of agriculture

- 1.16 Since the agriculture sector is diverse in nature, one cannot generalize about its problems - the emphasis is different for different areas and products. A "problem chart" has been prepared that summarizes the constraints within an analytical structure that indicates cause and effect. Agricultural exports are below their potential because of two main factors: (i) the productivity of rural activities is below its potential; and (ii) the quality of many products is not up to international standards. The fact that

promotion of agricultural exports is weak and many countries protect their own markets is also a consideration.

1. Yields below potential

a. Use of antiquated production techniques

- 1.17 Farmers have not adopted new technologies for a number of reasons, such as: (i) the technology may not have offered a profit margin (between 1960 and 1990, the prices obtained for agricultural products were from 40% to 50% lower owing to the discriminatory restrictions imposed by the government, taxes, and the exchange rate policy, which had a particularly marked impact on cereals and oilseeds, thus discouraging the use of more intensive production technologies); (ii) the instability of the former policies increased uncertainty and discouraged investment; (iii) debt problems - the level of farm indebtedness meant that many farmers were either unwilling or unable to take on further debt (in 1993, total farm debt stood at almost US\$4 billion, mostly short-term, about one third overdue); (iv) scarcity of credit - credit for financing technology investments is costly and hard to come by; (v) lack of information - the small farmers often do not know what is the best production technique (the coverage of the public extension service is very low and, while the private sector offers a wider range of technical services, these are aimed more at medium-sized farms or large enterprises); and (vi) tenure problems of two sorts - absentee owners, common in the Pampas region and leading to underuse of arable land and poor livestock management; and lack of titles, which means that there is less incentive to invest in or conserve the land and also makes it impossible to obtain credit.
- 1.18 Although the program cannot resolve the credit and farm debt problems, now that the most burdensome taxes have been eliminated and that a measure of stability has been achieved in agricultural policies, it is hoped that farmers will be more receptive toward adopting new technologies that have demonstrated their profitability in recent trials. According to data from the Instituto Nacional de Tecnología Agropecuaria [National Agricultural Technology Institute] (INTA), it is estimated that Argentine agricultural production could be increased by between 11% and 100% with fuller adoption of technologies already in use in the country or elsewhere (Table I-1).

Table I-1
Production increase possible in the next 15 years (%)

	Wider adoption of technology in use in the country	Adoption of technology from other countries
Cereals and oilseeds	11%	74%
Livestock products	12%	78%
Horticultural products	16%	100%

b. Cropping with insufficient water

- 1.19 Irrigated agriculture is underused and little studied. Although it accounts for only 5% of the planted area, with almost half of it used for horticultural crops, the output of irrigated agriculture represents over 30% of the sector GDP. Argentina has potential to irrigate some 20% of its arable land (6.1 million hectares), with some 2.7 million hectares located in arid or semiarid zones. In the areas with irrigation works their average efficiency has declined to around 30%, compared with an average efficiency of 45% to 50% in gravity systems in countries with a similar technology level. The works are not properly maintained and the operators (federal and provincial authorities) rarely collect even half of the cost of proper operation and maintenance, while the structure of the charges applied does not offer incentives for more efficient use. Of the 1.9 million hectares covered by irrigation systems, only 1.5 million hectares are equipped with distribution works. At farm level, the water application systems are primitive and the extension workers' and farmers' knowledge of irrigation techniques is sketchy.

c. Land degradation

- 1.20 The low cost of water, obsolete irrigation techniques and the deterioration of the canals have created problems in 45% of the irrigated land (waterlogging and salinization of over half a million hectares). These problems primarily affect horticulture in the arid and semiarid regions. In addition, desertification is also occurring as a result of overgrazing and inappropriate land use techniques.
- 1.21 Even in the Pampas region, the continued use of extensive cultivation practices with limited technology and frequent tilling create serious erosion problems, land degradation and weed infestation. One third of the country's main cereal and oilseed producing region is affected by water erosion, since more than half of the original organic matter has been lost, and there is constant weed infestation in more than three fourths of the area.

2. Product quality not up to international requirements

a. Production of varieties for which there is little demand

- 1.22 The producers and processors have not been export oriented, as a result of which they are growing varieties that are no longer in demand and still using inefficient management and processing techniques. They are still producing table grapes with seeds and grapes for jug wines for which even domestic demand is shrinking, varieties of apples that are no longer particularly popular in the markets, and peaches, plums, mandarin oranges, strawberries and even citrus for packing that are not top quality. It is not clear whether the basic problem is one of poor profitability, because of past discriminatory policies (paragraph 1.6), or simply one of ignorance. The farmers do not appear to know what varieties are in demand in international markets or the prices they could get if they were to produce these varieties. Specific varieties tailored to each particular microclimate have not been developed and the extension service does not have the coverage necessary for disseminating the information if it were available. In the case of fruit trees, the growers are not in a financial position to make the investments required for the full-scale change of varieties.

b. Products not meeting international health requirements

- 1.23 The cattle and sheep, citrus fruits and other fruits and vegetables do not meet international health standards and therefore have to be sold in less demanding markets at lower prices, and on account of sanitary problems certain products have to undergo additional processing, which increases costs.
- 1.24 Vegetables do not meet international standards because of the lack of protective barriers against diseases (control and inspection by means of laboratory tests are weak and the quarantine measures are ineffective). IASCAV does not have sufficient personnel and is dependent on the provinces for obtaining more support. In their efforts to control damage and losses caused by pests, growers use excessive quantities of toxic farm chemicals, the residues of which also block access to international markets.

D. Design of the program

- 1.25 The increase of exports and external capital flows features prominently in the government's program. Taking into account the country's comparative advantages in agriculture, this sector can contribute significantly to boosting exports since agroindustry offers good prospects for attracting foreign capital. In accordance with the policy of political decentralization and the diversity of agricultural conditions in the country, the Secretariat of Agriculture and Fisheries (SAGyP) has requested that the provinces identify their products with the best potential and define their priorities.

- 1.26 The government will carry out a program to provide better information services on prices, markets and costs. The provinces have identified investment projects for reducing the quality and productivity problems and stepping up exports. The support furnished through the SAGyP will provide the agricultural services that the provinces have determined to be priorities: extension services on agricultural practices and technologies; irrigation and drainage for arid or waterlogged soils; health inspection services; and disease and pest control. In view of the limited availability of agricultural credit and the sector's current heavy indebtedness, the proposed investment projects will not require significant additional investments.
- 1.27 In addition to the purely agricultural investment projects, various provinces have identified infrastructure projects complementary to agriculture. These projects are outside of the SAGyP's purview and the majority of them would fall under another program (AR-0073, currently under study). The only projects that could be included in PROSAP would be ones designed to deal with constraints on provincial agricultural development for which no financing is obtainable from other sources (paragraph 2.11).

E. Experience of the Bank and other institutions

- 1.28 The Bank has extensive experience in supporting implementation of projects in the Argentine agriculture sector (nine projects financed). Special mention should be made of loan 495/OC-AR to INTA in 1984, which was quite successful in research programs and transfer of agricultural technology within its limited context, and of 618/OC-AR (PROMSA) in 1991 (together with the World Bank), to modernize agricultural services, with emphasis on institutional strengthening and equipping of the institutions responsible at the national level for delivering livestock and plant disease prevention services and assisting with trade promotion; in each case, the main objective was to improve the competitiveness of the country's agricultural products on international markets. Loan 618/OC-AR was initially two years behind schedule, due in part to structural changes in the Executive Branch which resulted in changes in the executing agencies, but since then it has been achieving the expected results. The loan is 42% disbursed with all components in full execution, which has served to spur various aspects of PROSAP, especially in marketing. This program (PROSAP) complements at the provincial and regional levels the actions begun under PROMSA and helps to further the decentralization process in Argentina.
- 1.29 In 1991, the Bank approved loan 619/OC-AR for the program for the financial strengthening and economic development of the Argentine provinces (Provinces I), in the amount of US\$200 million (cofinanced by the World Bank for the same amount). The program has concentrated on support for provincial public administration and assistance for project preparation, but in the past two years

more funds have been channeled into the education, health and roads sectors. In its first two years the program moved slowly, mainly because its design required preparation of plans and projects together with establishment of a provincial execution mechanism and of evaluation methodologies needed for its implementation. As of now, the program's resources are almost fully committed and studies or investments are under way that account for half of the financing. Contracts for utilization of the balance are expected to be concluded this year. The IBRD, which has disbursed a substantial part of its funding, this year approved a loan in the amount of US\$225 million for a second stage of this program.

- 1.30 The improvement of the financial system has been supported by both the IDB and the IBRD recently, the IDB having approved a loan in the amount of US\$750 million (with IBRD cofinancing of US\$500 million) in May 1995, in order to continue assisting the public sector reforms and promoting the economic development of the Argentine provinces by means of privatization, consolidation or closing of inefficient provincial and municipal banks.

F. The Bank's strategy

- 1.31 The proposed program is consistent with the government's and the Bank's strategy in the country in support of macroeconomic stability and the reforms undertaken to modernize the public sector, especially the agriculture sector. The program has been designed in light of the priorities expressed by the provinces in their PPDA, specific investment projects having been selected that are best suited for resolving the problems identified. Moreover, in addition to the provincial and national borrowing capacity, the sizing of the program has also taken into account the efforts of the Bank and other international agencies to help Argentina consolidate its financial and economic sectors. This program has been prepared in close coordination with the IBRD, the aim being to use uniform procedures and parameters for the loans provided by the two financial institutions in all components of the program. The sizing of the program further took into account the fact that the actual demand for projects to date greatly exceeds the total figure of US\$336.5 million, so that the IDB and the IBRD expect the funds they make available to be quickly committed.

II. THE PROGRAM

A. Background

- 2.1 The proposed program has been designed to meet the financing needs of agricultural development projects (which the Argentine provinces have submitted to the Bank and the IBRD), to speed up the increase in agricultural production and productivity. In order to prioritize needs, over the past two and a half years each province has drawn up and submitted a PPDA for consideration by the IDB and the IBRD. In these PPDA's, the provinces have identified their medium- and long-term growth targets on the basis of their comparative advantages for production and taking into account natural resource and environmental conservation. Each of these needs has resulted in the preparation of investment projects which, after being ranked in order of priority, have produced a set of projects that form the basis of this program. Each project in Group A (paragraph 2.21) has been subjected to a technical, economic, financial, institutional and environmental feasibility study, in accordance with the procedures established by the Bank and the IBRD; the same procedure would be followed with Group B projects.

B. Objectives

- 2.2 The objective of PROSAP is to increase the value of agricultural exports by improving quality and increasing production volumes. The increase in quality and quantity of agricultural products will be achieved through implementation of various provincial investment projects, some of which have already been identified and analyzed while others are still in the formulation stage (paragraph 2.5). The benchmarks include the number of hectares irrigated, tons of product obtained, number of farmers and growers who have adopted the new technologies, etc. The program will provide the provinces with the operating and financial mechanisms for strengthening and improving the services they offer to the agriculture sector and spurring physical investments, to which end the program will:
- a. promote the execution of physical investments in provinces with problems in reclaiming irrigation areas, handling drainage and managing water resources; it will strengthen initiatives aimed at changing the production structure of some areas and will improve the administrative management of the irrigation systems;
 - b. strengthen and modernize the agricultural services provided to producers and which are critical elements for raising productivity, increasing competitiveness, supporting diversification of production and improving the control and inspection mechanisms to ensure the continuity of the advances achieved;

- c. help to prevent degradation of natural resources, by aiding in the recovery and improvement of the productive environment and promoting production of alternative pollutant-free foodstuffs; and
- d. stimulate better administration of interinstitutional relations.

C. Description of the program

- 2.3 The program consists of the preparation and execution, over five years, of a set of investment and development projects for the agriculture sector. The program will finance provincial investment projects in eight areas to be described below. In the course of the execution phase, projects in other areas may be included, subject to review and approval by the Bank. Of the projects submitted, 11 have been selected (Group A - total cost of approximately US\$192.4 million - 57.2% of the program and 66.5% of the direct costs) whose execution, based on their degree of preparedness and the fact that they have met all the eligibility requirements, could begin in the first year of the program. Other projects, which could begin to be executed as of the second year, form Group B, which would include projects in areas of basic infrastructure (#2), technological development (#3) and commercial development (#6).
- 2.4 The program would include projects to be executed in three different ways: provincial investment projects with execution also being handled by the provinces; projects that will be implemented by regional offices of national agencies; and others of national scope that will be executed by the federal authorities. In addition to regional and national institutional strengthening and technical assistance programs, each type of project would include specific components of these activities. The areas of water resource administration (#1) and basic infrastructure (#2) will be executed by the provinces, while execution in the animal health (#4) and plant health (#5) areas would be the responsibility of the regional agencies that report to the pertinent national agencies. The technological development (#3) and commercial development work (#6) could involve national, regional and provincial executing agencies, but coordination of the integrated agricultural information systems (#7) and strengthening of the State's agricultural programming capacity (#8) will be handled at the national level.
- 2.5 The sample of projects prepared by the Bank's analysis mission did not cover all the investment areas planned for PROSAP, because certain provinces have initiatives that cannot readily be classified in any of the preceding categories; examples are seed improvement services, soil conservation, fishery and forest resources development and management, regularization of land tenure and titling. Any projects that may arise in the infrastructure, commercial development and technological development areas, together with other areas that have not been studied, will

therefore require a full analysis by the Bank and the IBRD before they can be accepted. These projects may only be included during the execution of the program if it is demonstrated that they are vital for growth of the agriculture sector, that State intervention is essential for their implementation, and that they are not eligible for financing from any other source, including the private sector.

D. The areas of PROSAP action

1. Administration of water resources

- 2.6 The water resource projects would include: (i) rehabilitation and improvement of irrigation works; (ii) rehabilitation and construction of drainage works; (iii) reclamation of areas subject to flooding; (iv) improvement of water resource administration; (v) training of the user associations in the operation and maintenance of their irrigation systems; (vi) water control, regulation and measurement systems and planning for their use; (vii) extension assistance in water-use techniques (parcel-level irrigation methods, soil leaching and prevention of salinization); (viii) extension services concerning crops and varieties most in demand and better utilization of irrigation; and (ix) technological development.
- 2.7 The water resource projects include actions to stimulate and strengthen the beneficiaries' involvement in the operation and maintenance of their systems and the financing thereof, as well as technical assistance for production, applied research and training. Technically, the essential approach of the investments is improvement of water use efficiency and better control of groundwater levels to combat or reverse the soil salinization process. The seven water projects (US\$111.2 million) make up 58% of Group A projects (see Table II-2). Three of these projects will be financed by the Bank, namely the Constitución project in the province of Mendoza, the Colonia Centenario project in Neuquén, and the Alto Valle project in Río Negro. The other projects, for virtually the same amount, would be financed by the IBRD. The main problem, which is common to all these projects, is the continuous and increasing deterioration of the existing facilities.
- 2.8 The Constitución project is located in the northeast of Mendoza, in the watershed of the lower reach of the Tunuyán River. The area under cultivation is almost 8,000 hectares, 78% of which is devoted to grapes for winemaking. Other fruit (peaches, plums, cherries and apricots) are grown on 20% of the area, while the remaining land is sown with vegetables, mainly garlic, tomatoes and onions. Agriculture here is characterized by scarcity of irrigation water and irregularity in its distribution, the presence of a large number of family-type operations and predominance of the raising of varieties of grapes and fruits for which there is little demand.

The main water management problems are: (i) high infiltration; (ii) an inadequate water distribution system; (iii) insufficient canal maintenance; (iv) inadequate irrigation programming and lack of coordination with cropping plans; and (v) high groundwater levels in the areas adjacent to the canal. The project is designed to raise the productivity and profitability of agriculture in the zone, by improving: (i) the management of the irrigation and drainage systems and the efficiency of water use (rehabilitation of the main canal, construction of a drainage network and user training); and (ii) the technology levels of the farms through agricultural research and extension programs.

- 2.9 The Colonia Centenario rehabilitation project (lower watershed of the Neuquén River) covers 3,500 hectares devoted almost exclusively to apples and pears. The problem in this zone is the rise in groundwater levels (above acceptable levels in 60% of the irrigated area) combined with increasing soil salinization due to the effects of the recent regulation of the river, the high infiltration levels in the canal network and the dilapidated state of the drainage system's runoff structure, the deficient operation of the system and the inappropriate irrigation practices employed. The project will prepare and execute a rehabilitation plan for the area under irrigation to increase its production capacity, improve product quality, make product diversification possible and thereby improve the growers' incomes. The project will focus on: (i) rehabilitation of the irrigation and drainage infrastructure; (ii) technology generation and transfer; and (iii) institutional strengthening to ensure the operation, maintenance and administration of the system.
- 2.10 The project for reactivation of production in the Alto Valle region of Río Negro (northern part of the province) covers 69,500 hectares, with apples and pears as its main crops, followed by grapes and vegetables. Fruitgrowing in the valley is in a crisis situation that is aggravated by the low profitability of the farms in the zone, and the low productivity, mediocre quality and limited competitiveness of the varieties offered. The most important problems that have led to this situation are: (i) the marked technology lag that has resulted from the low levels of profitability and the absence of an efficient agricultural extension system; and (ii) the inadequacy and lack of maintenance of the greater part of the drainage system and the infiltration in the irrigation canals, which contribute to the rising groundwater levels and soil salinization. The project seeks to support conversion and reactivation of agricultural production in Alto Valle. It will include deepening of several kilometers of primary collecting drains in the drainage system and construction of crossings for rural roads; waterproofing of several kilometers of main canal, construction of transmission canals for irrigation and of an intercepting channel for flood control.

2. Basic infrastructure

- 2.11 In addition to the purely agricultural projects, various provinces have identified infrastructure projects complementary to agriculture that will serve to improve factors of priority importance for agricultural production. Projects in this area will only be considered when the absence of service infrastructure is a significant constraint that blocks any successful outcome for specific agricultural development projects in the context of the provincial strategies. Any attempt to take care of all the needs in this respect is beyond the scope of the program but there might be ways of financing them under other Bank programs with Argentina and under study. It was considered appropriate to deal with this type of project in a limited context and a project for construction or rehabilitation of local roads in the province of Santa Fe (IBRD project), which would provide a means for getting perishable products to market that could not otherwise be moved efficiently, has been included among Group B projects. However, financing of this and other projects in this area will require specific approval by the IDB and the IBRD, since it has to be demonstrated that they are critical and essential elements for resolving particular constraints on the province's agricultural development and meet the pertinent feasibility requirements. Although basic infrastructure forms part of the program, the use of the proceeds from the Bank's financing for projects is not envisaged.

3. Technological development

- 2.12 Within a global strategy of promotion and diversification, the provincial policies focus on the introduction and adoption of new technologies and conversion of traditional crops, as well as inclusion of new productive items. The technological development component is incorporated into the irrigation projects. Primarily two other types of specific projects would be financed in this area: (i) technology transfer services, the training of farmers and growers in productive, management and commercial techniques; and (ii) applied research focusing on new production alternatives in order to identify promising activities, verify their agro-ecological suitability and ensure their subsequent dissemination among producers, including a study on the prospects of organic agriculture in Argentina, which was referred to in the environmental report on the program.
- 2.13 The cost items that will form part of these projects are: (i) technical assistance (consultants, researchers, extension officers and teachers); (ii) vehicles and equipment; and (iii) operating costs (cost of disseminating information, fuel, materials, etc.).

4. Animal health

- 2.14 The programs of the Servicio Nacional de Sanidad Animal [National Animal Health Service] (SENASA) are designed to strengthen the existing barriers in the areas free of foot-and-mouth disease and to eradicate the disease in the areas where its incidence is low. PROSAP will strengthen SENASA's regional programs and implement specific animal health actions in the provinces with particular problems. The investments in this area will include: (i) animal health barriers; (ii) installation of animal quarantine stations; (iii) diagnostic services; (iv) epidemiologic surveillance; (v) inspection and control of slaughterhouses and processing plants and of product marketing; (vi) development of vaccination plans; (vii) ectoparasite control; and (viii) dissemination and training. The two projects in this area in Group A, to be financed by the IBRD, are those in southern Patagonia (US\$9.4 million) and Mesopotamia (US\$23.3 million). The investments would include construction, remodeling of facilities, procurement of furniture and computer equipment, vehicles, campaign financing and training courses.

5. Plant health

- 2.15 The projects in this area will include one or more of the following components: (i) pest, disease and weed identification; (ii) warning systems; (iii) information and extension services on plant health topics; (iv) biological control and integrated management of pests; (v) supervision of marketing, transport and use of agrochemicals; (vi) agrochemical residue control systems; (vii) training in correct use of agrochemicals; (viii) disease-free zone certification; (ix) seed certification; (x) inspection of the marketing and transport of all plant material; (xi) phytosanitary barriers; and (xii) chemical control of pests and diseases. The Group A project in this area, to be financed by the IBRD (SEFINOA, cost: US\$16.5 million), would include capital goods (i.e. sterile flies), laboratory equipment, training courses, construction, vehicles, technical consulting services and publicity campaigns and work to disseminate results.

6. Commercial development

- 2.16 In almost all the provincial strategies there was found to be a need to develop provincial or regional services, mixed or private, that would be able to identify markets, establish links with them and determine the conditions for gaining access to them. Commercial development is closely connected with the technological development (#3) and agricultural information (#7) areas. The development assumptions for preparation of the projects are that: (i) they may be based on either public or private sector initiatives but cannot be carried out by the private sector; (ii) they are capable of identifying markets, establishing connections with them and determining the conditions for gaining

access to them; (iii) they can identify and propose actions for enhancing the efficiency of all the links in the production-marketing chain which have to be functioning smoothly for marketing to proceed efficiently; and (iv) they can cofinance trade promotion activities in the first experiments in access to new markets.

- 2.17 The cost items that would form part of these projects are concentrated in technical assistance for studies and training and may include: (i) funds for financing participation in fairs, travel for opening markets and establishing trade contacts, etc.; (ii) vehicles and equipment; and (iii) to a very limited degree, small-scale facilities.

7. Integrated agricultural information services

- 2.18 The agricultural information services will provide mechanisms for getting information out to producers, agricultural professionals, academic circles and the public in general, as well as for making basic data available so that the State will be able to make appropriate decisions as regards formulation and monitoring of policies, programs and projects. The provincial agricultural information systems would be coordinated with the Sistema Integrado de Información Agropecuaria [Integrated Agricultural Information System] (SIIA) being developed at the national level by the SAGyP, and with the National Statistical System run by the Instituto Nacional de Estadística y Censos [National Institute for Statistics and Census] (INDEC). The SIIA project would be financed by the Bank at an estimated cost of US\$23.2 million equivalent. The project would be of use at the basic level in all the provinces to finance computer equipment and programs standardized according to INDEC guidelines, classification of land by its agricultural use through satellite imaging, and development of statistics and forecasts.

8. Strengthening of provincial programming capacity

- 2.19 The actions to be undertaken in this area are designed to provide an efficient system for formulating and analyzing policies, programs and projects for the agriculture sector and will focus on various lines of institutional strengthening, from definition or establishment of the service to staff training. The intention would also be to apply standardized methodology and equipment in all the provinces for project programming and preparation. The development of the provincial PROSAP preparation units has supported the programming capacity at the level of each province and may serve as the nucleus of a provincial agricultural programming agency where there is none. The provincial studies on water resource rates would be included in this area (paragraphs 1.10 and 3.22). This area would further include the specific studies and actions at the national level that will complement provincial activities. This program, which would be

funded with resources from the IDB and the IBRD, will cost approximately US\$8.8 million.

E. Selection of the Group A projects

- 2.20 The 23 Argentine provinces have drawn up their medium-term PPDAs, which identify the sector's main constraints and put forward development strategies that include, inter alia, the priorities and projects that PROSAP would fund. After ranking all the initiatives submitted in order of priority, more than 90 projects were selected that met the eligibility requirements and could be executed in the next five years. Out of these eligible projects, the IDB and the IBRD agreed with the government to implement 11 (Group A) projects, which would serve as a sample at program level, chosen because of their advanced stage of preparation and the fact that they had met the feasibility study requirements, (paragraph 2.3). Group A includes five irrigation and drainage rehabilitation projects; one drainage project; two animal health projects; one plant health project; and two national-level institutional support and information technology projects.
- 2.21 The Group A projects met the following specific selection criteria: (i) submission of a satisfactory technical feasibility study; (ii) proposal on institutional aspects in the management and regulatory sphere; (iii) evaluation of the economic and financial parameters; (iv) financial sustainability of the project; (v) satisfactory identification of the impacts on the environment and, where these would be negative, inclusion of alternatives that would mitigate or neutralize these effects; (vi) satisfactory social assessment of impact on low-income and marginalized groups; and (vii) objective demonstration of the provincial interest in the project.

F. Use and reimbursement of the Bank's PPF resources

- 2.22 PPF loan 821/OC-AR, in the amount of US\$1.5 million, was used for the preparation of the operation. It has been almost entirely committed for project feasibility studies, including those for the Group B projects, which could be started in the course of the second year and thereafter. It is also expected that up to US\$100,000 from PPF loan 762/OC-AR will be used to help meet the conditions precedent to this financing. With the first disbursement from the financing, the PPF sums disbursed would be reimbursed to line 003/PPF-AR.

G. Cost and financing of the program

2.23 Table II-1 presents a summary of the costs and financing of the program, estimated to total US\$336.5 million, of which the Bank and the IBRD would each furnish US\$125 million, with the national, provincial and private sector counterpart totaling approximately US\$86.5 million.

Table II-1
Summary of program costs
by category and source (US\$ thousands)

Category		Financing		Local	Total	I
		IDB	IBRD			
1.	Engineering and administration	2,063	8,463	36	10,562	3.1
1.1	Central executing unit	1,340	4,290	19	5,649	
1.2	Provincial administration	723	4,173	17	4,913	
2.	Direct costs - projects	117,087	113,537	58,799	289,423	86.0
2.1	Group A	72,326	69,572	50,525	192,423	57.2
2.2	Group B	44,761	43,965	8,274	97,000	28.8
3.	Other costs	4,600	3,000		7,600	2.3
3.1	PPF reimbursement	1,600			1,600	
3.2	Project preparation	3,000	3,000		6,000	
4.	Finance charges	1,250		27,670	28,920	8.6
4.1	Insp. and supervision	1,250			1,250	
4.2	Interest			26,622	26,622	
4.3	Credit fee - Bank			1,048	1,048	
	Total costs	125,000	125,000	86,505	336,505	100.0
	Percentages	37.1%	37.1%	25.7%	100.0%	

2.24 Table II-2 lists the Group A projects.

Table II-2
Summary of costs of the Group A projects
(US\$ thousands)

Area/province	Project	Financing		Local	Total	%
		IDB	IBRD			
Water resources		49,968	40,432	20,754	111,154	57.8
Buenos Aires	CORFO		22,434	3,017	25,451	
Mendoza	Irrig. project		9,464	1,643	11,106	
	Montecaseros		3,567	719	4,285	
	Constitución	5,521		1,218	6,738	
Neuquén	Col. Centenario	6,095		1,711	7,805	
Río Negro	Alto Valle	38,353		11,634	49,987	
Santa Fe	Pozo Borrado		4,967	814	5,781	
Animal health			14,903	17,818	32,720	17.0
Regional	S. Patagonia		7,168	2,218	9,387	
	Mesopotamia		7,734	15,599	23,333	
Plant health			13,193	3,311	16,504	8.6
Regional	SEFINOA		13,193	3,311	16,504	
Agricultural information		16,470		6,728	23,197	12.0
National	SIIA	16,470		6,728	23,197	
Institutional strengthening		5,887	1,046	1,915	8,848	4.6
National	Inst. str.	5,887	1,046	1,915	8,848	
Totals		72,325	69,573	50,525	192,424	100.0
Percentages		37.5	36.2	26.3	100.0	

III. EXECUTION OF THE PROGRAM

A. Execution mechanisms

1. The borrower and the executing agency

- 3.1 The borrower will be the Argentine Nation and the executing agency will be the Secretariat of Agriculture and Fisheries (SAGyP), with the participation of the provinces that sign the pertinent participation agreements. The SAGyP is the topmost national authority for the agriculture sector and its responsibilities include preparation and execution of programs in the sector, which involves harmonizing the interests of the national government with those of the provincial governments. A Consejo Federal Agropecuario [Federal Agricultural Council] (CFA) made up of representatives of the SAGyP and the senior provincial agricultural authorities and chaired by the Secretary of the SAGyP has been set up to facilitate this harmonization process.
- 3.2 The SAGyP will execute the program through the Undersecretariat for Agricultural Economy, to which the central executing unit (CEU) for the program will be attached. The CEU will be responsible for supervising and coordinating program execution. It will be comprised of an executive coordinator responsible for running the program, a group of professionals and administrative personnel. Formation of the CEU and appointment of the key personnel will be conditions precedent to the first disbursement.
- 3.3 Executive supervision of PROSAP will be the responsibility of the SAGyP in consultation with the Comisión Asesora Provincial [Provincial Advisory Commission] (CAP), which will be chaired by the Secretary of the SAGyP and made up of six members of the CFA, who will be selected by turns and will serve for a period of one year. Formation of the CAP would be a condition precedent to the first disbursement. Once the CAP is formed, the next step will be formal approval of the financing of the projects in Group A, a condition precedent for projects in the Bank's sample.
- 3.4 The CAP will meet as often as necessary to advise on the program, and will have the following functions: (i) ensuring compliance with the policies and priorities of the national and provincial governments in the approval of the annual operating plans (AOPs) and the supervision and evaluation reports; (ii) strengthening the interinstitutional relations between the national and provincial governments; (iii) analyzing, expressing opinions on and recommending modifications to the program's AOP; (iv) examining and giving opinions on the preinvestment and financing operations submitted to PROSAP; and (v) issuing opinions on the appointment of the executive coordinator of PROSAP and of the rest of the CEU team.

2. Levels of execution

- 3.5 PROSAP is a program comprising multiple projects, divided basically into three types: those to be executed at the national, regional and provincial level. In each case, the intention is to utilize the existing structure and capacities for executing the projects. Due to the nature of each type of project, the structure of execution will vary according to the governmental and institutional levels involved. The SAGyP, through the CEU, will be directly responsible for execution of the national projects (Table III-1). The regional animal and plant health projects will be executed within the framework of the regional agreements with the specialized national agencies - SENASA and IASCAV (Table III-2), and execution will be coordinated with the CEU and with the respective agencies of the participating provinces.
- 3.6 The majority of the projects will be executed in the provinces by the pertinent local agencies. Each province will assign responsibility for project supervision and coordination with the CEU to the provincial agricultural programming agency (EPDA). In the administrative and financial work involved in the provincial investment projects, the EPDAs will utilize the capacities of the provincial financial administration agencies (EPAFs) established in the Provinces I program.

3. Terms and conditions of transfers

- 3.7 The national government will transfer to the provinces the funds necessary for execution of the provincial investment projects, with amortization periods of up to 18 years and grace periods of up to five years, which are the outcome of averaging the relevant Bank and IBRD terms. In addition, the following would be collected on the provincial debts: (i) the amortization amounts that result from averaging the values of the currency baskets of the IDB and the IBRD; and (ii) the interest and credit fee rates that result from averaging the nominal rates of the two IFIs. An inspection and supervision fee of 0.50% (the average of the charges applied by the two IFIs) would also be charged to all provincial projects (of both the IDB and the IBRD). A condition for a province's participation in the program is that its legislature has approved a law authorizing the borrowing involved, together with allocation of its federal revenue-sharing funds as guarantee to the Argentine Nation, and that it adopt such other measures as are necessary to ensure execution of the provincial program and compliance with the contractual obligations entered into with the IDB and the IBRD.
- 3.8 The projects will be executed using the operating and financial procedures established by: (i) the stipulations of the loan contract between the Bank and the borrower; (ii) the program's manual of operating procedures; and (iii) the subsidiary loan contracts between the State and the provinces. Signature of at least one of these subsidiary contracts and entry into effect of

the program's manual of operating procedures agreed upon with the Bank will be conditions precedent to the first disbursement from the financing. The national-scale projects that will be executed by the State and the regional projects may require subsidiary loan agreements when the agreements for these programs include provincial borrowing.

4. Project cycles

- 3.9 Inclusion of projects in the program implies recognition that a set of minimum requirements for approving a province's participation in the program have been met. These requirements have already been satisfied by all the provinces and consisted of: (i) formulation of a diagnostic study and a medium-term agricultural development strategy subject to periodic updating (at least annually), covering the sector policies and programs and the proposed projects; and (ii) establishment of a project preparation unit provided with adequate resources.
- 3.10 To be eligible, projects must be consistent with the PPDA and with national policy as a whole and for the sector. The project portfolio is developed in three cycles each comprising clearly identified actions:
- a. In the eligibility and design cycle: (i) the province identifies a need, outlines an idea for a project to resolve this need and submits it to the CEU; (ii) the CEU verifies that the idea submitted meets in principle the project eligibility criteria, and proceeds to authorize its preparation; and (iii) the province prepares the design of the final project, including the studies of least-cost alternatives and the pertinent evaluations.
 - b. For financing cycle: (i) the province submits the final project to the CEU; (ii) the CEU reviews it and verifies that it meets all the eligibility conditions set by the program and, after technical clearance is obtained from the IDB and the IBRD, the CEU processes the project for approval; and (iii) after consulting with the CAP, the SAGyP approves the loan and signs the subsidiary loan agreement (or its addendum) with the province.
 - c. For the execution and cost-recovery cycle: (i) the pertinent EPDA will execute the project according to the plan approved and agreed on; and (ii) in the various provincial investment projects that will generate direct benefits for the private sector, the project design will include arrangements for recovery of costs for works administration, operation and maintenance and, if possible, of the capital cost (paragraphs 3.19 and 3.24). Normally, the operation and maintenance of facilities will be the responsibility of the associations of producers (or irrigation users).

B. Physical start, commitment of resources and disbursements

- 3.11 The prospective loan contract would include periods for physical initiation of works (42 months), commitment of funds (54 months) (for projects not involving works) and for final disbursement (five years). The manual of operating procedures will also set time limits in all projects for conclusion of the respective participation or subsidiary agreement, compliance with the requirements for eligibility for disbursements, and physical initiation of the works and/or commitment of resources.

C. Manual of operating procedures

- 3.12 The execution of the program will be governed by the manual of operating procedures, a preliminary version of which was examined by the project team. Adoption of this manual will be a condition precedent to the first disbursement. The manual contains, among other things, the program's operating mechanism and the eligibility criteria for sectors and projects, together with the preliminary version of the environmental procedures (paragraph 3.27 (b)).
- 3.13 The majority of the provinces will operate under the procedures and supervision of only one of the two IFIs, since Group A includes only one province - Mendoza - with more than one investment project, which will require it to work with both the IDB and the IBRD.

D. Eligibility criteria

1. For provinces

- 3.14 All the provinces are eligible to participate in the national institutional strengthening programs and information systems. However, only those that demonstrate their institutional and financial capacity and have signed the program participation agreement will be able to benefit from the investment programs. The eligibility criteria set for the purpose require the province to:
- a. currently have a law on borrowing that authorizes it to conclude the agreement under the conditions agreed upon between Argentina and the Bank, and to be a party to the program participation framework agreement;
 - b. have signed an agreement with the agency (or agencies) that will execute the investment projects in the province, which agreement must define the requirements for establishing a cost-recovery mechanism; and
 - c. have set up the agricultural programming agency and the administrative and financial supervision mechanism for the

provincial investment projects and, where necessary, signed an agreement with the agency responsible for this supervision.

- 3.15 In various programs targeted at the provinces, Argentina, together with the IDB and the IBRD, sought to stimulate better use of the facilities already in existence in each sector or subsector before embarking on new projects in these sectors. PROSAP is focused on projects for rehabilitation or rationalization of existing facilities. However, if a province were to propose financing a new project, it would be required to submit evidence of its ability to pay to finance such a new initiative, to the satisfaction of the CEU and the two IFIs.

2. For projects

- 3.16 Projects must meet the requirements set forth in the manual of operating procedures as regards their feasibility. In addition, they must have: (i) financial sustainability - the project must generate sufficient surpluses to cover at least the administration, operation and maintenance of the works and will include a plan for recovery of the investment and/or ensuring project sustainability; (ii) environmental sustainability - the project must improve and/or conserve the biophysical environment and natural resources; (iii) beneficiary participation - in each project the beneficiaries must have participated in the decision-making on the investment and will participate in its administration and operation; (iv) decentralization - preference would be given to projects that will strengthen and improve the agricultural services that have been delegated to the provinces; (v) institutional feasibility - the project's technical executing unit and the province must have adequate institutional and technical capacity to handle execution of the project; and (vi) economic feasibility - the economic rate of return on the project must be at least 12%.

E. Operation and maintenance

- 3.17 The executing organizations would be liable for the maintenance of all program-financed works. In the particular case of water projects, the associations of users or irrigators will be responsible for charging the appropriate fees and for managing, operating and maintaining the facilities. The fact that these associations are being increasingly involved offers better opportunities for the operation and maintenance of the facilities to be performed satisfactorily.
- 3.18 The organizations responsible for operation and maintenance of facilities funded by the Bank will be required to prepare and submit an annual operating and maintenance plan that will include a report on the execution of the previous year's plan, a discussion of the present state of the facilities and the operating and maintenance program for the next year. During execution of the program, these plans will be consolidated and submitted to the Bank

by the borrower together with the year-end progress report (paragraph 3.29) and, for the 10 years following completion of the works, in the first quarter of each year. This condition will be included in the loan contract between the Bank and Argentina and also in each execution agreement and subsidiary loan agreement.

F. Cost recovery and sustainability

- 3.19 Under the new agricultural policy, the State's role is to offer the essential services that the market cannot provide under normal conditions. These services include basic research, sanitary regulation and quality control, and promotion of Argentine products in the world markets. Moreover, the State is no longer shouldering the responsibility for providing irrigation and extension services, which it used to provide at much below cost or even free of charge. The governments recognize, however, that they have to introduce a new fee schedule that covers the costs of these services and investments, even if only on a gradual basis.
- 3.20 Provincial legislation requires the authorities to recover the cost of their investments by means of fees, charges and taxes on the beneficiaries. However, the legislation also recognizes exceptions in justified cases and does not require set amortization periods or the charging of the applicable interest, leaving it to the provincial authorities to determine the cost-recovery conditions to be applied in each case. In the program, the design of each project that results in direct benefits to the private sector will include a cost-recovery plan and program with agreements establishing the mechanisms for implementing the cost-recovery system. Conclusion of these agreements will be a condition precedent to the first disbursement of proceeds intended for projects requiring such systems. The fees, charges, special assessments and taxes would cover the cost of operation, administration, maintenance and, where financially feasible, the cost of the investment. For all Group A projects financed with Bank funds, the plans for cost recovery and/or financial support of the services are to be submitted within six months of the signature of the loan contract.

1. Irrigation and drainage

- 3.21 The provinces with water projects in the sample will absorb between 50% and 70% of the rehabilitation and rationalization costs, while the users would cover the balance by means of special assessments.
- 3.22 In general, water rates in Argentina are based on the area of land registered for irrigation service and are charged to the farmers regardless of whether they receive the water or not, which has financial and also economic consequences. Since the fee is not based on the quantity of water used, there is no incentive to use it efficiently. This program will require that, in each province with a water project, within two years of the start of the first project in the respective province, a study of alternatives be

conducted for optimizing the use of water resources, including alternatives related to the volume of water used, among other variables, which would make it possible to charge for water actually used instead of basing fees solely on the number of hectares registered. Within six months from the date that each of the studies mentioned above is submitted, and in any case before the execution of another water subproject for that province is financed, the borrower, together with the respective province and the Bank, will consider the technical alternatives to determine the actions that may be adopted with regard to the recommendations and conclusions of the studies (paragraph 1.10).

2. Research and extension

- 3.23 In the past, the public sector performed the research and extension services free of charge. However, owing to the pressure for budget cutbacks, the government has reduced its participation in these two activities, with the result that both the coverage and the quality of the services have declined. The government has sponsored a pilot program called "Rural Change" in which groups of farmers contract the services of extension officers directly, with 80% of the cost initially being covered by the government, after which, as the beneficiaries realize the value of these services (which takes on average some five years) the share they pay is gradually raised to 100%. The extension services form an important component of the program, so for each project in this area a plan to ensure cost recovery and/or sustainability of the service is included.

3. Animal and plant health

- 3.24 In the animal and plant health projects, the beneficiaries would pay fees that would bring in funds for their operation, for recovery of the costs of the national and provincial agencies involved and to keep the services running in the future. The beneficiaries in both areas would pay fees for inspection visits in the field and per unit of product marketed. Participants in the animal health projects would also pay the cost of vaccinating their stock.

G. Supervision of the works

- 3.25 Supervision of the construction contracts will be the responsibility of the pertinent EPDA. The EPDA would be able to delegate a part of this work to the provincial executing agencies with the technical capacity to perform it, with the assistance of individual consultants or a specialized consulting firm when necessary. In all cases, the procedure to be used will have to be cleared with the CEU.

H. Environmental aspects

- 3.26 The environmental report on PROSAP (approved by the Environment Committee on April 18, 1995) summarized the environmental impact assessments of the projects with varying types of complexity. The environmental quality control procedures form part of the manual of operating procedures. In the case of a project requiring measures to mitigate environmental impacts, such activities will be programmed as a component of the project and their cost will be included in the project budget. The CEU, in coordination with the agricultural programming agencies and the provincial environmental agencies, will be responsible for monitoring the performance of environmental mitigation activities.
- 3.27 As a result of the environmental review of the Group A projects, it was recommended in the environmental report that, prior to the first disbursement, the SAGyP shall have:
- a. assigned or hired an environmental specialist to serve as a member of the technical team in the CEU in order to supervise the application of the environmental procedures established for projects to be financed under the program; and
 - b. incorporated the environmental impact assessment procedures, which have been included in the draft manual, in the manual of operating procedures (reformulating procedures applied to date).

I. Program monitoring

- 3.28 Within 60 days from the end of each calendar year, the borrower will be required to submit to the Bank the annual operating plan (AOP) for PROSAP, broken down by province and project.
- 3.29 The borrower will also be required to submit to the Bank semiannual reports on the implementation of the plan, making reference to the AOP already approved and forwarded to the Bank. The provincial agricultural programming agencies will submit reports at the provincial level, based in turn on the reports from the different provincial investment projects. The semiannual reports are to be submitted to the Bank within 90 days of the closing date of each calendar semester, and shall contain a complete updating of the AOPs and necessary budget allocations.

J. Annual program monitoring meeting

- 3.30 Each year throughout the execution of the program, the Bank and the borrower will conduct a joint evaluation in order to assess the accomplishment of the program's objectives. This evaluation will be based on the program's year-end semiannual reports.
- 3.31 Taking into consideration the original program design criteria and objectives, the areas on which the monitoring is to be concentrated

are: (i) the effectiveness of the program approach; (ii) the program's impact in terms of coverage and quality of the support services for agriculture; (iii) the cost of the projects and of the institutional development activities financed; (iv) compliance with the environmental requirements; (v) training of province personnel; (vi) operation and maintenance of the services; (vii) cost recovery; (viii) selection of new projects; and (ix) behavior of the agreed benchmarks. The benchmarks and methodologies defined in the manual of operating procedures will be used for this purpose.

K. Recognition of expenditures

- 3.32 The executing agency has incurred certain expenses in preparing the program, such as for strengthening provincial technical units, together with expenses connected with the starting of various Group A works; the procurement or contracting involved met requirements substantially similar to those that would be laid down in the loan contract. The amount of these costs to be recognized up to the estimated approval date of the Bank loan is put at US\$2.4 million equivalent. Recognition of expenses incurred since September 1, 1994, up to an amount of US\$400,000 equivalent chargeable to the local contributions and expenses incurred since March 1, 1995, up to US\$2 million chargeable to the financing is accordingly recommended.

L. Procurement of goods and services and hiring of consultants

- 3.33 The current Bank procedures, which will form an integral part of the loan contract, will be used for procurement of goods and contracting of services to be funded with the loan. The provinces and the federal government generally have ceilings for requiring competitive bidding for procurement of goods and works construction that are below those set by the Bank and procedures compatible with those of the Bank. For procurement of goods above US\$350,000 and works construction over US\$5 million, international competitive bidding would be used. The documentation for bids on goods and services in amounts below those ceilings will be verified after the fact. The ceilings established for selection of the applicable procurement procedures are indicated on page 10 of Annex III-2.
- 3.34 As regards consulting services, the loan contract will also specify that the Bank's procedures be followed. However, in view of the large number of consulting services required for the program, and with a view to speeding its execution and facilitating supervision by the Bank, it will be necessary for the CEU to hire at least two consultants familiar with the subject area. These two specialists would help coordinate the processes for selection, contracting and supervision of individual consultants and consulting firms. The hiring of these two specialists must be completed before the first disbursement from the loan. It is Bank policy that consulting firm services in excess of US\$200,000 must be retained through international competitive bidding procedures.

- 3.35 To facilitate the CEU's work and achieve a measure of standardization, the services of consulting firms will be used to the maximum extent possible. Prior Bank approval will be required for individual consultant contracts exceeding US\$30,000 (and for contracts with consultants who have provided services aggregating over US\$50,000 to the program), and for contracts in excess of US\$100,000 for consulting firms. For contracts below these limits an ex post evaluation will be made.
- 3.36 The bidding and contracting schedules will be updated semiannually based on the program schedule of activities and the progress of the projects and actions; review of these schedules will be one of the agenda items for the annual meetings with the IDB and the IBRD.

M. Disbursements

- 3.37 Considering the nature of the operation, the volume of transactions involved in the procurement of goods and services and the characteristics of a global program, the object is to have an efficient and quick mechanism that will ensure swift disbursement of the program funds. The disbursements will accordingly follow the Bank's normal procedures, except as regards justification of advances and reimbursement of payments made. To speed up the start of execution of the program, an advance of funds of 10% of the amount of the loan is proposed. After the first disbursement for each project, the executing agency will only need to submit to the Bank the disbursement request accompanied by the list of payments plus a checklist of disbursements and local contributions, and will retain the pertinent supporting documentation for ex post verification by the Bank on a sample basis. If the supporting documentation is found to be incomplete, the Bank may require prior submission of all documentation with each disbursement request.

N. Audit

- 3.38 Until the end of execution of the program, its annual financial statements, certified by the Comptroller General of the Nation, are to be submitted within the first six months following the end of each fiscal year.

O. Ex post evaluation

- 3.39 In the course of the second year after the final disbursement, an ex post evaluation will be made that analyzes the data previously identified for measuring the degree of success achieved during execution and at the end of the program. This evaluation will be performed at the national level by the Dirección Nacional de Economía Agropecuaria y Planeamiento [National Directorate of Agricultural Economy and Planning] of the SAGyP with resources of the latter.

- 3.40 The ex post evaluation will be used to verify fulfillment of the program's objectives and its impact on the beneficiaries. The information obtained will serve to determine the reasons for any failure to achieve the objectives. For performance of this function, appropriate benchmarks will be established, to be considered at two levels - objectives and targets - and reflecting both quality and quantity. A preliminary set of benchmarks has been prepared. These benchmarks will measure the effects of the program and will include: (i) the additional quantity of output expected both as a result of the irrigation and drainage work and by means of the research and extension programs; (ii) regarding plant health, the extent to which Argentine fruits and vegetables meet with greater acceptance in the markets; (iii) as regards animal health, the benchmarks will measure the extent to which diseases are diminishing and the cost and frequency of vaccination, as well as the acceptance of Argentine meat in the world markets that are most demanding from the health standpoint; (iv) with regard to the extension programs, the benchmark is connected with the increased number of farms actually using new techniques or adopting a vertical integration system; and (v) in winemaking areas, the benchmark refers to the increase in area and the tonnage of the right varieties of grapes produced. This list is not exhaustive because various other benchmarks will be added as a result of the strengthening of the programming capacity referred to above.

IV. THE BORROWER AND THE EXECUTING AGENCY

A. The borrower

- 4.1 The borrower will be the Republic of Argentina and the executing agency will be the Secretariat for Agriculture and Fisheries (SAGyP), an agency of the Ministry of Economic Affairs and Public Works and Services (MEyOSP). The SAGyP will execute the program through its Subsecretaria de Economía Agropecuaria [Undersecretariat for Agricultural Economics], in which the central executing unit (CEU) for the program will be located.

B. The executing agencies

- 4.2 The projects making up the program will be implemented by the public agencies in the three levels of government. Firstly, the agency responsible for the entire program and also for execution of the national projects will be the SAGyP, through the CEU. Secondly, the regional projects will be carried out by specialized agencies of the SAGyP, in coordination with provincial governmental agencies and the producers and merchants of the respective sector. The latter, through their associations, have recognized the importance of the Mesopotamia animal health project and the plant health project (SEFINOA) and will assist with the funding of the additional personnel needed in the health control stations of the provinces involved. Thirdly, the provincial investment projects will be executed by the appropriate local agencies. The EPDAs will provide coordination between the executing agencies in the provinces and the CEU at the national level.

1. The SAGyP

- 4.3 The SAGyP was established in 1992 by decree 2773/92. Its main functions include: (i) preparing and executing plans, programs and policies concerning agriculture, fisheries, forestry and agro-industry, reconciling the interests of the national government, the provinces and the subsectors; (ii) promoting the utilization and conservation of the natural resources employed for crop, livestock and fishery production; (iii) monitoring production and the national and international markets and supervising programs and projects to provide feedback for policy formulation and decision-making; and (iv) verifying the application of the regulatory frameworks and the provision of agricultural services.
- 4.4 The SAGyP is comprised of two undersecretariats and five decentralized agencies: (i) Undersecretariat for Agricultural Economics (responsible for the execution of this program); (ii) Undersecretariat for Agricultural Production and Markets; (iii) INTA; (iv) SENASA, responsible for execution of certain regional projects; (v) IASCAV, responsible for execution of certain

regional projects; (vi) Instituto Nacional de Investigaciones y Desarrollo Pesquero [National Fishery Research and Development Institute] (INIDEP); and (vii) Instituto Nacional de Semillas [National Seed Institute] (INASE).

- 4.5 The Undersecretariat for Agricultural Economics' responsibility for executing PROSAP includes coordination of studies of factors that affect agricultural development and the control of plans, programs and projects in the agriculture sector.
- 4.6 In accordance with the policy of rationalizing and decentralizing the public sector, the SAGyP has been converted from an agency with 16,413 employees in 1988, including three decentralized agencies, into an agency with 8,604 employees in 1995, with five decentralized agencies, six directorates having been eliminated from its economic development sector. The Undersecretariat for Agricultural Economics has 70 professional and 130 administrative employees. However, with its present responsibilities it does not have sufficient staff suitable for the CEU. The CEU's staff will accordingly be made up mainly of additional personnel and consultants.
- 4.7 In addition to the SAGyP's formal structure and personnel, it also has various project execution units, funded from both international and national sources. These include units for PROMSA and the credit and support project for small-scale producers in northeastern Argentina, financed by the Bank.
- 4.8 The SAGyP currently has a project preparation unit (PPU) that was established for the preparation of PROSAP with financing from the Bank and the IBRD and would become the CEU. The CEU would be responsible for the programming, coordination and supervision of project execution, and for liaison among the program, the provinces and the IFIs. The CEU will have direct responsibility for execution of two national projects: the integrated agricultural information system and the project for strengthening the provincial agricultural development programming capacity. The CEU will hire specialists and/or consulting firms according to the projects' requirements for supervision of Group B project preparation and for the design and preparation of the projects.
- 4.9 To enable the CEU to perform its functions, the SAGyP will appoint a group of personnel, representing an increment for the SAGyP (although certain positions will be covered by PPU staff), comprised of some 14 professionals and seven administrative personnel. The professionals will include a coordinator, a chief of administration, an economist, a legal advisor and specialists in water resources, animal health, plant health, data processing systems, institutional design, environmental matters and the hiring of consultants (paragraph 3.34). The administrative personnel will include accounting staff, information system operators and technical assistants. The estimated budget for the CEU is

US\$5.2 million, which includes the cost of incremental personnel (to be funded by the IBRD) and of the equipment (to be funded by the Bank).

2. Financial capacity of the provinces

- 4.10 The execution of the investment projects in the provinces depends on their financial and borrowing capacity. Their financial capacity has been weak for some time and only in the past three or four years has it begun to improve. However, owing to a downturn in the economy of the interior of the country, there has been a significant worsening of the provinces' fiscal position in the past two years. In recent years all the provinces have financed more than half their expenditure with national government tax revenues. The State has encouraged the provinces to use these revenues to finance productive projects along the lines of this program. It is accordingly expected that the State would continue to contribute these funds in order to improve the provinces' financial capacity during the execution of this program.

3. The provincial agencies

- 4.11 The EPDAs will be responsible for the execution of the provincial investment projects making up this program. They would have sufficient authority to coordinate and supervise the execution of each of the projects. The provincial executing agencies will supervise the technical activities performed by the consulting or construction firms in the execution of the investment projects. They will be staffed by personnel with sufficient professional experience, capable of carrying out the execution of the particular project concerned with the consulting services needed for any additional and/or specialized work to be done in the execution of the program and/or the specific investment projects involved.
- 4.12 The institutional strengthening project will support the development in each province of permanent agricultural programming capacity. In each province, an EPDA will either be established or an existing one strengthened that will take care of the programming, supervision and coordination of all the province's projects. These agencies will be located in the topmost provincial agricultural authority and will serve as liaison between the provincial executing agencies and the program's CEU. In many cases, the sole agricultural programming capacity is located in the units that were established to develop the PROSAP projects. The majority of these units are permanent, not temporary, and will be converted into and/or combined with the agricultural programming agencies.
- 4.13 In the administration and financial management of the provinces' investment projects, the EPDAs will use the existing provincial financial administration agencies (EPAFs) with strengthening where needed. Generally, these agencies already have the systems and

procedures necessary to handle the accounting and administration of projects, including the management of disbursements, handling of bidding documents and hiring of consultants and specialized firms, all in accordance with IDB and IBRD procedures.

4. Execution structures in the provinces with Bank-financed water projects

- 4.14 In Mendoza, the PROSAP investment projects will be supervised by an agricultural programming agency, the provincial technical unit, which is currently located in the Undersecretariat for Agricultural Development of the Ministry of Economic Affairs and Finance. Administrative and financial control of the project will be performed by the public investment, coordination and technical assistance system (SIPCAT), which was set up by the provincial government to track all the projects under execution in the province and is presently being used for projects in all the province's ministries. The executing agency for the specific project will be the Irrigation Department (DGI), a decentralized agency located in the Ministry of Public Works. The DGI has successfully executed a number of investment projects and has demonstrated adequate financial capacity and achieved budgetary autonomy.
- 4.15 In Neuquén, the Colonia Centenario project will be supervised by the agricultural programming agency, currently located in the Secretariat for Agricultural Production of the Ministry of Production and Tourism. The province has programmed the transfer to this agency of the five additional professionals needed for starting the program. The administrative and financial supervision of the project will be performed by the executing unit of the Provinces I program, located in the Ministry of Economic Affairs. The provincial executing unit for the irrigation project will be the Agricultural Technology Department of the Secretariat for Agricultural Production of the Ministry of Production and Tourism. All these agencies have demonstrated the necessary capacity for the program.
- 4.16 The Alto Valle project in Río Negro will be supervised by the project preparation unit, currently located in the Ministry of Economic Affairs, which has two professionals and will have six more transferred to it for starting the program. The Provincial Water Department (DPA), the provincial agency responsible for irrigation and drainage, has an administrative office and three irrigation districts in the zone. To supplement the technical capacity and involve the private sector directly in the execution of the project, the Río Negro Foundation has been formed to execute the project. This foundation, an independent entity under private law, will also assume the administrative and financial control of the project. The creation and strengthening of the foundation (or any other agency to execute the project) and the signing of an

agreement therewith will be conditions for initiating the project execution.

5. The executing units for regional projects

- 4.17 The group of priority projects (Group A) includes three regional animal and plant health projects (all with IBRD financing). The SAGyP's decentralized agencies - SENASA and IASCAV - will be responsible for the organization and technical supervision of these projects. In the execution phase, these agencies will coordinate the project activities with the agricultural programming agencies in each province participating in the projects and also with the producers and merchants in the provinces. The administrative supervision and accounting and financial control of these projects will be coordinated between the CEU and the relevant agencies of the participating provinces, within the framework of the pertinent regional agreements.
- 4.18 SENASA has 2,864 employees and a budget of US\$81,003,000. Approximately 8% of this budget is derived from external sources for project financing. IASCAV is a new agency, established in 1992. Since then, its staff has grown to 655 and its budget has risen to US\$22,669,000. External financing for projects makes up 14% of its budget. The two agencies have technical offices in the areas of the regional projects.

V. JUSTIFICATION

A. Technical feasibility

- 5.1 The feasibility of the investment projects in the water sector in Group A has been developed to a level satisfactory to the Bank. The works involved are not technically complex, since they consist almost entirely of rehabilitation of existing infrastructure, at times with expansions for the drainage systems. The aspects that were examined most closely include the technical and economic suitability of the canal lining, the selection of the most appropriate lining method, and the optimum sequencing of the different stages of construction and their coordination with the training activities in the operation of the system and in parcel irrigation/drainage.
- 5.2 The analysis of the farm models suggests that the "with project" situation would make it possible to cover both repayment of the system-level investments and the additional farm-level investments needed to use the water.
- 5.3 A positive and essential aspect that has been included in the water projects is improvement of the operation by means of proper training in the use of computerized hydraulic simulation and/or demand- and supply-based water allocation programs by the official agencies and the associations of irrigation users. Many of the present problems involving high water tables and salinization are the consequence of overapplication of water and deficient infrastructure.
- 5.4 The provincial agencies responsible for coordination and supervision of construction and processing of the contracts have the capacity (number of staff and staff with the right qualifications) for the purpose. However, the volume of investment envisaged is much greater than in previous activities. In order to keep up with the proposed schedules for execution of the projects, which might be optimistic, with the resulting consequences as regards materialization of the benefits in the first few years, close coordination with the technical assistance programs will be necessary.
- 5.5 It is fully realized in PROSAP that the attention paid to agricultural development activities complementary to the investment in infrastructure is the best guarantee for achieving the desired impact. Training, applied research and technology transfer involve less inertia at the start than works, but entail a significant input from contract personnel that could be difficult to handle from the administration and management standpoint.

- 5.6 Given the objective of greater efficiency in water use at all levels (conveyance, distribution/operation and parcel level), it has been stipulated that an adequate "baseline" in relation to the present level of service must be determined, for use as reference in future evaluations of the investments' impact, as a condition precedent to the execution of each project. For the works involved in the Group B projects, this type of systematic review of performance will have to be included as an early stage in the preparation of the studies. Besides precise guidelines for the technical and environmental procedures, a method for consulting the beneficiaries over the entire project cycle is being devised.
- 5.7 The findings of the economic appraisals and the environmental considerations are noted in Annex IV to the environmental report. The negative environmental impacts are dealt with through mitigation measures and a program for monitoring environmental quality indicators is included in each individual project. The final version of the list of benchmarks and of the corresponding base-year data for Group A projects is to be submitted within six months of signature of the contract while those for Group B will form part of the pertinent feasibility studies. The initial data are to be submitted within three months of the start of each project.

B. Institutional feasibility

- 5.8 The institutional feasibility of the program depends on the ability of the national, provincial and local agencies to carry out their responsibilities. These agencies include the SAGyP, the CEU and its decentralized agencies, provincial agricultural programming and project supervision agencies, and provincial sector units responsible for the technical execution of the projects; all of these agencies would have the necessary capacity.
- 5.9 At the national level, the SAGyP and its agencies have sufficient capacity for executing the PROSAP projects. The CEU would have the experience gained during the program's design and preparation. During the preparation stage, coordination mechanisms were established with the provinces, and also financial and accounting systems. The SAGyP has a number of project execution units that receive international financing. This capacity will facilitate swift commencement of the program.
- 5.10 By hiring consultants, the CEU will have specialists in information technology and institutions for supervising the execution of the projects assigned to it. The CEU will also be able to obtain support from the Information and Systems Department and the National Agricultural Economics and Planning Department, which specialize in these areas.
- 5.11 The three regional projects in Group A will be supervised and executed by the two decentralized agencies of the SAGyP: SENASA

and IASCAV. Both of these agencies have offices and technical personnel in the regions where the projects will be executed, with programs and activities set up with provincial agencies and the private sector in the regions. These technical links will facilitate effective execution of these projects.

- 5.12 The institutional capacity of the 23 provinces ranges from very good to quite weak. As a condition for their participation in the program, each province has conducted an analysis of the institutional capacity of the units participating in the program. This analysis was conducted by the EPDAs and by the project technical supervision agencies. As a result of the findings, strengthening programs have been developed for each of the five provinces included in the program of the Group A investment projects. These strengthening activities will be executed simultaneously with the provincial investment projects. The other provinces, with the support of the CEU, will develop their own strengthening programs prior to financing investment projects.

C. Financial feasibility

- 5.13 The Bank team concluded in its analysis that the financial projections are satisfactory for supporting the program's feasibility. The financial feasibility relates to the ability of the national and provincial governments to provide the counterpart funds in a timely fashion. The local contributions, US\$31.5 million (9.4% of the total) for the national share and US\$40.4 million (12%) for the provincial share, are available according to the financial projections, since a substantial part of the program's financial requirements will be derived from the IBRD cofinancing (paragraph 2.23).
- 5.14 Since 1990 the decentralization policy has resulted in a more equitable distribution of national tax revenues to the provinces and an improvement in their fiscal position. However, their fiscal position has deteriorated over the past two years due to a downturn in economic activity. It is hoped that the rehabilitation projects forming the base of the program will help to revitalize economic activity and thereby restore the provinces' fiscal position. The fact that a part of the debt (US\$43.8 million) will be directly absorbed by the State serves to improve the program's financial feasibility.
- 5.15 The review of the financing requirements of the counterpart funds, both national and provincial, and the fiscal position of the provinces, at the different levels of government, confirmed the importance of the program for strengthening the provinces and the central government has ratified the commitment and capacity of the national government to cover the necessary national counterpart funds.

- 5.16 In the respective agreements, the producers and intermediaries have committed themselves to funding the additional personnel needed and the recurring costs of two regional projects (US\$14.6 million), one in animal health and one in plant health, by means of additional contributions per unit of product certified. In both cases, the private sector will benefit from the phytosanitary control resulting from execution of the projects and is, therefore, prepared to finance the counterpart costs involved, to which end agreements have been concluded with the executing agencies (SENASA and IASCAV) for recovery of the costs by means of a levy on products marketed that benefit from the projects.

D. Economic analysis

1. Background

- 5.17 The project team reviewed 11 projects of different types that were eligible for PROSAP and whose cost represented 57% of the total cost of the program (66.5% of the direct costs), including financing and administration costs. The bulk of these projects were prepared by consultants under the supervision of the PPU. The projects submitted included irrigation, drainage, extension, pest and disease control in crops and livestock, rural roads and rural electrification; however, the rural roads and electrification projects were not prepared to the degree needed in economic analysis for them to be included in Group A.
- 5.18 Responsibility for analysis of the projects was divided between the IBRD and the Bank, on the basis of a preliminary distribution of the projects. The economic analysis of the CORFO and Pozo Borrado projects, which will be financed by the IBRD, will be completed by the IBRD and those projects are therefore not included in Table V-1.
- 5.19 The economic analysis made by PROSAP focused on the impact of a set of components on specific areas, namely for irrigation, drainage and technology generation and transfer, on the one hand, and crop and livestock health control, on the other.

2. Irrigation, drainage, and technology generation and transfer projects

- 5.20 The benefits derived from the irrigation, drainage and technology generation and transfer group are the expansion of the area under production, increased yields, and improvements in product quality. In all the projects in this group, the benefit from drainage (lowering of the water table) is very important. In the Alto Valle and Colonia Centenario projects, bad irrigation practices and an inadequate drainage infrastructure are affecting the roots of the apple and pear orchards. In Constitución and Montecaseros, canal filtration and overapplication of water are causing soil salinization and the abandonment of land. The estimated benefits

from PROSAP include increased production following lowering of the water table, but do not take into consideration the fact that, without the project, production would decline over time. The benefits accordingly tend to be underestimated.

- 5.21 The estimate of the magnitude of the benefits is based on various sources. The calculations of the increase in yield and improvement in quality after lowering of the water table are based on statistical studies linking the flow from hydroelectric plant releases with the depth of the water table, and the depth of the water table with the yield and discard rate of fruits. The estimated increase in yield resulting from technology generation and transfer assumes that growers who are using basic techniques move up to intermediate techniques that are already in use in the zone and that they have the same result. The assumptions have to do with the speed of adoption and the number of growers who make the change.
- 5.22 It was not possible to break the benefits down by component in an entirely satisfactory manner for two reasons. First, the structure of the models used in the analysis did not provide for a breakdown, and so could not be used for that type of analysis and second, several components contribute to the lowering of the water table and a precise separation is impossible. For example, rehabilitation of the irrigation canals will reduce the filtration and cracks that lead to flooding and raise the groundwater level. As part of the technology transfer, more appropriate irrigation techniques are taught that reduce the volume of water used and the amount that goes into the ground. In view of these difficulties, the results broken down by component must be taken as indicative.

3. Animal and plant health control projects

- 5.23 The benefits of the health control projects are derived from the cost savings (1) from vaccination or treatment of pests and diseases, (2) from the losses prevented, and (3) in some cases, from the incremental income from exports that meet the health requirements (vegetables only, not livestock products). Given the nature of the latter benefits, there is no sound statistical basis for verifying them, so the analysis was based on the first two.

4. Results of the economic analysis

- 5.24 Table V-1 presents the results of the economic analysis of the projects considered.

TABLE V-1
SUMMARY OF ECONOMIC RATES OF RETURN OF PROJECTS BY COMPONENT

Project		Rate of return %	Sensitivity analysis (\$ 5.27)
ALTO VALLE	Irrigation	12	10
	Drainage	25	21
	Research and extension	38	28
	Apple moth control	26	24
	Total	27	23
CENTENARIO	Drainage	24	21
	Research and extension	23	16
	Apple moth control	19	16
	Total	22	17
MONTECASEROS	Irrigation	31	28
	Drainage	25	22
	Research and extension	16	13
	Total	23	21
CONSTITUCIÓN	Irrigation	20	18
	Drainage	32	29
	Research and extension	17	17
	Total	21	20
PATAGONIA ANIMAL HEALTH	Health campaign	41	17
	Meat inspection	19	14
MESOPOTAMIA ANIMAL HEALTH		119	17
NORTHWEST ARGENTINA	Fruit fly control campaign	36	17
	Health inspection	119	44
	Pest detection	88	36
	Total	103	87

5.25 The rates of return calculated do not include adjustments for the shadow price of foreign exchange, which is higher than the value of foreign exchange. As a result, since the projects produce primarily tradable goods, not applying a shadow price for foreign exchange underestimates the economic rate of return. The labor shadow price calculations are very much ad hoc, but are above those that appear in a sound study made before the major changes that have been introduced in trade policy. This implies that these prices may also result in a slight underestimation of the rates of return, since the differences in the labor used with and without the project are not large.

5.26 With the exception of one component, which is marginal, all the components have good rates of return. The only one that appears close to the marginal limit (irrigation in Alto Valle) is not a reason for concern since the breakdown into components is not precise and there are certain interdependencies with the drainage project, which shows a rate of economic return that is more than high enough to offset the irrigation figure.

5. Sensitivity analysis

- 5.27 Most of the economic analyses of the projects have to make assumptions about how soon the farmers will adopt the new techniques and make the complementary investments needed to utilize the works, health campaigns and extension services offered by the projects. The economic results are often very sensitive to these assumptions. An analysis was made of the sensitivity of the economic return calculations to three simultaneous adverse changes: (i) two years longer than expected before being able to take advantage of all the project benefits; (ii) cost of investments 20% higher than estimated; and (iii) real value of labor equal to its market value (i.e. no shadow price for labor). The results obtained were satisfactory and are presented in Table V-1.
- 5.28 The results of the sensitivity analysis indicate that the projects are resistant to adverse changes. This conclusion is all the more solid in light of the fact that the analysis does not include the benefits from the foreign exchange shadow price or from avoiding the decline in production that would ensue in the irrigation and drainage project areas without the projects.

E. Women

- 5.29 This program does not have specific impacts or effects specially targeting women. Its central objectives are to shift Argentine agriculture into more efficient and competitive production models with a view to raising rural income levels and thereby helping to improve the situation of the most vulnerable groups. The benefits for women are indirect: in other words, they form part of the overall benefits of the program, namely increased production, more employment opportunities and higher incomes in the areas of influence of each specific project.

F. Poverty policy criteria

- 5.30 In accordance with the requirements of the Eighth Replenishment document (AB-1704), it has been determined that the proposed program does not have the characteristics of a program targeting the poor. However, it is bound to have positive impacts in this respect, particularly in its second phase (Group B projects). The sample projects (Group A) are not located in Argentina's poorest provinces, but it is expected that there will be more provinces with sizable low-income populations in the second phase of the program. The institutional strengthening and training work being carried out in all the provinces ought to result in better-prepared investment projects in the future in the provinces that currently have less capacity in this regard.

G. Risks of the program

- 5.31 Given its nature and complexity, a program such as PROSAP is subject to risks of various sorts. The main risk is that the provincial governments will not have had enough experience in managing projects in their territory and may not be sufficiently prepared to execute the investment projects for which they are responsible. To reduce this risk as far as possible, as soon as preparation of this program was started, the SAGyP began conducting training activities in related areas, and these activities will be continued throughout the program's execution.
- 5.32 Since the provinces, in executing the investment projects in their areas, have to accept responsibility for servicing the debt connected with the provincial investment projects and a part of that arising from the regional and national projects, this program will have to be closely coordinated with the other needs in each province and with the programs organized by the Bank and the IBRD to meet them. Since the program focuses on rehabilitation of existing facilities, it should make a very positive contribution to the provinces' financial position.
- 5.33 After completion of the works and programs, one risk that could complicate accomplishment of the desired improvements in quantity and quality of agricultural production would be a return to the former policy of discriminating against agriculture, which would change the farmers' profit margins and lessen their incentive to invest. However, the likelihood of this happening is thought to be very small, given the trade liberalization reforms already implemented. In order to minimize the risk of inefficient management and inadequate maintenance of the facilities, annual operating and maintenance plans will be required for a ten-year period after the execution of the works, and the users will be responsible for managing them.
- 5.34 There are also environmental risks associated with each specific project; these have been identified and discussed in the environmental report and the appropriate guidelines have been laid down for environmental assessments.

OBJECTIVES	PROJECTS TO INCREASE OUTPUT	PROJECTS TO CHANGE VARIETIES	PROJECTS TO MEET SANITARY STANDARDS	PROJECTS TO SUPPORT CAPACITY
PROGRAM GOAL The value of agricultural exports increase.				
PROGRAM PURPOSE 1. Agricultural output increases in the Provinces. 2. Farmers and ranchers produce varieties that the market wants. 3. Agricultural output complies with international sanitary standards. 4. Provincial Governments identify and support production with good prospects for export.	PROJECT GOAL Output of apples and pears of exportable quality in Alto Valle and Centenario increases	PROJECT GOAL The amount of better quality grapes for wine production increases in Constitucion and Montecaseros.	PROJECT GOAL Cattle and sheep in Chubut, Santa Cruz, and the Mesopotamian region are exported to the US, European, and Japanese markets. All products of vegetable origin from Tucuman, Jujuy, Salta and Catamarca meet international sanitary standards.	PROJECT GOAL Projects and policies address the most important agricultural opportunities are prepared and implemented.
PROJECTS 1. Projects to increase agricultural yields in products with high export potential. -Apples and pears in Alto Valle -Apples and pears in Centenario 2. Projects to change from low value to high value crops demanded in the export market. -Fine wine grapes in Constitucion -Fine wine grapes in Montecaseros 3. Projects to control diseases and pests in plant and animal projects. 4. Projects to increase the planning and project analysis capacity of Agricultural Planning Units in the Provinces.	PROJECT PURPOSE 1. Agricultural lands have a sufficient amount of water delivered at the appropriate time. 2. High water tables do not reduce the amount of oxygen reaching the roots and reduce production. 3. Farmers apply appropriate techniques for irrigation, and protection of trees against frost. 4. Apple moth is eradicated.	PROJECT PURPOSE 1. Agricultural lands have a sufficient amount of water delivered at the appropriate time. 2. Production is not reduced by high water table and salinity of the soil. 3. Farmers apply techniques to graft quality grape stems to existing vines, and techniques of pruning and thinning. 4. Farmers apply new techniques of irrigation, vineyard management and pest control. 5. Volumetric irrigation tariffs are implemented.	PROJECT PURPOSE 1. The International Enzootic Organization recognizes Chubut, Santa Cruz and Mesopotamia Regions as "areas free of foot and mouth disease without vaccination." 2. Incidence of other cattle and sheep disease is reduced. 3. The fruit fly is eradicated. 4. Northwest Argentine Region is free of citrus cancrrosis. 5. Tucuman, Jujuy, Salta and Catamarca have an effective system to prevent the entry of exotic pests. 6. All fruit and vegetable crops pass tests for the maximum acceptable level of toxic residuals.	PROJECT PURPOSE 1. The Agricultural Programming and Planning Units (APPU) in each of the 23 Provinces identify and prepare economically efficient policies and projects to support agricultural exports. 2. The APPUs, extension agents, ranchers and producers use the price, production and meteorological information from the Agricultural Information Network to make better planning, production and marketing decisions. 3. Annual National and Provincial Agricultural Information Reports are published and available for use by government officials (national, provincial and international), farmers, educators and other private sector representatives.

OBJECTIVES	PROJECTS TO INCREASE OUTPUT	PROJECTS TO CHANGE VARIETIES	PROJECTS TO MEET SANITARY STANDARDS	PROJECTS TO SUPPORT CAPACITY
	<p>OUTPUTS</p> <p>1. Irrigation canals rehabilitated and in operation.</p> <p>2. Drainage canals constructed and in operation.</p> <p>3. Farmers know proper techniques for irrigation and protection against frosts.</p> <p>4. Orchards infested with apple moth are destroyed.</p>	<p>OUTPUTS</p> <p>1. Irrigation canals rehabilitated and in operation.</p> <p>2. Drainage canals constructed and in operation.</p> <p>3. Farmers know proper techniques of grafting</p> <p>4. Farmers know proper techniques for irrigation, pruning, thinning, and pest management.</p> <p>5. Recommendations for volume based irrigation charges proposed.</p>	<p>OUTPUTS</p> <p>1. Quarantine stations constructed, staffed and operating.</p> <p>2. Serological laboratories, constructed, staffed and operating.</p> <p>3. Center for Introduction of Plant Propagation Materials is constructed, staffed, and in operation.</p> <p>4. Laboratories to test for agrochemicals and toxic residuals are equipped, staffed and in operation.</p>	<p>OUTPUTS</p> <p>1. APPUs legally established in each of the 23 Provinces equipped and staffed with capability to perform agricultural programs to prepare agricultural projects.</p> <p>2. Integrated computer systems installed in APPUs of the 23 Provinces with software necessary to support agricultural programming, project preparation and to establish Federal Information Network for the retrieval and storage of agricultural data.</p> <p>3. Staff of the 23 APPUs know how to use the integrated computer systems.</p> <p>4. Staff of the 23 APPUs know methods of agricultural programming.</p> <p>5. Staff of the 23 APPUs know methods of project preparation and management.</p> <p>6. Federal Information Network with price, production, and meteorological data collected in operation, and accessible to the 23 APPUs.</p>

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
GOAL Output of apples and pears of exportable quality in Alto Valle and Centenario increases	1. Production of exportable ("select") apples in Alto Valle and Centenario increases from 187,000 MT in 1995 to 283,000 MT in 2002. 2. Production of exportable ("select") pears in Alto Valle and Centenario increases from 86,000 MT in 1995 to 140,000 MT in 2002.	1. Annual Agricultural Surveys of Rio Negro and Neuquén. 2. Annual Agricultural Surveys of Rio Negro and Neuquén.	The international price of exportable quality of the types of apple and pears produced in Alto Valle and Centenario remains relatively stable.
PURPOSE 1. Agricultural lands have a sufficient amount of water delivered at the appropriate time. 2. High water tables do not reduce the amount of oxygen reaching the roots and reduce production. 3. Farmers apply appropriate techniques for irrigation, and protection of trees against frost. 4. Apple moth is eradicated.	1. Agricultural area in Alto Valle and Centenario with a regular supply of irrigation water increases from 12,215 ha in 1995 to 41,749 ha in 2001. 2. Water table declines from an average of 1.3 m in 1995 to an average of 1.6 m in 2000 on 24,195 ha of farm land in Alto Valle and Centenario. 3. The area to which appropriate techniques for irrigation and frost protection are applied increases from 1,393 ha in 1995 to 16,079 ha in 2001 in Alto Valle and Centenario. 4. No apple moths are caught in the INTA monitoring traps in 2000.	1. Project Monitoring System of the APPU. 2. Project Monitoring System of the APPU. 3. Project Monitoring System of the APPU. 4. Monitoring records of INTA.	
OUTPUTS 1. Irrigation canals rehabilitated and in operation. 2. Drainage canals constructed and in operation.	1.1 In Centenario, 11.5 km of the principal Canal and 2.4 km of the Gramondo Canal straightened and deepened by the end of 1999. 1.2 In Alto Valle, 30.7 km of the principal canal lined and 14.5 km of irrigation pipeline built by the end of 1999. 2.1 In Centenario, 45 km of drainage collectors and the complementary culverts and drains rehabilitated by the end of 1999. 2.2 In Alto Valle, rehabilitation of 301 km of drainage collectors and construction of 310 drains and culverts by the end of 1999. 2.3 In Alto Valle, construction of 10 km of interceptor canals for flood control by the end of 1999.	1.1 Project Monitoring System of APPU and Bank supervision reports. 1.2 Project Monitoring System of APPU and Bank supervision reports. 2.1 Project Monitoring System of APPU and Bank supervision reports. 2.2 Project Monitoring System of APPU and Bank supervision reports. 2.3 Project Monitoring System of APPU and Bank supervision reports.	Irrigation consortia adequately maintain the canals. The level and collection of irrigation charges provides sufficient funds for operation and maintenance. Drainage works are adequately maintained.

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
GOAL The amount of better quality grape for wine production increases in Constitution and Montecaseros.	In the Constitution and Montecaseros area of Mendoza, the production of Pedro Gimenez, Ugni Blanc, Chenin, Lambrusco and Bonarda grape increases from 12,166 MT in 1995 to 49,408 MT in 2005.	Agricultural production statistics of the Secretary of Agriculture of Mendoza.	There is sufficient capacity wineries to produce better quality wine. The price of Mendoza's wine is competitive.
PURPOSE 1. Agricultural lands have a sufficient amount of water delivered at the appropriate time. 			

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
4. Farmers apply new techniques of irrigation, vineyard management and pest control.	4.1 Between 1995 and 2001, 320 farms (2,400 ha) in Constitución adopt thinning and pruning techniques for grape cultivation, change from irrigation by flooding to furrow irrigation, and install holding ponds so that they can irrigate between scheduled water deliveries.	Project monitoring system.	New strains of pests and blight not occur.
	4.2 Between 1995 and 2001, 320 farms (2,100 ha) in Montecaseros adopt thinning and pruning techniques for grape cultivation, change from irrigation by flooding to furrow irrigation, and install holding ponds so that they can irrigate between scheduled water deliveries.	Project monitoring system.	
5. Volumetric irrigation tariffs are implemented.	5. By the end of 1998, the Constitución and Montecaseros Irrigation Districts adopt a rate schedule that charges for volume of water delivered and the revenues generated are sufficient to cover operating, maintenance, and administrative expense and contribute to the repayment of the investments in irrigation and drainage.	Supervision of the sector specialist.	Farmers make decisions based on price of irrigation water.
OUTPUTS			
1. Irrigation canals rehabilitated and in operation.	1.1 In Constitución, 11.5 Km of the canal Viejo Retamo and 2.37 Km of the canal Constitución lined and operating with no losses because of filtration by the end of 1998; installation of control gates in the Moyano and Viejo Retamo canals by the end of 1998; installation of 70 intakes and measuring weirs in tertiary canals; installation of 1,400 intakes at farmgate.	Supervision of the sector specialist.	Average rainfall and snow melt conditions prevail. Operation and maintenance are adequate. The irrigation tariffs are adjusted frequently to maintain their real terms.
2. Drainage canals constructed and in operation.	2.1 In Constitución, 16.2 km of the complementary drainage system rehabilitated and widened by the end of 1998. 2.2 In Montecaseros, 38.6 km of the complementary drainage system rehabilitated and widened by the end of 1998.	Supervision of the sector specialist. Supervision of the sector specialist.	Farmers use some of the irrigation water to leach salts from the soil.
3. Farmers know proper techniques for grafting vines.	3. Farmers demonstrate use of appropriate techniques in the presence of extension agents.	Report of the extension agents.	Farmers believe that use of the techniques will increase their profits.

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
4. Farmers know proper techniques for irrigation, pruning, thinning, and pest management. 5. Recommendations for volume based irrigation charges proposed.	4. Farmers demonstrate use of appropriate techniques in the presence of extension agents. 5. Report handed in by the end of 1998 that provides analysis of alternative volume based charges for irrigation water, users preferences, and a recommendation on which system to use.	Report of the extension agents. Copy of the report available in the Country Office.	Political will exists to change to more rationale pricing system.
ACTIVITIES 1.1 Bidding documents for major works & equipment prepared by beginning of March, 1996. 1.2 Invitation to bid issued by end of March, 1996. 1.3 Bids opened August, 1996. 1.4 Bids adjudicated September, 1996. 1.5 Contract signed October, 1996. 1.6 Civil works initiated January, 1997 1.7 Supervision 1.8 Works inspected and accepted January, 1998.	PROJECT COSTS ('000 of US\$) Civil Works 8,930.0 Equipment and Vehicles 114.6 Training 70.8 Tec. Asst. & Studies 456.2 Personnel Costs 456.2 Other Operating Costs 411.6 Contingencies 522.0 Escalation 62.4 TOTAL 11,023.8		Local counterpart funds available in a timely manner Exchange rate remains stable.

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
<p>2.1 Bidding documents for major works & equipment prepared by beginning of March, 1996.</p> <p>2.2 Invitation to bid issued end of March, 1996.</p> <p>2.3 Bids opened August, 1996.</p> <p>2.4 Bids adjudicated September, 1996.</p> <p>2.5 Contract signed October, 1996.</p> <p>2.6 Civil works initiated January, 1997</p> <p>2.7 Supervision</p> <p>2.8 Works inspected and accepted January, 1998.</p> <p>3.1 Competition for consulting services prepared by end of March, 1996.</p> <p>3.2 Consultants for first year activities hired by May, 1996.</p> <p>3.3 Consulting services for all seminars and training contracted by January, 1998.</p> <p>4.1 Competition for consulting services prepared by end of March, 1996.</p> <p>4.2 Consultants for first year activities hired by May, 1996.</p> <p>4.3 Consulting services for all seminars and training contracted by January, 1998.</p>			

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
5.1 Consultant's preliminary report presented by March, 1996. 5.2 Analysis among DGI, environmental authorities & interested ministries de Agricultura by July, 1996. 5.3 Interim report by end of 1996. 5.4 Definition of applicable environmental considerations by July, 1997. 5.5 Final Report by end of 1998. 5.6 Review by provincial authorities by March 1999. 5.7 Review and discussion of alternatives among provincial and national authorities and Banks by July, 1999.			

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
GOAL 1. Cattle and sheep in Chubut, Santa Cruz, and the Mesopotamian region are exported to the US, European, and Japanese markets. 2. All products of vegetable origin from Tucuman, Jujuy, Salta and Catamarca meet international sanitary standards.	The US, Canada and the European Community and Japan import at least some fresh meat from Chubut, Santa Cruz and the Mesopotamian region. Products of vegetable origin from the Northwest Argentine region enter U.S. European markets without inspection and quarantine by 2002.	Records of SAGyP on export volumes of fresh meat. Records of agricultural exports maintained by SAGyP.	Prices of fruit and vegetables competitive.
PURPOSE 1. The International Enzootic Organization recognizes Chubut, Santa Cruz and Mesopotamia Region as "an area free of foot and mouth disease without vaccination." 2. Incidence of other cattle and sheep disease is reduced. 3. The fruit fly is eradicated. 4. Northwest Argentine Region is free of citrus cancrrosis. 5. Tucuman, Jujuy, Salta and Catamarca have an effective system to prevent the entry of exotic pests. 6. All fruit and vegetable crops pass tests for the maximum acceptable level of toxic residuals.	1. Official certification obtained. 2. Incidence of bovine and ovine brucellosis, melioidosis, leptospirosis, trichinosis and infectious equine anemia is reduced to less than 2% by year 2000. 3.1 50,000 ha. of susceptible vegetable species are free of fruit fly at the end of 2,000. 3.2 The number of fruit flies registered in INTA traps is zero in the year 2000. 4. There are no reports of outbreaks on 41,000 ha. of citrus plantations in the region of Northwest Argentina. 5. By 1998, all traffic that enters the Northwest region is inspected for exotic pests. 6. By the 2,000, less than 1% of samples are rejected because they exceed established maximum levels for residual toxics.	1. List of certified countries and regions of the IEO. 2. Records of the regional offices of the IASCAV. 3.1 Reports of the regional office of IASCAV. 3.2 Reports of the regional offices of INTA. 4. Reports of the regional office of IASCAV. 5. Reports of the regional office of IASCAV and supervision of the project monitoring system. 6. Reports of the laboratories of Jujuy and Tucuman.	Developed countries do not block imports to protect their agricultural industries.
OUTPUTS 1. Quarantine stations constructed, staffed and operating.	1. By the end of 1997, four laboratories, one in Tucuman, Jujuy, Salta, and Catamarca, are constructed, staffed, equipped and functioning	1. Project monitoring system and Country office	

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS																				
<p>2. Serological laboratories, constructed, staffed and operating.</p> <p>3. A mechanism to collect and administer resources for the indemnification for the cattle slaughtering is established at the end of 1996</p> <p>4. Center for Introduction of Plant Propagation Materials is constructed, staffed, and in operation, at the end of 1997.</p> <p>5. Laboratories to test for agrochemicals and toxic residuals is equipped, staffed and in operation.</p>	<p>2. Two serological laboratories process 100% of samples from cattle suspected to have FMD by the end of 1998.</p> <p>3. The emergency sanitary fund, in an amount of at least US\$1 million, is made available at the end of year two</p> <p>4. Center in operation in some arcane corner of Northwest Argentina by the end of 1997 provide certification of plant quality and health.</p> <p>5. By the end of 1997, reference laboratories in Tucuman and Jujuy test and certify fruit and vegetable production for levels of agrochemical residuals.</p>	<p>2. Annual report of the serological laboratories.</p> <p>3. Financial Statements of the Emergency Fund.</p> <p>4. Field Office Inspection.</p> <p>5. Field Office inspection.</p>																					
<p>ACTIVITIES</p> <p>1.1 Bidding documents for construction of laboratories and purchase of equipment prepared by end of March, 1996.</p> <p>1.2 Invitation to bid issued April, 1996.</p> <p>1.3 Bids opened September, 1996.</p> <p>1.4 Bids adjudicated October, 1996.</p> <p>1.5 Contract signed November, 1996.</p> <p>1.6 Civil works initiated January, 1997</p> <p>1.7 Supervision</p> <p>1.8 Works inspected and accepted January, 1998.</p>	<p>PROJECT COSTS ('000 of US\$)</p> <table><tr><td>Civil Works</td><td>2,802.8</td></tr><tr><td>Equipment and Vehicles</td><td>7,458.8</td></tr><tr><td>Training</td><td>912.0</td></tr><tr><td>Tec. Asst. & Studies</td><td>3,329.4</td></tr><tr><td>Development Fund</td><td>900.0</td></tr><tr><td>Personnel</td><td>14,095.4</td></tr><tr><td>Other Operating Costs</td><td>15,327.8</td></tr><tr><td>Contingencies</td><td>2,241.3</td></tr><tr><td>Escalation</td><td><u>2,156.6</u></td></tr><tr><td>TOTAL</td><td>32,045.4</td></tr></table>	Civil Works	2,802.8	Equipment and Vehicles	7,458.8	Training	912.0	Tec. Asst. & Studies	3,329.4	Development Fund	900.0	Personnel	14,095.4	Other Operating Costs	15,327.8	Contingencies	2,241.3	Escalation	<u>2,156.6</u>	TOTAL	32,045.4	<p>SAGyP project monitoring system and IDB country office supervision.</p>	<p>Local counterpart funds available in a timely manner.</p> <p>Exchange rate remains stable.</p> <p>Farmers believe that reporting outbreaks of disease on their property is in their own interest.</p>
Civil Works	2,802.8																						
Equipment and Vehicles	7,458.8																						
Training	912.0																						
Tec. Asst. & Studies	3,329.4																						
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TOTAL	32,045.4																						

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
<p>2.1 Bidding documents for construction & equipment prepared by end of July, 1996.</p> <p>2.2 Invitation to bid issued August, 1996.</p> <p>2.3 Bids opened November, 1996.</p> <p>2.4 Bids adjudicated December, 1997.</p> <p>2.5 Contract signed February, 1997.</p> <p>2.6 Civil works initiated March, 1997</p> <p>2.7 Supervision</p> <p>2.8 Works inspected and accepted January, 1998.</p> <p>3.1 Monitor suspected cases of FMD and, when the problem is confirmed, sacrifice sick animals</p> <p>3.2 Establish control mechanisms and prohibit access of animals, products, and other elements that could carry the FMD virus</p> <p>3.3 Train human resources</p> <p>4.1 Hiring of service for aerial spraying against fruit fly is made before end of year one</p> <p>4.2 Total area of citrus, tomatoes and peppers is sprayed at the end of year two</p> <p>4.3 The acquisition of sterile flies and the service of fly liberalization is contracted by year one</p> <p>4.4 During years three, four and five, irradiated sterile flies are liberated in all areas with citrus, tomatoes and peppers.</p>			

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
5.1 Compensation fund to reimburse ranchers for destroyed animals established by December, 1996.			
5.2 Campaign to inform ranchers about the benefits of the program to destroy infected animals prepared by March, 1997.			
5.3 Information distributed to all affected ranchers by June, 1997.			
5.4 Ranchers destroy all infected animals by the end of 1997.			

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
GOAL Projects and policies to address the most important agricultural opportunities are prepared and implemented.			Policies and the operation and maintenance of projects are funded and sustained.
PURPOSE 1. The Agricultural Programming and Planning Units (APPU) in each of the 23 Provinces identify and prepare economically efficient policies and projects to support agricultural exports. 2. The APPUs, extension agents, and farmers use the price, production, and meteorological information from the Federal Information Network to make better planning, planting, and marketing decisions. 3. Annual National and Provincial Agricultural Information Reports are published and available for use by government officials (national, provincial and international), farmers, educators and other private sector representatives.	1.1 Annual agricultural plans and programs addressing agricultural export opportunities are prepared and implemented by the APPUs in 7 provinces by 1997, in 15 provinces by 1998 and by all 23 provinces by 2000. 1.2 At least one project per Province per year to support increased production, improved quality and lower costs for exportable agricultural products are identified and prepared by 7 provinces beginning in 1998; by 15 provinces in 1999, and by all 23 provinces in 2001. 2.1 Annual agricultural plans and programs are prepared by each of the 23 Provinces more quickly and contain more complete and consistent data obtained from the Federal Information Network beginning in 1999. 3.1 Annual Agricultural Information Reports published for the nation as a whole and for each of the 23 provinces beginning in 2001.	1.1 Copies of the annual plans are submitted to the National Program Execution Unit in the Secretariat of Agriculture, Cattle and Fisheries. 1.2 Copies of the feasibility studies for proposed projects are submitted to the National Program Execution Unit in the Secretariat of Agriculture, Cattle and Fisheries. 2.1 The National Program Execution Unit in the Secretariat of Agriculture, Cattle and Fisheries reviews the quality of Provincial Annual Agricultural Programs received. 3.1 The National Program Execution Unit in the Secretariat of Agriculture, Cattle and Fisheries receives a copy of each report as well as information regarding the distribution of each.	There are funds available to carry out investment projects. There is political will to promulgate, monitor, and enforce policies.
OUTPUTS 1. APPUs legally established in each of the 23 Provinces; equipped and staffed with the capability to perform agricultural programming and to prepare agricultural projects.	1.1 APPUs have been established, including the designation of their technical staff, in 15 Provinces by 1996 and in all 23 Provinces by 1997.	1.1 Provincial Decree, Act or Resolution legally establishing each Provincial APPU and defining its mission, functions, structure, staffing and first year budget.	Salaries at the APPUs are sufficient to retain trained, qualified personnel.

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
2. Integrated computer systems installed in the APPUs of the 23 Provinces with software necessary to support agricultural programming, project preparation and to access the Federal Information Network for the retrieval and input of agricultural data.	2.1 Integrated computer systems (hardware and software) have been procured and installed in 7 Provinces by 1996, in 15 Provinces by 1997 and in all 23 Provinces by 1998.	2.1 Annual program and project progress reports as well as supervision by the National Program Execution Unit in the Secretariat of Agriculture, Cattle and Fisheries.	
3. Staff of the 23 APPUs know how to use the integrated computer systems.	3.1 APPU professional staff in each Province trained in the use of the integrated computer systems. 28 persons trained in 1996, 32 persons trained in 1997 and 32 persons trained in 1998.	3.1 Annual program and project progress reports as well as supervision by the National Program Execution Unit in the Secretariat of Agriculture, Cattle and Fisheries.	
4. Staff of the 23 APPUs know methods of agricultural programming.	4.1 APPU professional staff in each Province trained in agricultural planning and programming methodologies. 42 persons trained in 1996, 48 persons trained in 1997 and 48 persons trained in 1998.	4.1 Annual program and project progress reports as well as supervision by the National Program Execution Unit in the Secretariat of Agriculture, Cattle and Fisheries.	
5. Staff of the 23 APPUs know methods of project preparation and management.	5.1 APPU professional staff in each Province trained in project preparation and project management methodologies. 42 persons trained in 1996, 48 persons trained in 1997 and 48 persons trained in 1998.	5.1 Annual program and project progress reports as well as supervision by the National Program Execution Unit in the Secretariat of Agriculture, Cattle and Fisheries.	
6. Federal Information Network with price, production, and meteorological data created, in operation, and accessible to the 23 APPUs.	6.1 The Federal Information Network, including the national and international agricultural information data base, is established by 1998. 6.2 The APPU in each of the 23 Provinces has access to the Federal Information Network for the purpose of retrieving and inputting agricultural data by 1999.	6.1 Annual program and project progress reports as well as supervision by the National Program Execution Unit in the Secretariat of Agriculture, Cattle and Fisheries. 6.2 Annual program and project progress reports as well as supervision by the National Program Execution Unit in the Secretariat of Agriculture, Cattle and Fisheries.	

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
<p>ACTIVITIES</p> <p>1. Technical assistance for institutional strengthening and the federal agricultural information system (various contracts):</p> <p>1.1 Preparation of the terms of reference for technical assistance by March 1996.</p> <p>1.2 Invitation to bid issued by April 1996.</p> <p>1.3 Bids opened by July 1996.</p> <p>1.4 Bids adjudicated by September 1996.</p> <p>1.5 Technical assistance initiated by October 1996.</p> <p>1.6 Technical assistance completed by December 1999.</p> <p>2. Technical assistance for the design and installation of the geographical information system:</p> <p>2.1 Preparation of the terms of reference for technical assistance by January 1997.</p> <p>2.2 Invitation to bid issued by February 1997.</p> <p>2.3 Bids opened by May 1997.</p> <p>2.4 Bids adjudicated by June 1997.</p> <p>2.5 Technical assistance initiated by July 1997.</p> <p>2.6 Technical assistance completed by December 1999.</p> <p>3. Procurement of computer and communications equipment and software for the APPUs and for the federal agricultural information system (various contracts):</p> <p>3.1 Preparation of specifications for computer hardware and software by June 1996.</p> <p>3.2 Invitation to bid issued by July 1996.</p> <p>3.3 Bids opened by October 1996.</p> <p>3.4 Bids adjudicated by November 1996.</p> <p>3.5 Procurement and installation of equipment and software initiated by December 1996.</p> <p>3.6 Installation of equipment and software completed by December 1999.</p>	<p>PROJECT COSTS ('000 of US\$)</p> <p>Civil Works 297.5</p> <p>Equipment and Vehicles 7,191.9</p> <p>Training 1,681.0</p> <p>Tec. Asst. & Studies 7,410.0</p> <p>Personnel 6,335.4</p> <p>Other Operating Costs 6,414.6</p> <p>Contingencies 1,466.5</p> <p>Escalation <u>1,248.5</u></p> <p>TOTAL 32,045.4</p>	<p>Bank project supervision</p>	<p>Local counterpart funds are provided in a timely fashion.</p> <p>Exchange rate remains stable.</p> <p>Qualified personnel can be attracted at existing salaries.</p>

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
<p>4. Procurement of agrometeorological and the geographical information system equipment (and software) for the federal agricultural information system:</p> <p>4.1 Preparation of specifications for equipment and software by January 1997.</p> <p>4.2 Invitation to bid issued by February 1997.</p> <p>4.3 Bids opened by May 1997.</p> <p>4.4 Bids adjudicated by June 1997.</p> <p>4.5 Procurement and installation of equipment and software initiated by July 1997.</p> <p>4.6 Installation of equipment and software completed by December 1999.</p> <p>5. Procurement of vehicles for the APPUs and for the federal agricultural information system (various contracts):</p> <p>5.1 Preparation of specifications for vehicles by June 1996.</p> <p>5.2 Invitation to bid issued by July 1996.</p> <p>5.3 Bids opened by October 1996.</p> <p>5.4 Bids adjudicated by November 1996.</p> <p>5.5 Vehicles delivered by February 1997.</p> <p>6. Training services for the APPUs and for the federal agricultural information system (various contracts):</p> <p>6.1 Preparation of the terms of reference for training services by January 1997.</p> <p>6.2 Invitation to bid issued by February 1997.</p> <p>6.3 Bids opened by May 1997.</p> <p>6.4 Bids adjudicated by June 1997.</p> <p>6.5 Training services initiated by July 1997.</p> <p>6.6 Training services completed by December 1998.</p>			

PROCUREMENT FINANCING, PROCEDURES, AND TIMETABLE

PROVINCIAL AGRICULTURAL SERVICES PROGRAM - PROCUREMENT FINANCING, PROCEDURES, AND TIMETABLE								
Description of procurement	Value of Procurement	Source of funding (US\$)			Type of Procurement	Procurement Procedure	Quarter bid. proc.	
		IDB	IBRD	Local				
Buenos Aires								
CORFO								
1.1.1 Civil works	13,872,778		11,758,591	2,116,186				
1.1.1.1 Relining secondary canals	12,647,800		10,718,475	1,929,325	WORKS EXEC.	ICB	III/97	S
1.1.1.2 Relining primary canals	1,224,978		1,038,117	186,861	WORKS EXEC.	LCB	III/96	
1.1.2 Equipment and vehicles	528,368		447,769	80,599				
1.1.2.1 Procurement vehicles	118,000		100,000	18,000	GOODS	LCB	III/96	
1.1.2.2 Procurement machinery and equipment	208,000		176,271	31,729	GOODS	LCB	III/96	
1.1.2.3 Procurement office equipment	75,380		63,881	11,499	GOODS	LCB	III/96	
1.1.2.4 Procurement communications equipment	65,000		55,085	9,915	GOODS	LCB	III/96	
1.1.2.5 Procurement computer equipment	55,700		47,203	8,497	GOODS	Limited bidding	n/a	
1.1.2.6 Procurement office furniture	6,288		5,329	959	GOODS	Price comparison	n/a	
1.1.3 Training	1,494,235		1,494,235	0				
1.1.3.1 Assistance for training courses	125,100		125,100		INDIV. CONS.	LCB	IV/96	S
1.1.3.2 Agricultural extension courses	1,369,135		1,369,135		CONS. FIRMS	ICB	IV/96	S
1.1.4 Technical assistance	5,070,334		5,070,334	0				
1.1.4.1 International consulting services	220,000		220,000		INDIV. CONS.	ICB	I/97	S
1.1.4.2 Local consulting services	200,500		200,500		INDIV. CONS.	LCB	III/96	S
1.1.4.3 Technology development - soil	290,864		290,864		CONS. FIRMS	ICB	I/97	S
1.1.4.4 Technology development - economics	627,012		627,012		CONS. FIRMS	ICB	I/97	S
1.1.4.5 Technology development - animal health	233,923		233,923		CONS. FIRMS	ICB	I/97	S
1.1.4.6 Technology development - beekeeping	246,381		246,381		CONS. FIRMS	ICB	I/97	S
1.1.4.7 Technology development - plant health	662,788		662,788		CONS. FIRMS	ICB	I/97	S
1.1.4.8 Miscellaneous services contracts	2,588,866		2,588,866		CONS. FIRMS	ICB	III/96	S
Subtotal	20,965,715		18,768,930	2,196,785				

PROCUREMENT FINANCING, PROCEDURES, AND TIMETABLE

PROVINCIAL AGRICULTURAL SERVICES PROGRAM - PROCUREMENT FINANCING, PROCEDURES, AND TIMETABLE								
Description of procurement	Value of Procurement	Source of funding (US\$)			Type of Procurement	Procurement Procedure	Quarter bid. proc.	
		IDB	IBRD	Local				
2.1 Montecaseros								
2.1.1 Irrigation program								
2.1.1 Civil Works	6,000,000		5,084,746	915,254				
2.1.1.1 Minor works (misc. contracts)	6,000,000		5,084,746	915,254	WORKS EXEC.	LCB	III/96	
2.1.2 Equipment and vehicles	255,365		216,411	38,954				
2.1.2.1 Computer equipment	89,000		75,424	13,576	GOODS	LCB	III/96	
2.1.2.2 Environmental component equipment	27,365		23,191	4,174	GOODS	Price comparison	n/a	
2.1.2.3 Procurement of vehicles	139,000		117,797	21,203	GOODS	LCB	III/96	
2.1.3 Training	47,500		47,500	0	INDIV. CONS.	Nat. Pub. Comp.		
2.1.4 Technical assistance	1,884,525		1,884,525	0				
2.1.4.1 Distribution water resources	649,585		649,585		CONS. FIRMS	ICB	IV/96	
2.1.4.2 Monitoring and evaluation	396,000		396,000		CONS. FIRMS	ICB	IV/96	
2.1.4.3 Environment	323,300		323,300		CONS. FIRMS	ICB	IV/96	
2.1.4.4 Miscellaneous services contracts	515,640		515,640		CONS. FIRMS	ICB	n/a	
Subtotal	8,187,390		7,233,182	954,208				
2.2 Montecaseros								
2.2.1 Civil works	3,296,947		2,794,023	502,924				
2.2.1.1 Canal lining	1377290		1,167,195	210,095	WORKS EXEC.	LCB	III/96	
2.2.1.2 Drainage System	1648097		1,396,692	251,405	WORKS EXEC.	LCB	III/96	
2.2.1.3 Water gates, meters and takes	175560		148,780	26,780	WORKS EXEC.	LCB	III/96	
2.2.1.4 Works supervision	96000		81,356	14,644	WORKS EXEC.	LCB	III/96	
2.2.2 Equipment and vehicles	57,300		48,559	8,741	GOODS	Limited bidding	n/a	
2.2.3 Training	35,425		35,425	0	INDIV. CONS.	Nat. Pub. Comp.	n/a	
2.2.4 Technical assistance	228,075		228,075	0	CONS. FIRMS	ICB	n/a	
Subtotal	3,617,747		3,106,082	511,665				

PROCUREMENT FINANCING, PROCEDURES, AND TIMETABLE

PROVINCIAL AGRICULTURAL SERVICES PROGRAM - PROCUREMENT FINANCING, PROCEDURES, AND TIMETABLE								
Description of procurement	Value of Procurement	Source of funding (US\$)			Type of Procurement	Procurement Procedure	Quarter bid. proc.	
		IDB	IBRD	Local				
Constitution								
2.3.1 Civil works	5,633,080	4,773,797		859,283				
2.3.1.1 Canal lining	399,390	338,466		60,924	WORKS EXEC.	LCB	III/95	S
2.3.1.2 Canal lining	2,536,290	2,149,398		386,892	WORKS EXEC.	LCB	III/96	S
2.3.1.3 Drainage system	1,262,279	1,069,728		192,551	WORKS EXEC.	LCB	III/96	S
2.3.1.4 Water gates, meters, and takes	458,000	388,136		69,864	WORKS EXEC.	LCB	III/96	S
2.3.1.5 Canal improvement	813,021	689,001		124,020	WORKS EXEC.	LCB	III/96	S
2.3.1.6 Works supervision	164,100	139,068		25,032	WORKS EXEC.	LCB	III/96	S
2.3.2 Equipment and vehicles	57,300	48,559		8,741	GOODS	Limited bidding	n/a	
2.3.3 Training	35,425	35,425		0	INDIV. CONS.	Nat. Pub. Compet.	n/a	
2.3.4 Technical assistance	228,075	228,075		0	CONS. FIRMS	ICB	n/a	
Subtotal	5,953,880	5,085,856		868,024				
San Juan								
Colonia Centenario								
3.1.1 Civil works	4,343,457	3,680,895		662,561				
3.1.1.1 Rehabilitation Main Canal	3,008,960	2,549,966		458,994	WORKS EXEC.	LCB	III/96	S
3.1.1.2 Rehabilitation Gramondo canal	310,020	262,729		47,291	WORKS EXEC.	LCB	III/96	S
3.1.1.3 Rehabilitation drainage system	820,141	695,035		125,106	WORKS EXEC.	LCB	III/96	S
3.1.1.4 Other constructions	204,336	173,166		31,170	WORKS EXEC.	LCB	III/97	S
3.1.2 Equipment and vehicles	236,424	200,360		36,065				
3.1.2.1 Procurement office furniture	29,221	24,763		4,457	GOODS	Price comparison	n/a	
3.1.2.2 Procurement Computer equipment	28,170	23,873		4,297	GOODS	Price comparison	n/a	
3.1.2.3 Procurement communications equipment	26,490	22,449		4,041	GOODS	Price comparison	n/a	
3.1.2.4 Procurement office equipment	12,994	11,012		1,982	GOODS	Price comparison	n/a	
3.1.2.5 Procurement laboratory equipment	69,750	59,110		10,640	GOODS	Limited bidding	n/a	
3.1.2.6 Procurement vehicles	69,800	59,153		10,647	GOODS	Limited bidding	n/a	
3.1.3 Training	141,125	141,125		0	INDIV. CONS.	Nat. Pub. Comp.	n/a	
3.1.4 Technical assistance	1,094,463	1,094,463		0				
3.1.4.1 Miscellaneous services contracts	1,038,463	1,038,463			CONS. FIRMS	ICB	n/a	
3.1.4.2 Water table study	56,000	56,000			INDIV. CONS.	Nat. Pub. Comp.	n/a	
Subtotal	5,815,468	5,116,842		698,626				

PROCUREMENT FINANCING, PROCEDURES, AND TIMETABLE

PROVINCIAL AGRICULTURAL SERVICES PROGRAM - PROCUREMENT FINANCING, PROCEDURES, AND TIMETABLE								
Description of procurement	Value of Procurement	Source of funding (US\$)			Type of Procurement	Procurement Procedure	Quarter bid. proc.	T
		IDB	IBRD	Local				
o Negro								
l. Alto Valle								
4.1.1 Civil works	22,717,048	19,251,735		3,465,312				
4.1.1.1 Rehabilitation secondary irrigation system III	12,139,012	10,287,298		1,851,714	WORKS EXEC.	ICB	IV/96	SP
4.1.1.2 Rehabilitation drainage systems VI & VII	1,862,312	1,578,231		284,081	WORKS EXEC.	LCB	III/96	S
4.1.1.3 Rehabilitation Alto Valle drainage system	4,396,445	3,725,801		670,644	WORKS EXEC.	LCB	I/97	S
4.1.1.4 Rehabilitation Cervantes flood control system	1,180,703	1,000,596		180,107	WORKS EXEC.	LCB	III/96	S
4.1.1.5 Waterproofing main canal (km 99 to 101)	737,828	625,278		112,550	WORKS EXEC.	LCB	III/96	S
4.1.1.6 Construction - water table research	561,728	476,041		85,687	WORKS EXEC.	LCB	III/96	S
4.1.1.7 Works - technology development and transfer	1,110,960	941,492		169,468	WORKS EXEC.	LCB	I/97	S
4.1.1.8 Construction - training center	638,280	540,915		97,365	WORKS EXEC.	LCB	I/97	S
4.1.1.9 Works - communications component and antenna installation	89,780	76,084		13,695	WORKS EXEC.	Limited bidding	n/a	
4.1.2 Equipment and vehicles	3,804,715	3,224,335		580,380				
4.1.2.1 Machinery	1,280,000	1,084,746		195,254	GOODS	ICB	IV/96	SP
4.1.2.2 Vehicles	658,200	557,797		100,403	GOODS	ICB	IV/96	SP
4.1.2.3 Laboratory and field equipment	1,027,550	870,805		156,745	GOODS	ICB	IV/96	SP
4.1.2.4 Office furniture	285,054	241,571		43,483	GOODS	LCB	III/96	S
4.1.2.5 Computer equipment	238,230	201,890		36,340	GOODS	LCB	III/96	S
4.1.2.6 Communications equipment	233,106	197,547		35,558	GOODS	LCB	III/96	S
4.1.2.7 Other office equipment	82,576	69,980		12,596	GOODS	LCB	III/96	S
4.1.3 Training	1,270,125	1,270,125		0	CONS. FIRMS	ICB	I/97	SP
4.1.4 Technical assistance	8,506,965	8,506,965		0				
4.1.4.1 Institutional strengthening DPA	87,200	87,200			CONS. FIRMS	ICB	n/a	
4.1.4.2 Institutional strengthening Ministry of Economic Affairs	368,000	368,000			CONS. FIRMS	ICB	n/a	
4.1.4.3 Programming Unit	848,000	848,000			CONS. FIRMS	ICB	n/a	
4.1.4.5 Communications	367,000	367,000			CONS. FIRMS	ICB	n/a	
4.1.4.6 Technology transfer	4,788,895	4,788,895			CONS. FIRMS	ICB	n/a	
4.1.4.7 Technology development	2,047,870	2,047,870			CONS. FIRMS	ICB	n/a	
Subtotal	36,298,863	32,253,160		4,045,693				

PROCUREMENT FINANCING, PROCEDURES, AND TIMETABLE

PROVINCIAL AGRICULTURAL SERVICES PROGRAM - PROCUREMENT FINANCING, PROCEDURES, AND TIMETABLE								
Description of procurement	Value of Procurement	Source of funding (US\$)			Type of Procurement	Procurement Procedure	Quarter bid. proc.	
		IDB	IBRD	Local				
anta Fe								
1 Pozo Borrado								
5.1.1 Civil works	4,155,034		3,521,215	633,819				
5.1.1.1 Contract A	1,699,685		1,440,411	259,274		LCB	III/96	
5.1.1.1.1 Construction La Estela Canal	293,309		248,567	44,742	WORKS EXEC.			
5.1.1.1.2 Construction canal 291	325,755		276,063	49,691	WORKS EXEC.			
5.1.1.1.3 Construction Ramello Interlagos Canal	1,080,621		915,781	164,840	WORKS EXEC.			
5.1.1.2 Contract B	1,635,712		1,386,196	249,515		LCB	IV/96	
5.1.1.2.1 Construction canal 290	1,477,948		1,252,498	225,450	WORKS EXEC.			
5.1.1.2.2 Construcción Los Molles Canal	157,764		133,698	24,066	WORKS EXEC.			
5.1.1.3 Contract C	819,637		694,608	125,029		LCB	I/97	
5.1.1.3.2 Construction canal R 77	91,544		77,580	13,964	WORKS EXEC.			
5.1.1.3.3 Construction canal R 95	119,853		101,570	18,283	WORKS EXEC.			
5.1.1.3.4 Construction south interdistric canal	608,240		515,458	92,782	WORKS EXEC.			
5.1.2 Equipment and vehicles	82,283		69,731	12,552		LCB	III/96	
5.1.2.1 Office furniture	12,323		10,443	1,880	GOODS			
5.1.2.2 Computer equipment	21,800		18,475	3,325	GOODS			
5.1.2.3 Office equipment	3,660		3,102	558	GOODS			
5.1.2.4 Communications equipment	7,000		5,932	1,068	GOODS			
5.1.2.5 Hydrometeorological equipment	7,500		6,356	1,144	GOODS			
5.1.2.6 Vehicle (pick up truck)	30,000		25,424	4,576	GOODS			
5.1.3 Training	0		0	0				
5.1.4 Technical assistance	825,639		825,639	0				
5.1.4.1 Preparation executive project (3 contracts)	133,120		133,120		CONS. FIRMS	Nat. Pub. Comp.	n/a	
5.1.4.2 Works inspection (3 contracts)	221,868		221,868		CONS. FIRMS	Int. Pub. Comp.	n/a	
5.1.4.3 Topography	13,940		13,940		INDIV. CONS.	Private Comp.	n/a	
5.1.4.4 Measurements	45,011		45,011		INDIV. CONS.	Nat. Pub. Comp.	n/a	
5.1.4.5 Meters	39,600		39,600		INDIV. CONS.	Nat. Pub. Comp.	n/a	
5.1.4.6 Environmental impact assessment	150,000		150,000		CONS. FIRMS	LCB	III/96	
5.1.4.7 Miscellaneous services contracts	222,100		222,100		INDIV. CONS.	Int. Pub. Comp.	n/a	
Subtotal	5,062,958		4,416,585	646,370				
Total provincial projects	85,902,009	42,455,859	33,524,779	9,921,371				

PROCUREMENT FINANCING, PROCEDURES, AND TIMETABLE

PROVINCIAL AGRICULTURAL SERVICES PROGRAM - PROCUREMENT FINANCING, PROCEDURES, AND TIMETABLE

Description of procurement	Value of Procurement	Source of funding (US\$)			Type of Procurement	Procurement Procedure	Quarter bid. proc.	T
		IDB	IBRD	Local				
Regionals								
Southern Patagonia - animal health								
6.1.1 Civil works	315,767		267,599	48,168		LCB	III/96	S
6.1.1.1 Engineering and administration	23,447		19,870	3,577	WORKS EXEC.			
6.1.1.2 Construction and rehabilitation	292,320		247,729	44,591	WORKS EXEC.			
6.1.2 Equipment and vehicles	529,890		449,059	80,831				
6.1.2.1 Office furniture	65,290		55,331	9,959	GOODS	LCB	III/96	S
6.1.2.2 Computer equipment	47,700		40,424	7,276	GOODS	Limited bidding	n/a	
6.1.2.3 Communications equipment	132,550		112,331	20,219	GOODS	LCB	III/96	S
6.1.2.4 Laboratory equipment	70,400		59,661	10,739	GOODS	LCB	III/96	S
6.1.2.5 Audiovisual equipment	7,170		6,076	1,094	GOODS	Direct contracting	n/a	
6.1.2.6 Vehicles	189,000		160,169	28,831	GOODS	LCB	III/96	S
6.1.2.7 Other equipment	17,780		15,068	2,712	GOODS	Price comparison	n/a	
6.1.3 Training	147,200		147,200					
6.1.3.1 Sanitary education	147,200		147,200		INDIV. CONS.	Nat. Pub. Comp.	n/a	
6.1.4 Technical assistance	1,385,000		1,385,000					
6.1.4.1 Miscellaneous services contracts	1,385,000		1,385,000		CONS. FIRMS	ICB	n/a	
Subtotal	2,377,857		2,248,858	128,999				
Mesopotamia - animal health								
6.2.1 Civil works	577,500		489,407	88,093		LCB	III/96	S
6.2.1.1 Works design	52,500		44,492	8,008	WORKS EXEC.			
6.2.1.2 Works construction	525,000		444,915	80,085	WORKS EXEC.			
6.2.2 Equipment and vehicles	3,073,774		2,604,893	468,881				
6.2.2.1 Vehicles	1,971,450		1,670,720	300,730	GOODS	ICB	IV/96	SP
6.2.2.2 Furniture	19,870		16,839	3,031	GOODS	Price comparison	n/a	
6.2.2.3 Computer equipment	89,490		75,839	13,651	GOODS	LCB	IV/96	SP
6.2.2.4 Telephony equipment	15,600		13,220	2,380	GOODS	Price comparison	n/a	
6.2.2.5 Photocopiers	130,000		110,169	19,831	GOODS	LCB	IV/96	SP
6.2.2.6 Other equipment	847,364		718,105	129,259	GOODS	ICB	IV/96	SP
6.2.3 Training	200,200		200,200		CONS. FIRMS	Int. Pub. Comp.		
6.2.4 Technical assistance	551,200		551,200	0				
6.2.4.1 Miscellaneous services contracts	479,200		479,200		CONS. FIRMS	ICB	n/a	
6.2.4.2 Consulting services - epidemiology	72,000		72,000		INDIV. CONS.	Nat. Pub. Comp.	n/a	
Subtotal	4,402,674		3,845,700	556,974				

PROCUREMENT FINANCING, PROCEDURES, AND TIMETABLE

PROVINCIAL AGRICULTURAL SERVICES PROGRAM - PROCUREMENT FINANCING, PROCEDURES, AND TIMETABLE								
Description of procurement	Value of Procurement	Source of funding (US\$)			Type of Procurement	Procurement Procedure	Quarter bid. proc.	T
		IDB	IBRD	Local				
SEFINOA								
6.3.1 Civil works	1,909,500		1,618,220	291,280		LCB	IV/96	S
6.3.1.1 Construction barrier posts - Catamarca	400,000		338,983	61,017	WORKS EXEC.			
6.3.1.2 Construction barrier posts - Tucumán	800,000		677,966	122,034	WORKS EXEC.			
6.3.1.3 Construction barrier posts - Salta	600,000		508,475	91,525	WORKS EXEC.			
6.3.1.4 CEIMV works	109,500		92,797	16,703	WORKS EXEC.			
6.3.2 Equipment and vehicles	3,855,077		3,267,014	588,063				
6.3.2.1 Fields receivers	27,000		22,881	4,119	GOODS	Price comparison	n/a	
6.3.2.2 Laboratory equipment Jujuy	154,732		131,129	23,603	GOODS	LCB	III/96	S
6.3.2.3 CEIMV greenhouse equipment	9,700		8,220	1,480	GOODS	Price comparison	n/a	
6.3.2.4 CEIMV laboratory equipment	130,705		110,767	19,938	GOODS	LCB	III/96	S
6.3.2.5 Diagnostic lab equipment	545,280		462,102	83,178	GOODS	ICB	IV/96	SF
6.3.2.6 Irradiated fly	2,544,780		2,156,593	388,187	GOODS	ICB	IV/96	SF
6.3.2.7 Other equipment	101,000		85,593	15,407	GOODS	LCB	III/96	S
6.3.2.8 Furniture	66,280		56,189	10,111	GOODS	LCB	III/96	S
6.3.2.9 Vehicles	275,800		233,559	42,041	GOODS	LCB	III/96	S
6.3.3 Training	584,554		584,554		CONS. FIRMS	ICB	I/97	SF
6.3.4 Technical assistance	1,393,180		1,393,180					
6.3.4.1 Environmental expert	56,000		56,000		INDIV. CONS.	Short list	n/a	
6.3.4.2 Expert on toxic waste analysis	20,000		20,000		INDIV. CONS.	Private Comp.	n/a	
6.3.4.3 Miscellaneous works - consultants	150,000		150,000		INDIV. CONS.	LCB	III/96	S
6.3.4.4 Miscellaneous services - consultants	1,017,180		1,017,180		CONS. FIRMS	ICB	n/a	
6.3.4.5 Dissemination campaign	150,000		150,000		CONS. FIRMS	LCB	III/96	S
Subtotal	7,722,311		6,842,969	879,342				
Total regional projects	14,502,842		12,937,527	1,565,315				

PROCUREMENT FINANCING, PROCEDURES, AND TIMETABLE

PROVINCIAL AGRICULTURAL SERVICES PROGRAM - PROCUREMENT FINANCING, PROCEDURES, AND TIMETABLE								
Description of procurement	Value of Procurement	Source of funding (US\$)			Type of Procurement	Procurement Procedure	Quarter bid. proc.	
		IDB	IBRD	Local				
7.1.1 Civil works	297,500	252,119		45,381				
7.1.1.1 Rehabilitation provincial offices (numerous works)	297,500	252,119		45,381	WORKS EXEC.	Limited bidding	n/a	
7.1.2 Equipment and vehicles	6,859,170	5,812,856		1,046,314				
7.1.2.1 Vehicles	555,000	470,339		84,661	GOODS	ICB	I/97	SI
7.1.2.2 Computer equipment prov. units (various contracts)	1,528,000	1,294,915		233,085	GOODS	ICB	I/97	SI
7.1.2.3 Computer equipment central unit	112,000	94,915		17,085	GOODS	LCB	IV/96	SI
7.1.2.4 Computer equipment - agrometeorology	175,000	148,305		26,695	GOODS	LCB	IV/96	SI
7.1.2.5 Computer equipment - survey system	52,700	44,661		8,039	GOODS	LCB	IV/96	SI
7.1.2.6 Computer equipment - MIS component	1,504,500	1,275,000		229,500	GOODS	ICB	IV/96	SI
7.1.2.7 Communications equipment	63,200	53,559		9,641	GOODS	LCB	III/96	SI
7.1.2.8 Agrometeorological equipment	2,147,000	1,819,492		327,508	GOODS	ICB	IV/97	SI
7.1.2.9 Other equipment for prov. units (various contracts)	490,000	415,254		74,746	GOODS	ICB	I/97	SI
7.1.2.10 Furniture	231,770	196,415		35,355	GOODS	LCB	III/96	SI
7.1.3 Training	848,200	848,200						
7.1.3.1 Training - prov. unit staff	517,500	517,500			CONS. FIRMS	Int. Pub. Comp.	n/a	
7.1.3.2 Training - central unit staff	64,200	64,200			CONS. FIRMS	Nat. Pub. Comp.	n/a	
7.1.3.3 Training - supervisors and surveyors	146,500	146,500			CONS. FIRMS	Nat. Pub. Comp.	n/a	
7.1.3.4 Training - MIS component	120,000	120,000			CONS. FIRMS	Nat. Pub. Comp.	n/a	
7.1.4 Technical assistance	3,961,690	3,961,690						
7.1.4.1 RFI component - provincial units	2,081,600	2,081,600			CONS. FIRMS	ICB	n/a	
7.1.4.2 RFI component - central unit	1,009,790	1,009,790			CONS. FIRMS	ICB	III/96	SI
7.1.4.3 Survey system component	798,300	798,300			CONS. FIRMS	ICB	IV/96	SI
7.1.4.4 MIS component	72,000	72,000			INDIV. CONS.	ICB	IV/97	SI
Subtotal	11,966,560	10,874,865		1,091,695				
2 Institutional strengthening								
7.2.1 Civil works	0							
7.2.2 Equipment and vehicles (numerous contracts)	332,680	281,932		50,748	GOODS	LCB	III/96	SI
7.2.3 Training (numerous contracts)	832,806	832,806			CONS. FIRMS	LCB	III/96	SI
7.2.4 Technical assistance	3,448,252	3,448,252			INDIV. CONS.	LCB	III/96	SI
Subtotal	4,613,738	4,562,990		50,748				
Total national projects	16,580,298	15,437,855		1,142,443				

PROCUREMENT FINANCING, PROCEDURES, AND TIMETABLE

PROVINCIAL AGRICULTURAL SERVICES PROGRAM - PROCUREMENT FINANCING, PROCEDURES, AND TIMETABLE							
Description of procurement	Value of Procurement	Source of funding (US\$)			Type of Procurement	Procurement Procedure	Quarter bid. proc.
		IDB	IBRD	Local			
SUMMARY							
Civil works	63,118,610	27,958,546	25,531,801	9,628,262			
Equipment and vehicles	19,672,346	9,568,042	7,103,438	3,000,866			
Training	5,616,795	3,127,681	2,489,114	0			
Technical assistance	28,577,398	17,239,445	11,337,953	0			
Subtotal summary	116,985,149	57,893,713	46,462,306	12,629,129			
GRAND TOTAL	116,985,149	57,893,713	46,462,306	12,629,129			

CEILINGS AND RESPECTIVE PROCEDURES
TABLE OF CEILINGS FOR THE SELECTION OF PROCEDURES
FOR THE AWARDING OF CONSTRUCTION CONTRACTS

AMOUNTS	PROCEDURE	NOTICES
US\$5,000,000 and up	International competitive bidding	<u>Development Business</u> , widely circulated national newspapers, Official Gazette
From US\$100,000 to US\$4,999,999	Local competitive bidding*	Widely circulated national newspapers, Official Gazette
Up to US\$99,999	Limited bidding*	Invitation to bid to at least five bidders included in the Bidders' Register

TABLE OF CEILINGS FOR THE SELECTION OF PROCEDURES
FOR THE PROCUREMENT OF GOODS

AMOUNTS	PROCEDURE	NOTICES
US\$350,000 and up	International competitive bidding	<u>Development Business</u> , widely circulated national newspapers, Official Gazette
From US\$80,000 to US\$349,999	Local competitive bidding*	Widely circulated national newspapers, Official Gazette
From US\$30,001 to US\$59,999	Limited bidding*	By invitation to five bidders
Up to US\$30,000	Shopping*	By invitation to at least three bidders

TABLE OF CEILINGS FOR THE SELECTION OF PROCEDURES FOR
THE HIRING OF CONSULTING SERVICES

AMOUNTS	PROCEDURE	NOTICES
US\$200,000 and up	International call for bids	<u>Development Business</u> , widely circulated national newspapers, Official Gazette
From US\$30,001 to US\$199,999	Local call for bids*	Widely circulated national newspapers, Official Gazette
Up to US\$30,000	Limited bidding*	By invitation to at least three bidders

* When foreign exchange from the proceeds of the Bank's loan is used, suppliers of goods, works contractors, or consulting service providers from the member countries of the Bank shall be allowed to participate.

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PROPOSED RESOLUTION

ARGENTINA. LOAN /OC-AR TO THE REPUBLIC OF ARGENTINA
PROVINCIAL AGRICULTURE SERVICES 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 Republic of Argentina, as Borrower, for the purpose of granting it a financing to cooperate in the execution of a Provincial agriculture services program. Such financing shall be for the amount of up to US\$125,000,000 or its equivalent in other currencies, except that of Argentina, which are part of the Ordinary Capital resources of the Bank and will be subject to the "Special Contractual Conditions" and the "Terms and Financial Conditions" of the Executive Summary of the Loan Proposal.

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