

AGRICULTURAL TECHNOLOGY PROGRAM

(VE-0125)

EXECUTIVE SUMMARY

Borrower and guarantor:	Bolivarian Republic of Venezuela	
Executing agency:	National Institute for Agricultural Research (INIA)	
Amount and source:	IDB: (OC)	US\$22.5 million
	Local:	US\$22.5 million
	Total:	US\$45.0 million
Terms and conditions:	Amortization period:	20 years
	Grace period:	4 years
	Disbursement period:	4 years
	Interest rate:	variable
	Inspection and supervision:	1%
	Credit fee:	0.75%
	Currency:	U.S. dollars under the Single Currency Facility
Objectives:	<p>The general objective of the program is to help increase productivity in the agricultural sector by transforming the National Institute for Agricultural Research (INIA) into a dynamic agency that will stimulate the agricultural technology system to generate technologies and provide efficient services.</p>	
Description:	<p>The program will enhance sector efficiency by consolidating the institutional reform of INIA, strengthening investments with PRODETEC funding, generating the financial and technical conditions needed to ensure INIA program sustainability, and strengthening the capacity of INIA to respond to demand and needs of the environment and among its agents in the agricultural sector. The program will also strengthen technology development capacity by modernizing services through adoption of modern technologies, laboratory accreditation, and consolidation and development of information systems. The program consists of three subprograms and seven components:</p>	

Subprogram 1. Institutional modernization (direct costs: US\$9.6 million). Component 1.1: Consolidation of the technical information and institutional management system; and Component 1.2: Job retraining. The purpose of this subprogram is to implement and consolidate new institutional systems and increase institutional efficiency.

Subprogram 2. Financial sustainability (direct costs: US\$5.2 million). Component 2.1: Strengthening capacity for technological linkage; and Component 2.2: Support for Establishment of a Capital Fund. This subprogram is designed to generate institutional mechanisms for building linkages with the environment to strengthen the sustainability of INIA.

Subprogram 3. Modernizing agricultural technology (direct costs: US\$17.5 million). Component 3.1: Technological modernization; and Component 3.2: Support for research consortia and third-party technical assistance. The purpose of this subprogram is develop and disseminate new technical capacity and to promote research consortia.

In addition, the program has an administration component for US\$1.5 million equivalent, which includes the costs of the Program Coordination Unit and training for INIA senior management.

**The Bank's
country and
sector strategy:**

The proposed program will contribute directly to three of the objectives in the Bank's strategy for the country: (i) it will support for the management and sustainability of INIA and of agricultural technology, thereby contributing to modernization of the State; (ii) it will help increase productivity in non-oil sectors, enhancing international trade, diversifying production and increasing exports; and (iii) it will enhance regional development and decentralization.

**Environmental
and social
review:**

This document was submitted to CESI for information, as recorded in the minutes of the 13 July 2001 meeting. The environmental impact of the operation is clearly positive and includes: (i) a training program for 489 officials, by means of 20 courses dealing with environmental issues relevant to their functions and the institution's objectives; (ii) development of institutional capacity to certify organic production, which will help disseminate clean technologies and practices, with a consequent reduction in the use of pesticides; (iii) accreditation of selected laboratories in accordance with Venezuelan Standard COVENIN 2534:2000 (ISO/IEC Guide 25) and five laboratories in accordance with COVENIN ISO 14000, with the consequent improvements in environmental management and in worker health and hygiene in those laboratories, and in the quality and reliability of the services they provide; (iv) worker retraining, as a means of mitigating the social impact of institutional reengineering of

INIA, including a training program for microentrepreneurs, with special attention to working women, in order to ensure gender equity; and (v) inclusion of an environmental specialist on the INIA staff to conduct the program's environmental activities and to promote institutionalization of environmental issues in INIA.

The following environmental risks were identified in the program: lack of monitoring of emissions from diagnostic laboratories and biotechnology units, existing environmental liabilities on the current property of the Veterinary Research Institute (IIV), and the lack of a frame of reference for monitoring the potential impact of genetically modified organisms.

The environmental risks will be mitigated by the following measures: (i) environmental audits will be conducted in 20 groups of diagnostic laboratories and biotechnology units, and advisory services to help them comply with environmental regulations, and inclusion of INIA in the Registry of Environmentally Harmful Activities (RASDA) of the Ministry of the Environment and Natural Resources (MARN); (ii) a frame of reference will be established, defining institutional powers and responsibilities for the control, development, adaptation, introduction and marketing of genetically modified organisms for agricultural purposes; (iii) a plan will be developed and implemented to shut down activities and dismantle operations of the IIV, as required by Venezuelan environmental legislation. Execution of the IIV closure plan calls for remediation of environmental liabilities that will include sealing 20 septic tanks and any others that may be found; and (iv) an Environmental Impact Assessment—EIA, consistent with the country's environment legislation, for the new IIV.

Benefits:

Increased agricultural productivity. The institutional changes and technological modernization supported by the program will help increase productivity by strengthening the ability of INIA to provide reliable services and technological products efficiently in response to needs in the environment. The program will have national coverage and its beneficiaries will be producers engaged in crop-farming, livestock-farming, forestry and fishing. The productivity increases, which are a significant part of the expected benefits, will result from the renewal of INIA, so that it can respond more effectively to the needs of the environment. These benefits will be derived from the increased volumes of output achieved through greater yields and lower losses from pests and diseases, and from better product quality. The population will benefit from greater availability of food, of better quality. The agroindustrial sector will benefit from inputs of better quality. The country will benefit from foreign exchange generated by greater exports and import savings.

Building linkages to the environment. The program will diversify, expand and develop links between INIA and researchers and clients. The new project selection methodology allows other stakeholders in the technological system to be closely involved. Establishment of the Consortium Fund will ensure resources to be allocated to projects on a competitive basis. The program will also establish linkages between INIA and the technology system and its clients in three ways: (i) it will strengthen the capacities of the Business Department so that INIA can work more closely with clients and potential customers for its research services, (ii) it will develop business units and research consortia so that INIA can increase and diversify the technology services it offers, using a business development approach, while providing technical assistance to third parties through training; and (iii) it will market technologies to create value added based on its previous experience and at the same time responding to the needs of its current and potential clientele.

Sustainability of INIA. The long-term sustainability of INIA will depend on its social and economic utility. Strengthening linkages to the environment will generate social and political support, which in turn will mobilize budgetary support, partnerships and service contracts that will help it become self-financing. The program will strengthen INIA so that it can produce a significant impact on the technology system, developing its linkage with similar local and international organizations and improving its ability to identify demand for technology, respond to it and meet expectations expeditiously.

Risks:

Failure to complete institutional reengineering. The program calls for a series of institutional changes that will imply cultural and operational changes that might encounter resistance. This risk should be reduced by the fact that the institution has been preparing for change since 1998. Furthermore, the commitments made and the nature of the new legislation governing INIA make such resistance unlikely. At the same time, INIA management is considered to have the capacity as well as the commitment and desire to carry out the reforms.

Failure to achieve financial sustainability. Uncertainty in the oil market affects the amount of financing available for the public sector and, in particular, for the Ministry of Science and Technology. The design of the Financial Sustainability Subprogram consists of a series of mechanisms to increase the number of sources for financing research in addition to the regular budget and thus to establish INIA financial sustainability. These measures include strengthening the Business Department to encourage undertakings with the private

sector, reinforce the capacity to produce and market technology services (business units), and make economic use of technologies with business potential (Marketing Fund), establishing a Capital Fund using underperforming assets, and expanding participation by partners in INIA's priority competitive projects.

Failure to establish the Capital Fund. The Capital Fund is to be established through the sale or concession of the fixed assets of INIA to the private sector, partnerships with the private sector, or other arrangements to be devised during program execution. The best option will be selected based on studies to be financed by the program. The decision to implement any of the options will be taken by the INIA board of directors pursuant to national legislation and INIA's legal rights. The MCT authorities and the INIA board have shown their determination to establish the fund. If the option selected is to sell off the assets, it will require nonobjection by the Public Assets Disposal Commission. There is a risk that the commission might not authorize the sale, but it is considered small because there are a number of precedents in INIA and other institutions. If the commission should refuse to authorize the sale of INIA assets, there are other options that do not require authorization by the commission.

**Special
contractual
clauses:**

The first disbursement under the loan is conditional upon submission by the borrower to the Bank's satisfaction of the following:

- a. certified copy of the Agreement for the Transfer of Resources between the MF and INIA (paragraph 4.1);
- b. certified copy of the service contract for the environmental specialist of the executing agency (paragraph 3.9);
- c. eligibility: (i) of the regulations for the Marketing Fund, the Capital Fund and the Consortium Fund (paragraphs 3.6, 3.8 and 3.13); (ii) the operations plan for the first year (paragraph 3.16); and (iii) the operations manual for the program (paragraph 3.17);
- d. presidential decree for the reorganization of INIA or any other suitable alternative legal provisions that would allow reorganization of the executing agency, in accordance with local legislation (paragraph 2.5); and
- e. certified copy of the legal document constituting the Fundación INIA (paragraph 3.20).

Other conditions

Within the first 12 months after the effective date of the loan contract, the borrower, through the executing agency, will submit evidence to the Bank's satisfaction that the new financial system (SIFA) has been implemented (paragraph 4.15).

During the program execution period, the borrower, through the executing agency, will hold meetings with the Bank within the third quarter of each year as part of the budgetary exercise to assess performance under the annual operations plan for the year in question and to agree on any necessary adjustments. These meetings will also serve to assess and agree on the operations plan for the following year (paragraph 3.16).

Within six and 11 years after program completion, the borrower, through the executing agency, will submit a program impact evaluation to the Bank that will review two areas: (i) the degree of modernization achieved by INIA through the program; and (ii) evaluation of the progress achieved in institutional, technical, financial, environmental and consortium development. The evaluation will use baseline data similar to that to be used for the final evaluation financed with program resources.

Poverty-targeting and social sector classification:

This operation does not qualify as a social equity enhancing project, as described in the key objectives for Bank activity set forth in the Report on the Eighth General Increase in the Resources of the Bank (document AB-1704).

Exceptions to Bank policy:

See section on procurement.

Procurement:

As an exception to the procedure for selecting consultants through competitive bidding, it is recommended that the IICA be contracted directly to carry out the tasks of hiring consultants, minor procurement and other activities using program funds, in accordance with the applicable Bank procurement policies and procedures. The proposed direct hiring is consistent with section GS-403 of the Procurement Manual (see paragraph 3.23). In the procurement of machinery, equipment and other goods and services for project execution, and in the awarding of the contract for execution of works, normal Bank procedures will be followed. International competitive bidding will be required for the procurement of goods exceeding US\$350,000, consulting services exceeding US\$200,000, and civil works exceeding US\$3 million. Although there are not expected to be any construction projects in excess of US\$3 million, INIA believes that some contracts below the threshold, such as the IIV project for

US\$2 million, should be subject to international competitive bidding because of their complexity. In other cases, for contracts below the thresholds, when the works or equipment can be supplied locally, the procedures set forth in local legislation will be followed. Details on the number of tenders and the type of bidding expected are attached as Annex III-1.