



# Board of Executive Directors

## Simplified Procedure

On or after 20 June 2012

PR-3875  
5 June 2012  
Original: Spanish  
**Simultaneous Disclosure**

**To:** The Executive Directors  
**From:** The Secretary  
**Subject:** Argentina. Proposal for a loan for the “Rural Development and Family Agriculture Program”

**Basic Information:** Loan type ..... Specific Investment Operation (ESP)  
Borrower ..... Argentine Republic  
Amount ..... up to US\$30,000,000  
Source ..... Ordinary Capital

**Inquiries to:** César Falconi (extension 3848) or Ricardo Quiroga (telephone Country Office in Argentina 5411-4320-1870)

**Remarks:** This operation is included in document GN-2661-4, “2012 Operational Program Report”, approved by the Board of Executive Directors on 25 April 2012. Additionally, its amount does not exceed the ceiling established for Group A countries. Therefore, the operation qualifies for approval by simplified procedure.

**Reference:** GN-1838-1(7/94), DR-398-11(4/11), GN-2661-4(5/12)



DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

**ARGENTINA**

**RURAL DEVELOPMENT AND FAMILY AGRICULTURE PROGRAM**

**(AR-L1068)**

**LOAN PROPOSAL**

This document was prepared by the project team consisting of: César Falconi (INE/RND) and Ricardo Quiroga (RND/CAR), Project Team Co-leaders; Ricardo Vargas del Valle (RND/CAR); María Carmen Fernández, María Claudia Perazza, Gabriel Montes, Lisa Sofia Restrepo (INE/RND); Pedro Martel (RND/CGU); Alessandro Maffioli (SPD/SDV); Teresa Maurea Faria (LEG/SGO); Gustavo Sierra and Gumersindo Velázquez (FMP/CAR), with the assistance of Juan Antonio Ketterer (IFD/CMF).

This document is being released to the public and distributed to the Bank's Board of Executive Directors simultaneously. The Board may or may not approve the document, or may approve it with modifications. If the document is subsequently updated, the updated document will be made publicly available in accordance with the Bank's Access to Information Policy.

## CONTENTS

### PROGRAM SUMMARY

I.	DESCRIPTION AND RESULTS MONITORING .....	1
A.	Background, problems addressed, and rationale .....	1
B.	Program design .....	4
C.	Objectives, components, and cost.....	5
D.	Key results and rationale for selection.....	7
II.	FINANCING STRUCTURE AND RISKS .....	8
A.	Financing instruments .....	8
B.	Economic viability and sustainability.....	9
C.	Fiduciary and other risks.....	9
D.	Environmental and social safeguard risks .....	10
III.	IMPLEMENTATION AND ACTION PLAN .....	11
A.	Program execution and administration .....	11
B.	Monitoring and evaluation plan.....	14

ANNEXES	
Annex I	Development Effectiveness Matrix (DEM) – Summary
Annex II	Results Matrix
Annex III	Fiduciary Agreements and Requirements

ELECTRONIC LINKS	
<b>REQUIRED</b>	
1.	Annual work plan (AWP) <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36756160">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36756160</a>
2.	Monitoring and evaluation plan <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36756210">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36756210</a>
3.	Procurement plan <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36756149">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36756149</a>
4.	Environmental and social management report (ESMR) <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36756298">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36756298</a>
<b>OPTIONAL</b>	
1.	Program technical support documents <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36767244">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36767244</a>
2.	Economic analysis <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36758111">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36758111</a>
3.	Institutional capacity assessment <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36756245">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36756245</a>
4.	Environmental and social management plan (ESMP) <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36762528">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36762528</a>
5.	Draft Operating Regulations <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36756235">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36756235</a>
6.	Itemized budget <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36756167">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36756167</a>
7.	Preliminary PMR <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36769266">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36769266</a>

## **ABBREVIATIONS**

IFAD	International Fund for Agricultural Development
INTA	Instituto Nacional de Tecnología Agropecuaria [National Agricultural Technology Institute]
MAGyP	Ministry of Agriculture, Livestock, and Fisheries
GDP	Gross domestic product
SGR	Sociedad de garantías recíprocas [reciprocal credit guarantee company]
EIRR	Economic internal rate of return
UCAR	Unidad para el Cambio Rural [Unit for Rural Change]
PEU	Provincial executing unit
NPV	Net present value
GPV	Gross production value

## PROGRAM SUMMARY

### ARGENTINA RURAL DEVELOPMENT AND FAMILY AGRICULTURE PROGRAM (AR-L1068)

Financial Terms and Conditions					
<b>Borrower:</b> Argentine Republic			<b>Flexible Financing Facility*</b>		
<b>Executing Agency:</b> The borrower, acting through the Ministry of Agriculture, Livestock, and Fisheries (MAGyP), and, as subexecuting agencies, the provinces of Chaco and Entre Ríos			<b>Amortization period:</b>	25 years	
			<b>Original WAL:</b>	15.25	
			<b>Disbursement period:</b>	5 years	
<b>Source</b>	<b>Amount (US\$)</b>	<b>Grace period:</b>		5 years	
<b>IDB (Ordinary Capital)</b>	US\$30 million	<b>Interest rate:</b>		LIBOR-based	
<b>Other/Cofinancing</b>		<b>Inspection and supervision fee:</b>		**	
<b>Local</b>	US\$11 million	<b>Credit fee:</b>		**	
<b>Total</b>	US\$41 million	<b>Currency of approval:</b>		U.S. dollars	
Program at a Glance					
<b>Program objective:</b> The program will help increase the income of family farmers by improving their productivity.					
<b>Special contractual clauses:</b> <u>Special conditions precedent to the first disbursement:</u> (i) The entry into effect of the program’s Operating Regulations, in accordance with terms previously agreed upon with the Bank (see paragraph 3.4) (ii) evidence of creation within the Unit for Rural Change (UCAR) of the technical team that will coordinate program execution, under terms agreed upon with the Bank (see paragraph 3.2); (iii) amendment of the framework agreement between the UCAR and the National Agricultural Technology Institute (INTA) to include the program within its scope (see paragraph 3.6); and (iv) signature and entry into effect of the execution agreement between the borrower, acting through the executing agency, and at least one of the provinces participating in the program, in accordance with terms previously agreed upon with the Bank (see paragraph 3.1). <u>Special execution conditions:</u> (i) The transfer of program resources to each province will be contingent upon: (a) signature and entry into effect of the respective execution agreement between the borrower, acting through the executing agency, and the province participating in the program, in accordance with terms previously agreed upon with the Bank; (b) presentation of evidence of creation of the corresponding provincial executing unit (PEU); and (c) signature and entry into effect of a specific tripartite framework agreement between the borrower, acting through the executing agency, the INTA, and the corresponding province, under terms previously agreed upon with the Bank (see paragraph 3.3); (ii) within six months after the loan contract enters into effect: the borrower, acting through the executing agency, will present evidence to the Bank of creation of the guarantee facility through the selected reciprocal credit guarantee company (SGR) (see paragraph 3.8).					
<b>Exceptions to Bank policies:</b> None.					
<b>Project consistent with country strategy:</b> Yes [X]                      No [ ]					
<b>Project qualifies as:</b> SEQ [ ]              PTI [X]              Sector [X]              Geographic [ ]              Headcount [ ]					

\* Under the Flexible Financing Facility (document FN-655-1), the borrower has the option of requesting changes to the amortization schedule, as well as conversions of currency and interest rate, subject in all cases to the final repayment date and the original weighted average life (WAL) of the loan. The Bank will take market conditions and operational and risk management considerations into account when reviewing such requests.

\*\* The credit fee and inspection and supervision fee will be established periodically by the Board of Executive Directors as part of its review of the Bank's lending charges, in accordance with the applicable provisions of the Bank's policy on lending rate methodology for Ordinary Capital loans. In no case will the credit fee exceed 0.75% or the inspection and supervision fee exceed, in a given six-month period, the amount that would result from applying 1% to the loan amount divided by the number of six-month periods included in the original disbursement period.

## I. DESCRIPTION AND RESULTS MONITORING

### A. Background, problems addressed, and rationale

- 1.1 The agriculture sector makes a significant contribution to the Argentine economy, generating 10% of the country's gross domestic product (GDP), 22% of its gross production value (GPV), and 55.4% of its exports. Increasingly robust agricultural exports, which rose 129.5% between 2003 and 2010, are indicative of the sector's comparative advantage at the international level. The expansion of Argentina's mean annual production in the past decade—rising 41% between 2002 and 2010—positions the country as Latin America's largest producer/exporter, capable of contributing to meet world food demand.
- 1.2 The structure of the sector is characterized by the coexistence of entrepreneurial agriculture and family agriculture. Development in the sector has been led by entrepreneurial agriculture through a major expansion in the planted area of grains and oilseeds, primarily in the Pampa region. This has created competitive pressure on livestock ranching in the Pampa and on several crops in the non-Pampa regions. Areas that were used for fattening cattle in the Pampa have been devoted to agricultural production, thereby creating a need for pasture improvement. Similarly, grain production has been extended into other regions beyond the Pampa such as Chaco, which has put additional pressure on family agriculture there. The increased productivity and competitiveness of grains and oilseeds has been accompanied by the introduction of farming pools that have made it possible to secure capital for better access to modern production technologies.
- 1.3 In contrast to the rapid development of entrepreneurial agriculture in the Pampa, family farmers face numerous impediments to increased productivity. Family agriculture<sup>1</sup> accounts for 75% of Argentina's agricultural holdings (over 250,000) but occupies only 18% its farmland (30.9 million hectares), with an average area of 142 hectares compared to 1,839 hectares for commercial farms. Family agriculture contributes 27% of the sector's GPV and generates 64% of agricultural jobs nationally, and 70% of family farms are located primarily in non-Pampa regions. In terms of number of holdings, family agriculture has seen a decline of about 100,000 farms over the last three census periods (1998-2008). An increase in domestic consumption and rising international prices are creating opportunities for revitalizing important productive subsectors for family agriculture, such as fruits and vegetables, livestock, dairy products, and cotton. In order to take advantage of these opportunities, however, family agriculture will need to resolve restrictions on access to working capital and investment capital so as to adopt state-of-the-art technologies, organize production more effectively, and improve market linkages.

---

<sup>1</sup> Family agriculture refers to agricultural holdings where the producer works directly on the farm and employs up to two nonfamily paid workers.



- 1.4 Family agriculture is a heterogeneous sector.<sup>2</sup> Of the total number of family farmers, 32% are in the highest-capitalized segment, 23% are semicapitalized, and 45% are among the lowest-capitalized. The highest-capitalized group occupies 11% of the country's agricultural land, generates 23% of agricultural jobs, and accounts for 18% of agricultural GPV. This group, whose income is derived mainly from farm activity, includes cattle farmers in Chaco, fruit, rice, and dairy producers in Entre Ríos, medium-scale sheep farmers in Patagonia, fruit growers in the valleys of northern Patagonia, and small- and medium-scale wine and fruit growers in Cuyo. Although market-integrated, these producers have the same difficulties as other family farmers in obtaining access to financing, technology, and technical assistance. The program will target this population of highest-capitalized family farmers, given their strong potential for contributing to income growth in the regional economies.
- 1.5 Through programs financed by the World Bank and the International Fund for Agricultural Development (IFAD), the government supports the semicapitalized and lowest-capitalized family farmers, with an emphasis on the northern regions of the country. However, there is an absence of government programs to support the highest-capitalized farmers.
- 1.6 **Family agriculture in Entre Ríos and Chaco.** With the Bank's support, the government initiated a review of the subsector that confirmed the importance of family agriculture, especially in Argentina's regional economies, owing to the fact that it accounts for 60% of farms in regions such as the Northeast and the Northwest. Based on the number and size of family farms and their share of agricultural GPV, this [analysis](#) of all of the country's provinces selected Entre Ríos and Chaco for the first phase of a nationwide program. Family farms in Entre Ríos and Chaco respectively encompass 85% and 88% of agricultural holdings, occupy 28% and 40% of agricultural land area, and represent 41% and 45% of provincial agricultural GPV. The highest-capitalized family farmers represent 40% and 27% of family holdings, occupy 72% and 58% of family agricultural land, and generate 66% and 58% of GPV from family agriculture, respectively. These producers operate farms with an average size of 250 hectares and use mainly family labor. About 60% grow cereals and industrial crops, and 40% are devoted to livestock and dairy production, with a net income per producer of US\$15,500 (representing 20% of the net income of entrepreneurial producers). The challenge is to sustainably increase the agricultural productivity of these family farmers, in order to raise their income level and thereby contribute to provincial economic growth. The box below summarizes the principal challenges of family agriculture in Entre Ríos and Chaco.

---

<sup>2</sup> Family agriculture can be categorized into three groups: (i) the highest-capitalized farmers, who own tractors less than 15 years old, or 101 to 500 head of cattle, or more than five hectares of irrigated land and have up to two permanent workers; (ii) semicapitalized farmers, who own tractors more than 15 years old, or 51 to 100 head of cattle, or two to five hectares of irrigated land; (iii) the lowest-capitalized farmers, who own no tractors, less than 50 head of cattle, or less than two hectares of irrigated land.

**Principal challenges of family agriculture in Entre Ríos and Chaco:**

- (i) *Low level of technology adoption*, evidenced by large technological gaps. Chaco has lower cotton yields (1,200 kg/hectare) than those obtained in Santiago del Estero (2,000 kg/hectare), and a gap of 130% in relation to experimental yields. In livestock production, the yield per head is 0.35 basic units per hectare, with a gap of 114% in relation to experimental yields. In Entre Ríos there is a 40% gap in dairy production in relation to experimental yields.
- (ii) *Lack of information and/or asymmetric information*, which limits producers' capacity for technology adoption. This is especially important for technologies that need to be adapted to the specific features of a location or type of farmer. Information asymmetries between suppliers and farmers, which can limit resource availability or reduce the rate of adoption, are magnified for small-scale producers. Around 35% of the highest-capitalized family farmers receive no technical assistance and therefore obtain limited information on new technologies ([Unit for Rural Change \(UCAR\) survey, 2009](#)). A global study of agricultural research and extension found that improvements in information for both producers and suppliers increases technology adoption ([Pardey, P., et al. 2008](#)).
- (iii) *Small scale and little partnering* hamper the transfer and implementation of technologies that require a larger scale than achieved by the highest-capitalized family farmers, whose land parcels average 250 hectares, compared to 1,550 hectares among entrepreneurial farmers. In addition, most of the highest-capitalized producers (70% in these two provinces) do not use any form of partnership for production or the purchase of inputs or durable goods (UCAR survey, 2009). A recent study on dairy production in Uruguay found that producers working collectively achieved a 66% increase in per-capita farm income and obtained a 39% larger yield in terms of liters per hectare ([García F., et al. 2011](#)).
- (iv) *Limited access to financial resources* as a result of imperfections in the credit market. This is caused in particular by an absence of information on the financial position of family farmers, and a lack of risk mitigation instruments, restricting liquidity and limiting the farmers' ability to acquire modern technologies. About 18% of the highest-capitalized family farmers in Entre Ríos and Chaco have access to formal credit, compared to 30% of entrepreneurial farmers. Additionally, more than 60% of family farmers indicated that bank requirements constitute a restriction on credit access ([UCAR survey, 2009](#)). [Dercon and Christiaensen, 2008](#) show that increased access to credit results in better technology adoption.

1.7 **Lessons learned.** The proposed program has also drawn on lessons learned from other similar Bank-financed operations in the region (2086/OC-AR, 1956/OC-AR, 2443/OC-DR, 1800/OC-PR, 2055/BL-NI, 2223/BL-BO, and 2595/OC-UR), as well as operations financed by IFAD and the World Bank, including the following:

- a. Facilitation of access to financial resources. Production support projects require special attention to cofinancing for the technologies to be adopted. In this particular case, several of the technologies on the menu of options are especially costly, so the producer needs to have access to financial resources at a reasonable cost. The proposed program design will provide nonreimbursable support to family agriculture, including the possibility of access to financial institutions, backed by guarantees issued by a reciprocal credit guarantee company (SGR).
- b. Technical assistance. Experience with this type of project shows that it is good practice to have the support of appropriately trained technical specialists in the areas of intervention. The program will strengthen training for specialists in new technologies related to production and integrated production management.

- c. Impact evaluation. Based on previous experience with this type of project, the evaluation system should be properly designed from the outset. The proposed program will include an evaluation plan so that results can be measured with greater precision (see [Monitoring and evaluation plan](#)).

## **B. Program design**

- 1.8 Argentina faces the challenge of maintaining and increasing the productivity and competitiveness of the agricultural sector in a sustainable and equitable manner. To achieve that goal, the country will need to embrace interventions that promote technological change and boost agricultural production, while helping to maintain its productive ecosystems and supporting the development of family agriculture.
- 1.9 The empirical evidence suggests several justifications for the use of public-sector resources to finance services aimed at promoting technological change. In Argentine agriculture, two thirds of production growth is driven by technological change ([Lema, 2010](#)). The principal contribution to the growth of productive output comes from the capacity for innovation and adoption of new technologies. Recently, a number of impact studies have been conducted on the impact of Bank-financed agricultural technology transfer projects in Uruguay, Argentina, the Dominican Republic, and Panama, which show that greater use of technology has a positive effect on producers' yields ([IDB, 2010](#)).<sup>3</sup> Moreover, despite the ability to structure projects with reasonable private and economic rates of return, family farmers have limited access to credit.
- 1.10 In view of these challenges, in the case of family farming the proposed program for Chaco and Entre Ríos will: (i) provide nonreimbursable financial support for eligible producers to partially cover the costs of the technologies promoted by the program, so as to partially or fully overcome technology gaps; (ii) provide training and technical assistance to the producers or group of producers, so that they can use the technologies properly, reducing the information asymmetry between farmers and suppliers; (iii) encourage partnering among small-scale producers, forming groups to lower the cost of adopting new technologies and improve negotiating capacity; (iv) facilitate producers' access to credit needed to cofinance their investments through existing instruments in the Argentine financial market; and (v) help farmers adapt to climate change by promoting environmentally friendly agricultural technologies.
- 1.11 **Consistency with the Ninth General Capital Increase (GCI-9).** The proposed program will contribute to the following priority objectives established in GCI-9: (i) poverty reduction and social equity, through productivity gains for small-scale producers (100% of the expected beneficiaries are family farmers); and (ii) climate change adaptation, through technologies that promote sustainable environmental

---

<sup>3</sup> Specifically, studies on the effectiveness of extension service in the province of Mendoza ([Cerdan et al., 2008](#) and [Maffioli et al., 2011](#)) show the effectiveness of this type of intervention in promoting productivity and production quality in Argentina. [Lopez and Maffioli, 2008](#) show the effectiveness of a business plan focus in boosting productivity for livestock breeders in Uruguay.

practices (see paragraph 2.9). The program is also consistent with the institutional priority to “protect the environment, respond to climate change, promote renewable energy, and ensure food security,” thus contributing to the regional development goal of food security through an increase in the annual growth rate of agricultural GDP and its output “farmers given access to improved agricultural services and investments.”

- 1.12 **Alignment with the Bank’s country strategy.** This program is aligned with the [IDB country strategy with Argentina \(2004-2008\)](#) (document GN-2570), recently updated for the period 2009-2011. One of the strategy areas is creating a more favorable climate for investment and productivity, to enhance growth and competitiveness, an objective to which this program contributes. The program is included in the 2012 country program document (CPD) and is consistent with the Bank’s sector strategy supported through programs focused on improving the quality of agricultural services and rural infrastructure, and farmers’ access to them. The Provincial Agricultural Services Programs (PROSAP II and III), the Agrifood Health and Quality Management Program through the National Agrifood Health and Quality Service (SENASA), and the Program to Strengthen the Agricultural Innovation System through the National Agricultural Technology Institute (INTA), now in execution, total over US\$700 million in financing since 2008 alone. In addition, in 2010 the Bank initiated the Project to Integrate Small Producers into the Wine Production Chain to enhance production quality and facilitate agreement for its commercial integration with winemaking establishments through nonreimbursable contributions.

### **C. Objectives, components, and cost**

- 1.13 **Objective.** The program will help increase the income of family farmers by improving their productivity. To achieve this, the program will support the introduction of new technologies and facilitate access to financing. To make the technical and financial support more effective, the program will provide technical assistance and training in technologies, access to financing, and business and partnership management.
- 1.14 The target population is the segment of highest-capitalized family farm producers in the provinces of Chaco and Entre Ríos. This segment consists of producers with farms of up to 1,000 hectares in total land area, up to 500 hectares in production, and/or 100 to 500 head of cattle, and with up to two permanent paid workers. The following criteria will be used to determine the program target areas within the provinces: (i) high concentration of family farmers in the target population; (ii) sufficient level of public infrastructure for the activities of the target beneficiaries in those areas; and (iii) relative economic importance and the existence of technology gaps in the production chains in which the potential beneficiaries are involved.

- 1.15 **Component: Production support for family agriculture (US\$27.9 million).** The production support component will have two subcomponents: (i) support for business plan preparation skills; and (ii) support for business plan implementation.
- 1.16 The subcomponent to provide support for business plan preparation skills will finance: (i) formulation of business plans in each selected province, including selection of regions, identification of potential beneficiaries, description of the interventions and institutional arrangements for program execution, and specification of the national and provincial resources necessary to achieve the expected outcomes; (ii) development of a training plan to be offered by the INTA that will equip private-sector, provincial, and INTA technical specialists to support producers in the identification of the technological and organizational constraints on increased productivity, formation of partnerships, and preparation and implementation of a business plan for introducing the selected technological packages; (iii) training of beneficiaries in the formation of partnerships to facilitate access to financial resources, and in the adoption of technologies and management practices, among other skills; (iv) support for the preparation of business plans; (v) program promotion and dissemination activities; and (vi) studies that furnish information for expanding this type of intervention to other provinces. The training for technical specialists and producers will focus on such areas as: (i) understanding and managing the technologies on the technology menu; (ii) business management; (iii) financial management; and (iv) agricultural good practices.
- 1.17 The subcomponent to support business plan implementation will provide support to eligible producers in Entre Ríos and Chaco to partially cover the costs of implementing their respective business plans. In their business plans, producers will choose a combination of technologies best suited to their production conditions, taking into account the agroecological features of their land and their socioeconomic profile.
- 1.18 The support will partially cover the investments costs to introduce the technologies. The amount of the support will be up to 35% of the costs of implementing the technologies, and may not exceed US\$12,000 per producer during program execution. These figures may be revised by mutual agreement between the borrower, acting through the executing agency, and the Bank. The business plans will also identify the production- and management-related technical assistance activities associated with introducing new technologies, to be conducted by the technical specialists trained under the program.
- 1.19 Based on a survey of available technologies, a menu has been chosen of eligible technologies that will contribute to the program objectives.<sup>4</sup> The technologies have been chosen on the basis of the following economic and technical/environmental criteria: (i) positive impact on the net earnings of the beneficiaries; (ii) applicability

---

<sup>4</sup> The selected technologies include: planting systems, integrated crop management system, irrigation systems, harvesting systems, pasture improvement, food supplement improvement, and milking management improvement.

to the agroecological conditions where their use is being promoted; (iii) promotion of sustainable farming practices with positive or neutral impacts; and (iv) feasibility of objective verification of their adoption by the beneficiary producers.

- 1.20 The business plans will: (i) give priority to partnership-based or group interventions; (ii) respond to producer demand, thus effectively creating an opportunity to improve productivity; (iii) be viable proposals from the technical, environmental, and socioeconomic standpoints; (iv) base implementation on verifiable targets that are measurable over time; and (v) maintain consistency with the strategy outlined in the work plan of each province.
- 1.21 In order to facilitate access to financial resources for cofinancing the business plans, a local contribution will be used to set up a guarantee fund at SGR Garantizar (see paragraph 3.7). This local contribution to the guarantee fund will be considered an eligible expense for the program. The costs of the technical assistance provided by the qualified technical specialists will also be financed, as will the cost of training the qualified technical specialists and the beneficiary producers in new technologies.

#### **D. Key results and rationale for selection**

- 1.22 The program's main benefits relate to increases in farm income and the productivity of the beneficiary family farmers. The program will also contribute to increase the adoption of farming technologies among beneficiary producers. It is expected to benefit more than 2,060 agricultural producers (14% women), constituting 8,000 rural inhabitants. The program has a [Results Matrix](#) (see Annex II) agreed upon with the UCAR that lists the project outcome and output indicators, together with their respective intermediate and final targets. In accordance with the Results Matrix, Table I-1 shows the key expected outcomes of the operation.

<b>Table I-1: Principal program outcomes and outputs</b>		
<b>Key outcomes</b>	<b>Time of measurement</b>	<b>Rationale for selection</b>
Increase in average farm income among beneficiary farmers compared to nonbeneficiaries	By program end	Infer improvement in beneficiaries' living standards from the adoption of new technologies
Productivity increase in representative products in business plans presented	By program end	Provide information on the effect on increased yields
Increase in adoption of technologies among program beneficiaries and nonbeneficiaries	By program end	Estimate the effects of the program on the adoption of technologies
Increase in access to credit among program beneficiaries and nonbeneficiaries	By program end	Estimate the effect of the program on overcoming the barriers faced by producers in gaining access to financing

Key outputs	Time of measurement	Rationale for selection
Number of producers with access to technical assistance for technology adoption	Annual	Estimate the number of producers with access to better technical assistance services

## II. FINANCING STRUCTURE AND RISKS

### A. Financing instruments

- 2.1 The estimated total cost is US\$41 million. The Bank will finance US\$30 million (73%) of that amount with Ordinary Capital resources, and US\$11 million (27%) will be financed with a local contribution. The monitoring and evaluation item includes resources for developing a database of beneficiaries by gender and ethnic origin, and the costs of the impact evaluation. The program design includes contributions from the producers, which will be evaluated with the business plans, for a projected US\$40 million.

Table II-1: Costs (US\$ million)				
COST CATEGORY	Bank	Local contribution	TOTAL	%
<b>Direct costs (I)</b>	<b>27.9</b>	<b>10.6</b>	<b>38.5</b>	<b>93.9%</b>
I. Production support	27.9	10.6	38.5	93.9
I.1 Support for business plan preparation	1.5	0.7	2.2	5.3
I.2 Support for business plan implementation	26.4	9.9*	36.3	88.6
<b>Administration</b>	<b>1.4</b>	<b>0.4</b>	<b>1.8</b>	<b>4.4</b>
<b>Monitoring and evaluation</b>	<b>0.5</b>	<b>0.0</b>	<b>0.5</b>	<b>1.2</b>
<b>Finance charges**</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Audits</b>	<b>0.2</b>	<b>0.0</b>	<b>0.2</b>	<b>0.5</b>
<b>TOTAL</b>	<b>30.00</b>	<b>11.00</b>	<b>41.00</b>	<b>100%</b>
<b>Percentage</b>	<b>73%</b>	<b>27%</b>	<b>100%</b>	<b>-</b>
* Includes support for creation of the guarantee fund at the SGR.				
** The finance charges will be paid by the borrower from own resources outside the program.				

- 2.2 The program is structured as an investment loan, to be executed over five years according to the following disbursement schedule:

Table II-2: Disbursement Schedule (US\$ million)							
SOURCE	Year 1	Year 2	Year 3	Year 4	Year 5	Total	%
Bank	4.6	11.3	11.8	1.2	1.1	30	73
Local	10.2	0.2	0.2	0.2	0.2	11	27
<b>TOTAL</b>	<b>14.8</b>	<b>11.5</b>	<b>12.0</b>	<b>1.4</b>	<b>1.3</b>	<b>41</b>	<b>100</b>



## **B. Economic viability and sustainability**

- 2.3 The technical, environmental, and economic aspects of the technologies have been analyzed. The beneficiaries themselves will select the technologies best suited to their production conditions, and negotiate the delivery of the services to implement them directly with the providers.
- 2.4 The program has designed a number of activities aimed at overcoming the principal constraints on technology adoption associated with scale of production, asymmetry of information, risk aversion, and restricted access to financing. These activities include: (i) promotion of partnering among producers, to stimulate economies of scale; (ii) technical assistance for each technology; (iii) support equivalent to 35% of the amount of the investments, up to US\$12,000; and (iv) a guarantee arrangement through the SGR. An [economic analysis](#) of the program was performed using the cost-benefit method, based on the demands identified in the provinces and the projected timing for the delivery of business plan support. The analysis yielded a net present value (NPV) of US\$51.4 million, an economic internal rate of return (EIRR) of 22%, and a benefit/cost ratio of US\$1.45 per unit invested. The findings of the sensitivity analysis indicate that, even under pessimistic scenarios (e.g., a 10% decrease in the total benefits of the sectors in relation to projected benefits), the EIRR would be 16%, with an NPV of US\$17.6 million, discounted at 12%. Using similar criteria, if for internal reasons producers were faced with internal costs 10% higher than expected, the program's return would decline to an EIRR of 18%, with an NPV of US\$29.4 million.

## **C. Fiduciary and other risks**

- 2.5 The fiduciary capacity analysis performed as part of the Institutional Capacity Assessment System (ICAS) rated the executing agency's risk level as low. The fiduciary risks identified and their associated mitigation measures are detailed in the [Fiduciary Agreements and Requirements](#), and were used to determine the applicable supervision method for financial and procurement management. The initially established supervision method may vary during program execution, based on the findings of the evaluations.
- 2.6 Risks (including fiduciary risks) were identified during program preparation using the "risk management in sovereign-guaranteed projects" methodology at a joint workshop with participants from the UCAR and the provinces. These risks are intrinsic to the nature of the program, which calls for coordinated technical-assistance and financing activities involving the central (national) and provincial levels, as well as the producers individually or collectively. The mitigation measures are built into the design of the operation through integrated strengthening and technical-assistance mechanisms at all levels.



**D. Environmental and social safeguard risks**

- 2.7 This operation has been classified as category “B” under the Bank’s Environment and Safeguards Compliance Policy (Operational Policy OP-703). An environmental and social analysis was performed during program preparation, as agreed in the proposed environmental and social strategy. The analysis identified the most significant socioenvironmental features, weaknesses, and risks in the target areas and the indicative production chains; specific control and management measures during the stages of planning, technology selection, and business plan preparation and execution; and the program’s socioenvironmental impact indicators.
- 2.8 The proposed program will have positive environmental and social impacts. It will provide support to small-scale producers on family farms for adopting and organizing technologies, which will help to raise family incomes, improve standards of living, and reduce pressure on natural resources. The program also includes measures and inputs to strengthen gender equity through active involvement in the process of developing and implementing technologies on family farms, and participation in cooperative and/or community management processes.
- 2.9 Strategic technologies and extension services were chosen and prioritized according to criteria that included positive or neutral impact on natural resources, and land suitable for crops or livestock. The program will not operate in protected, fragile, or high-biodiversity areas, or in areas with indirect influence on protected areas without a specific management plan prepared as part of the business plan and approved by the relevant authorities. More specifically, the menu of technologies includes investments for various crops, encompassing improved risk management systems, pasture improvement, productive efficiency for milk production and livestock breeding, access to improved phylogenetic material, and harvesting and post-harvesting systems. The majority of these will support improvements in the management of natural resources (soil, water, and vegetation) and will bring environmental benefits through savings in water use, increased energy efficiency, protection of soil from erosion, and reduced use of agrochemicals, all of which will contribute to climate change adaptation. The program design also includes training activities for producers and technical specialists who provide technical assistance in the adoption of agricultural good practices that integrate environmental with productive considerations, and in personal protection measures.
- 2.10 The planning, design, and execution of the business plans will follow the requirements and guidelines established in the Environmental and Social Management Plan ([ESMP](#)), in compliance with the Bank’s applicable policies (Operational Policies OP-703, OP-710, OP-765, and OP-102), which is attached to the program Operating Regulations as an annex. To ensure that the technologies are properly adopted, the program includes actions to strengthen the UCAR and the provinces for monitoring the introduction of the technologies with technical and environmental supervision. The results of the analysis are presented in the [Environmental and Social Management Report](#) (ESMR).

### III. IMPLEMENTATION AND ACTION PLAN

#### A. Program execution and administration

- 3.1 The borrower will be the Argentine Republic; the executing agency will be the Ministry of Agriculture, Livestock, and Fisheries (MAGyP), acting through the Unit for Rural Change (UCAR). MAGyP will transfer resources to the provinces of Entre Ríos and Chaco, which will act as subexecuting agencies through provincial executing units (PEUs) to be created within the ministries of production of Entre Ríos and Chaco. The program will be executed under execution agreements to be signed between MAGyP and each province involved. These agreements will include work plans to be executed under the program (see paragraph 1.16(i)). **Signature and entry into effect of the execution agreement between the borrower, acting through the executing agency, and at least one of the provinces participating in the program, in accordance with terms previously agreed upon with the Bank, will be a condition precedent to the first disbursement of the loan proceeds.**
- 3.2 The UCAR will be responsible for the strategic direction and guidance of the program; supervision of program execution; and serving as the program counterpart in relations with the Bank, among other functions. To accomplish this, it will have a coordination team consisting of an executive coordinator and a program-specific national technical coordinator, as well as assistance from the technical and administrative support areas of the UCAR. **Evidence of creation within the UCAR of the technical team that will coordinate program execution, under terms agreed upon with the Bank, will be a condition precedent to the first disbursement of the loan proceeds.**
- 3.3 The PEUs will be responsible for implementation of the program activities at the level of each province, including technical evaluation of the business plans; relations with the UCAR; and administration, programming, monitoring, and evaluation of the program in each province. Each PEU will have a general coordinator and a technical coordinator. The transfer of program resources to each province will be contingent upon: (i) signature and entry into effect of the respective execution agreement between the borrower, acting through the executing agency, and the province participating in the program, in accordance with terms previously agreed upon with the Bank; (ii) presentation of evidence of creation of the corresponding PEU and (iii) signature and entry into effect of a specific tripartite agreement between the borrower, acting through the executing agency, the National Agricultural Technology Institute (INTA), and the corresponding province, under terms previously agreed upon with the Bank.
- 3.4 Details of the functions of the executing agencies and the operating mechanism for delivery of the technological support are described in the Operating Regulations, the final version of which will be agreed upon with the Bank. **The entry into effect of the program's [Operating Regulations](#), in accordance with terms previously**

**agreed upon with the Bank, will be a condition precedent to the first disbursement.**

- 3.5 Details of the operating mechanism for production support are provided in the draft Operating Regulations and summarized below.

<b>Operating mechanism for production support</b>
<p><b>Work plan and identification of regions.</b> The program will have coverage in the provinces of Entre Ríos and Chaco. As part of establishing the work plan at program startup, the PEUs will identify regions where business plans will be solicited from potential beneficiaries, based on the criteria in paragraph 1.14.</p> <p><b>Technical specialist training and qualification plan.</b> Prior to issuing the first call for business plans, the program will implement a training plan and system to equip technical specialists to support producers in business plan preparation and monitoring. The program will maintain a list of qualified technical specialists who can be contacted by potential beneficiaries through the PEUs. The beneficiaries will choose from the list of qualified technical specialists for the implementation of business plans.</p> <p><b>Dissemination of the program.</b> With the goal of encouraging and incentivizing producers to submit business plan proposals in response to the calls, an extensive dissemination/communication campaign will be conducted to publicize the features of the program, the beneficiary eligibility criteria, procedures for obtaining program support, the technologies promoted by the program, and the mechanism used to select its beneficiary producers. Dissemination activities will be conducted by the PEUs.</p> <p><b>Calls for proposals.</b> Regional calls will be issued within the identified areas, indicating in each case the eligibility and proposal evaluation criteria and the technologies to be promoted by the program.</p> <p><b>Preparation and presentation of business plans.</b> Producers will prepare business plans in coordination with the qualified technical specialists, pursuant to the guidelines set in the program Operating Regulations. The qualified technical specialists will support the process of business plan formulation, selection, and monitoring. With the support of a qualified technical specialist, the producer or group of producers will present the business plan proposal to the PEUs.</p> <p><b>Selection of business plans.</b> The business plans will be selected by the PEUs on the basis of these and other criteria: (i) performance of eligible activities; and (ii) financial, technical, and environmental evaluation, and review of compliance with the Operating Regulations. A provincial approval committee will be established at each PEU with responsibility for approving the business plans on the basis of technical evaluation reports prepared by the PEU. The PEUs will publish the outcomes of the business plan evaluation.</p> <p><b>Verification of technology implementation and payment for support.</b> Financial support for business plans will be disbursed in up to two tranches, subject to verification of the cofinancing contribution needed to finance the investments, and of the producer's commitment to pay the provider of the technology inputs and, as applicable, verification of implementation of the technologies included in the business plans. The financial support will be provided to producers via bank draft, as described in the Operating Regulations. Subsequently, the qualified technical specialists will periodically verify the implementation of the respective technologies.</p> <p><b>Analysis of technologies.</b> The menu of eligible technologies will be included in the Operating Regulations. The menu may be revised by mutual agreement between the executing agency and the Bank. Adjustments may be made to the technical specifications as program execution proceeds. The technology evaluation methodology developed with the Bank will be included in the Operating Regulations.</p>

- 3.6 The UCAR and INTA have a framework agreement for technical assistance activities in a number of rural development projects. This agreement will be expanded to include the technical assistance activities related to productive, commercial, financial, and partnership management issues of groups and/or organizations of family farmers under the Rural Development and Family Agriculture Program. The PEUs will issue a call for the selection of technical specialists to be trained and equipped by the INTA (see Box 3.5). **Amendment of**

**the framework agreement between the UCAR and INTA to include the program within its scope will be a condition precedent to the first disbursement of the loan proceeds.**

- 3.7 To facilitate access to credit by the beneficiaries, a specific guarantee fund will be created at SGR Garantizar.<sup>5</sup> This reciprocal credit guarantee company (SGR) is registered with the Central Bank of the Argentine Republic, and its guarantees have a preferred A rating, which offers advantages for lenders. SGR Garantizar is also the guarantee market leader with 56% of the total number of existing guarantees and experience in the agricultural sector.
- 3.8 For the technological support component, and as an execution condition, within six months after the loan contract enters into effect, the borrower, acting through the executing agency, will present evidence to the Bank of creation of the guarantee facility through the selected SGR.
- 3.9 **Procurement.** Works, goods, and consulting services financed in whole or part with program resources will be procured in accordance with the Bank policies established in documents GN-2349-9 and GN-2350-9. Program-related procurements will be subject to ex post review, with the exception of single-source selection or international competitive bidding, which will be subject to ex ante review. Procurements planned under this program will be included in the procurement plan agreed upon between the executing agency and the Bank, and will be conducted in accordance with the bidding methods and ranges stated in it. The initial plan will cover the first 18 months of program execution and will be updated annually or whenever substantial changes occur during execution.
- 3.10 The program includes technical-assistance activities to be conducted through single-source selection of the National Agricultural Technology Institute (INTA). This institution is the principal public provider of research and technical assistance for the agricultural sector. It also developed most of the technologies to be financed by the program. The INTA is the only institution with a significant presence in technical assistance in Chaco and Entre Ríos that has the technical and institutional capabilities and appropriate methodologies for working with the program beneficiaries. The features of the institution therefore justify a single-source selection process for US\$3.2 million for the execution of program technical assistance, under the terms of the Bank policies.

---

<sup>5</sup> MAGyP will contribute the funds to the provinces, which will deposit them into the specific guarantee fund. The fund will then be available to all program beneficiaries who meet the SGR's requirements for reporting, documentation, and guarantees, if they decide to opt for this mechanism. The fund may leverage financing up to between three and four times its amount. In the event of a default, and after demonstrated collection attempts, the trust fund will pay off the loan to the SGR, which will transfer the credit to it so that the fund can continue collection or, if applicable, execute the guarantees. (For more information, see the [technical document](#) on the SGR.)

**B. Monitoring and evaluation plan**

- 3.11 The program provides for a monitoring and evaluation system described in detail in the [Impact Monitoring and Evaluation Plan](#). The UCAR will be responsible for generating and maintaining the information required to perform the actual monitoring and evaluation of each indicator listed in the Results Matrix, previously agreed upon with the government.
- 3.12 Based on this system, the UCAR will prepare a monitoring report on the status of program activities for delivery to the Bank no later than 60 days after the end of each six-month period during program execution. These reports will focus on the fulfillment of output indicators and progress toward outcomes specified in the Results Matrix, identification of problems encountered, and presentation of corrective measures. No later than the last quarter of each year, the UCAR will deliver, to the Bank's satisfaction, the annual work plan for the following year. Two independent evaluations will be performed during program execution: a midterm evaluation and a final evaluation. The UCAR will deliver the evaluations to the Bank within 90 days after 50% of the loan proceeds have been executed, and within 90 days after 90% of the program resources have been executed, respectively.
- 3.13 **Evaluation.** The impact evaluation of the program is designed to identify the program's impact on productivity and the agricultural income earned by the beneficiary farmers. It will also provide the tools needed to analyze mechanisms that stimulate the technology adoption process in the agriculture sector. The evaluation will be based on ad hoc data collection at program start and finish (see [evaluation plan](#)). The evaluation will be financed with program resources.
- 3.14 The impact evaluation will use a combination of quasi-experimental methods (pairing and difference-in-differences) to estimate the program's average impact by comparing groups of beneficiaries with a control group of nonbeneficiaries. Although the spillover effects are expected to be limited, the evaluation was designed to take into account the possibility of such effects and their consequences for impact measurement.

Development Effectiveness Matrix				
Summary				
I. Strategic Alignment				
1. IDB Strategic Development Objectives		Aligned		
Lending Program		(i) Lending for poverty reduction and equity enhancement, and (ii) Lending to support climate chance initiatives, renewable energy and environmental sustainability.		
Regional Development Goals		Annual growth rate of agricultural GDP (%).		
Bank Output Contribution (as defined in Results Framework of IDB-9)		Farmers given access to improved agricultural services and investments.		
2. Country Strategy Development Objectives		Aligned		
Country Strategy Results Matrix	GN-2328-3	i) A more favorable climate for investment and productivity growth, to enhance the country's competitiveness, and ii) Poverty reduction, rebuilding of the human resource base, and promotion of sustainable, inclusive social development.		
Country Program Results Matrix	GN-2661-1	The intervention is included in the 2012 Country Program Document.		
Relevance of this project to country development challenges (If not aligned to country strategy or country program)				
II. Development Outcomes - Evaluability		Highly Evaluable	Weight	Maximum Score
		9.8		10
3. Evidence-based Assessment & Solution		10.0	25%	10
4. Ex ante Economic Analysis		10.0	25%	10
5. Monitoring and Evaluation		9.1	25%	10
6. Risks & Mitigation Monitoring Matrix		10.0	25%	10
Overall risks rate = magnitude of risks*likelihood		Low/Medium		
Environmental & social risk classification		B		
III. IDB's Role - Additionality				
The project relies on the use of country systems (VPC/PDP criteria)		Yes	The project relies on the use of Procurement Systems: Sistema Electrónico de Compras Públicas Nacionales (SECOP). "Trámite Simplificado" para compras de \$ 10.000 equivalente a US\$ 2.500.	
The project uses another country system different from the ones above for implementing the program				
The IDB's involvement promotes improvements of the intended beneficiaries and/or public sector entity in the following dimensions:				
Gender Equality		Yes	The program will benefit at least 300 female producers.	
Labor				
Environment		Yes	The program contributes to climate change adaptation through the promotion of technologies that include sustainable environmental practices.	
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project				
The ex-post impact evaluation of the project will produce evidence to close knowledge gaps in the sector that were identified in the project document and/or in the evaluation plan.		Yes	The impact evaluation of this project is based on a quasi-experimental approach, and contributes to a better understanding of (i) how technological and financial constraints limit the productivity and incomes of small family producers, (ii) the effectiveness of public support based on business plans of individuals and groups.	

The project is aligned with IDB institutional priorities. The project contributes to: (i) the IDB lending priorities "Lending for poverty reduction and equity enhancement" and "Lending to support climate change initiatives, renewable energy and environmental sustainability". (ii) the Regional Development Goal "Protecting the environment, responding to climate change, promoting renewable energy, and enhancing food security", and (iii) the Bank Output Contribution to Regional Development Goals 2012-2015 "Protecting the environment, responding to climate change, promoting renewable energy, and enhancing food security." The project is also aligned with the country strategy's objectives to foster growth and reduce inequality.

The project will help increase farmers' income by family improving their productivity. The document and its annexes provide a clear and complete justification for the project. Problems and their causes are clearly identified and discussed. The project's potential beneficiaries are also clearly identified and described. Evidence of the effectiveness of similar interventions in similar contexts is also clearly discussed. The project's metric is well defined and the result matrix includes valid indicators with baseline and targets at all level. The project document includes a complete and realistic cost/benefit analysis. It also includes a monitoring and evaluation plan (MEP) that is complete and follows the DEM outline. The evaluation strategy is convincing and based on a quasi-experimental methodology, which is clearly discussed in the MEP.

The risks identified in the risk matrix are reasonable and they include mitigation measure and related metric to track their implementation.

## RESULTS MATRIX

<i>Program objectives</i>		<b>To help increase the income of family farmers by improving their productivity.</b>						
<i>Impact</i>		<i>Baseline</i>		<i>Target</i>		<i>Comments</i>		
<p><b>Impact:</b> Increase in average net farm income among beneficiary farmers compared to nonbeneficiaries in Chaco and Entre Ríos.</p> <p><b>Indicator:</b> Difference between the percentage change in average net farm income per beneficiary farmer and average farm income per nonbeneficiary farmer</p> $\left( \frac{\bar{Y}_{2017} - \bar{Y}_{2012}^B}{\bar{Y}_{2012}^B} \right) - \left( \frac{\bar{Y}_{2017}^{NB} - \bar{Y}_{2012}^{NB}}{\bar{Y}_{2012}^{NB}} \right)$		0%		15%		<p><b>Source:</b> Starting point: annual net farm income per family farmer of U\$S15,500. (Source: UCAR surveys, 2009).</p> <p><b>Assumption:</b> The baseline indicator is 0 by design. The control group will be structured to have key observable characteristics equivalent to the beneficiary group at the baseline (see monitoring and evaluation plan for details).</p> <p>Surveys of beneficiary and nonbeneficiary farms in 2012 and 2017</p>		
<i>Component. Production support for family farming</i>	<i>Base-line (2011)</i>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Year 4</i>	<i>Year 5</i>	<i>Target</i>	<i>Comments</i>
<p><b>Outcome:</b> Increase in productivity (yields) in representative products in the business plans</p> <p><b>Indicator:</b> Difference between the percentage change in average crop or livestock yields per hectare between beneficiaries and nonbeneficiaries</p> $\left( \frac{\bar{R}_{2017} - \bar{R}_{2012}^B}{\bar{R}_{2012}^B} \right) - \left( \frac{\bar{R}_{2017}^{NB} - \bar{R}_{2012}^{NB}}{\bar{R}_{2012}^{NB}} \right)$	0						15%	<p><b>Means of verification:</b> Ad hoc surveys of beneficiary and nonbeneficiary farms in base year 2012 and target year 2017.</p> <p><b>Assumptions:</b> There are no substantial changes in the economic, social, or environmental conditions affecting measurement of the indicators.</p> <p>The baseline indicator is 0 by design. The control group will be designed to have observable characteristics equivalent to the beneficiary group at the baseline (see monitoring and evaluation plan for details).</p> <p>Productivity indicators per product and preproject benchmark level for capitalized family farmers:</p>

<b>Component. Production support for family farming</b>	<b>Base-line (2011)</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Target</b>	<b>Comments</b>
								<i>Livestock: 57% weaned</i> <i>Milk production: 17 L/cow milked</i> <i>Cotton: 1.4 tons/hectare</i> <i>Rice : 6.5 tons/hectare</i>
<p><b>Intermediate outcome:</b> Increase in the adoption of technologies promoted by the program</p> <p><b>Indicator:</b> Difference in technology adoption rates between beneficiaries and nonbeneficiaries</p> $\left( \frac{\overline{U}^B_{2017} - \overline{U}^B_{2012}}{Total^B} \right) - \left( \frac{\overline{U}^{NB}_{2017} - \overline{U}^{NB}_{2012}}{Total^{NB}} \right)$	0						50%	<p><b>Means of verification:</b> Ad hoc surveys of beneficiary and nonbeneficiary farms in base year 2012 and target year 2017.</p> <p><b>Assumptions:</b> There are no substantial changes in the economic, social, or environmental conditions affecting measurement of the indicators.</p> <p>The beneficiary and control groups have been designed to have similar observable characteristics at the baseline, which ensures an initial difference of 0.</p>
<p><b>Intermediate outcome:</b> Increase in access to credit for program beneficiaries</p> <p><b>Indicator:</b> Difference between rates of access to bank credit between beneficiaries and nonbeneficiaries</p> $\left( \frac{\overline{CR}^B_{2017} - \overline{CR}^B_{2012}}{Total^B} \right) - \left( \frac{\overline{CR}^{NB}_{2017} - \overline{CR}^{NB}_{2012}}{Total^{NB}} \right)$	0						20%	<p><b>Comments:</b></p> <p>The technologies promoted by the program under the menu of technologies are described in the proposal for operation development and the economic analysis annex. In addition to these technologies, the indicator captures the use of management practices promoted through technical assistance and training.</p> <p>Access to credit is currently 15% according to the beneficiary population survey.</p>



<i>Component. Production support for family farming</i>	<i>Base-line (2011)</i>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Year 4</i>	<i>Year 5</i>	<i>Target</i>	<i>Comments</i>
<i>Subcomponent 1. Support for business plan preparation skills</i>	<i>Base-line (2011)</i>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Year 4</i>	<i>Year 5</i>	<i>Target</i>	<i>Comments</i>
<b>Output 1.1:</b> Work plans at the level of each province  <b>Indicator:</b> Number of work plans executed at the level of each province	0					2	2	<i>Means of verification:</i> <i>Program monitoring</i>
<b>Output 1.2:</b> Training plan for technical advisors and specialists up and running  <b>Indicator:</b> Number of technical advisors and extension agents evaluated and trained	0	36	36				72	
<b>Output 1.3:</b> Support for program promotion and dissemination  <b>Indicator:</b> Number of program promotion plans executed	0	2					2	
<b>Output 1.4:</b> Formation of partnerships  <b>Indicator:</b> Number of partnerships strengthened in technical and legal areas for access to technologies promoted by the program and access to financial system resources	0	50	50				100	
<b>Output 1.5:</b> Business plans formulated  <b>Indicator:</b> Number of business plans formulated	0	60	150	150			360	

<b>Component. Production support for family farming</b>	<b>Base-line (2011)</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Target</b>	<b>Comments</b>
<b>Output 1.6:</b> Future selection of regions and technologies  <b>Indicator:</b> Number of studies conducted for future selection of additional provinces and technologies	0		3	3	2		8	
<b>Subcomponent 2. Support for business plan implementation</b>	<b>Base-line (2011)</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Target</b>	<b>Comments</b>
<b>Output 2.1:</b> Specific guarantee fund to facilitate access to credit  <b>Indicator:</b> Guarantee fund created/transferred	0	1					1	<b>Means of verification:</b> Program monitoring  <b>Assumption:</b> Number of business plans based on forecast for program promotion and dissemination <b>Assumption:</b> Gender distinction based on data published in surveys to identify the beneficiary population that estimate a 14% share of women in the workforce in the sector  <b>Comment:</b> Support disbursed means support received by the farmer.
<b>Output 2.2:</b> Business plans  <b>Indicator:</b> Number of business plans for technology adoption with support disbursed	0	40	130	130			300	
<b>Output 2.3:</b> Eligible male and female farmers who receive technical assistance and training for technology adoption through business plans  <b>Indicator:</b> Number of male and female farmers receiving technical assistance for adoption of technologies promoted by the program	0	274	893	893			2,060	

<i><b>Component. Production support for family farming</b></i>	<i><b>Base-line (2011)</b></i>	<i><b>Year 1</b></i>	<i><b>Year 2</b></i>	<i><b>Year 3</b></i>	<i><b>Year 4</b></i>	<i><b>Year 5</b></i>	<i><b>Target</b></i>	<i><b>Comments</b></i>
<b>Indicator:</b> Number of female farmers receiving technical assistance for adoption of technologies promoted by the program	0	40	130	130			300	
<b>Indicator:</b> Number of female farmers receiving refresher training in the use of technology at INTA centers	0		200	500	500	300	1,500	

## **FIDUCIARY AGREEMENTS AND REQUIREMENTS**

**Country:** Argentina  
**Project number:** AR-L1068  
**Name:** Rural Development and Family Agriculture Program  
**Executing agency:** Ministry of Agriculture, Livestock, and Fisheries (MAGyP)  
**Prepared by:** Gustavo Sierra (PDP/CAR), Gumersindo Velázquez (PDP/CAR), and Maximiliano Marqués (consultant)

### **I. Executive summary**

1. In this evaluation, the project risk management methodology was used for risk analysis, and the Institutional Capacity Assessment System (ICAS) for institutional analysis. The executing agency will be the Ministry of Agriculture, Livestock, and Fisheries (MAGyP), acting through the Unit for Rural Change (UCAR), created by MAGyP Resolution 45 of 9 December 2009; the subexecuting agencies will be the provinces of Chaco and Entre Ríos, acting through their ministries of production.
2. Certain fiduciary weaknesses and risks were identified and included in the Risk Mitigation Matrix (RMM). The fiduciary management systems at the country level were evaluated in the fiduciary note to the country strategy, whereas those at the executing agency and subexecuting agency levels were evaluated using the procedures mentioned in section I.1, concluding that they are adequate but should be strengthened.
3. The program does not include financing from another agency, but a counterpart is required from the beneficiaries. The funds for the reciprocal credit guarantee company (SGR) will be considered eligible expenditures chargeable to the local counterpart. There are subexecuting agencies, and the UCAR will be the responsible for the consolidation of financial reporting.

### **II. Fiduciary context of the executing agency**

The executing agency's fiduciary systems are deemed satisfactory, although they will require a number of strengthening measures that will be included in the RMM.

### **III. Fiduciary risk evaluation and mitigation measures**

The fiduciary capacity analysis performed as part of the ICAS analysis rated the executing agency's risk level as low. The fiduciary risks identified are associated with delays in project-related flow of funds. The proposed mitigation measure includes establishing and agreeing on criteria and guidelines for financial planning in keeping with the nature of the

operation, aligning financial management with the project cycle and the production cycle, and training all those responsible for resource flow management. These identified risks were used as the basis for determining the applicable supervision method for financial and procurement management. The initially established supervision method may vary during program execution, based on the findings of the evaluations.

Risks (including fiduciary risks) were identified during program preparation using the “risk management in sovereign-guaranteed projects” methodology at a joint workshop with participants from the UCAR and the provinces. The identified risks are included in the corresponding Risk Matrix. These risks are intrinsic to the nature of the program, which calls for coordinated technical-assistance and financing activities involving the central (national) and provincial levels, as well as the producers individually or collectively. The mitigation measures are built into the design of the operation through integrated strengthening and technical-assistance mechanisms at all levels.

#### **IV. Considerations for the Special Provisions of the contracts**

- a. **Conditions precedent to the first disbursement:** (i) The entry into effect of the program’s Operating Regulations, in accordance with terms previously agreed upon with the Bank; (ii) the creation within the UCAR of the technical team that will coordinate the program execution, under terms agreed upon with the Bank; (iii) amendment of the framework agreement between the UCAR and the National Agricultural Technology Institute (INTA) to include the program within its scope; and (iv) signature and entry into effect of the execution agreement between the borrower, acting through the executing agency, and at least one of the provinces participating in the program, in accordance with terms previously agreed upon with the Bank.
- b. **Special execution conditions:** (a) The transfer of program resources to each province will be contingent upon: (i) signature and entry into effect of the respective execution agreement between the borrower, acting through the executing agency, and the province participating in the program, in accordance with terms previously agreed upon with the Bank; and (ii) presentation of evidence of creation of the corresponding provincial executing unit (PEU); (b) within six months after the loan contract enters into effect: the borrower, acting through the executing agency, will (i) sign and implement specific agreements with the INTA and each province in the program, in accordance with terms previously agreed upon with the Bank; and (ii) present evidence to the Bank of creation of the guarantee facility through the selected reciprocal credit guarantee company (SGR).
- c. **Agreed exchange rate:**
  1. **Reimbursement of expenditures:** Exchange rate indicated in Article 4.09(a) of the General Conditions, effective on the date the reimbursement request is submitted to the Bank.

2. **Accountability (advance of funds):** Exchange rate used for conversion of funds disbursed in the currency of the operation to the local currency.
  3. **Counterpart:** Exchange rate indicated in Article 4.09(a) of the General Conditions, effective on the first business day of the month of the payment date.
  4. **Disbursements in currencies other than U.S. dollars and Argentine pesos:** In the cases of direct payment and letter of credit guarantee reimbursements, the equivalence to the loan currency will be established according to the amount actually disbursed by the IDB. This method is not expected to be used.
- d. The executing agency will deliver annual financial statements for the project, audited by a firm of independent auditors acceptable to the Bank. In addition to the annual audit report, the executing agency will deliver financial and operational audit reports based on terms of reference previously agreed upon with the Bank.

## **V. Agreement and requirements for procurement execution**

### **1. Procurement execution**

The “Policies for the Procurement of Goods and Works Financed by the Inter-American Development Bank” (document GN-2349-9), of March 2011, and the “Policies for the Selection and Contracting of Consulting Services Financed by the Inter-American Development Bank (document GN-2350-9), of March 2011, will be applied. An agreement has been reached with the executing agency to use the Procurement Plan Execution System (SEPA) for the administration and management of program procurement planning.

- a. **Procurement of works, goods, and nonconsulting services:** Contracts for works, goods, and nonconsulting services<sup>1</sup> generated under the program and subject to international competitive bidding (ICB) will be executed using the standard bidding documents (SBDs) issued by the Bank. Procurements subject to national competitive bidding (NCB) will be executed using country bidding documents agreed upon with the Bank. The program’s sector specialist is responsible for reviewing the technical specifications for procurements during preparation of the selection processes. The procurement plan to be submitted by the executing agency will identify selection processes subject to single-source selection and those requiring prequalification of bidders.
- b. **Selection and contracting of consultants:** Contracts for consulting services generated under the program will be executed using the standard request for proposals (RFP) agreed upon with the Bank. The procurement plan lists the selection processes subject to single-source selection.

---

<sup>1</sup> “Policies for the procurement of works and goods financed by the Inter-American Development Bank” (document GN 2349-9), paragraph 1.1: Nonconsulting services are treated as goods.

- **Selection of individual consultants:** In the cases identified in the approved procurement plans, solicitations for individual consultants may be advertised locally or internationally, so as to establish a short list of qualified individuals, in accordance with Section V, paragraphs 5.1 to 5.4, of document GN-2350-9. In the case of service delivery contracts, the consultants will deliver the midterm or final report to the executing agency as requested. Approval of the performance evaluation by the relevant authority, with a rating of at least satisfactory, will be sufficient for the renewal of service delivery contracts. The evaluation will be performed once a year, in order to facilitate approval by the corresponding authorities.
  - **Training:** The procurement plan describes the procurements applicable to the program components that include training elements, contracted as consulting services or nonconsulting services
- c. **Recurrent expenditures:** The recurrent expenditures or operation and maintenance expenditures required during the life of the program will be: rent and utilities, maintenance, expenses, stationery expenses, messenger and postage, cleaning services, computer components, insurance, telephone, and minor expenses required for operation of the provincial program executing units and the UCAR. These expenditures will be financed by the program and will follow the administrative procedures described in the program Operating Regulations, which have been reviewed and accepted by the Bank. Recurrent expenditures also include the costs of consultants engaged to assist the executing agency during the program execution period. However, operating costs will not include the remuneration of public-sector employees.
- d. **Advance procurement/Retroactive financing:** No advance procurement or retroactive financing is planned.
- e. **Contracting of the INTA:** The program includes activities to be conducted through single-source selection of the National Agricultural Technology Institute (INTA). This institution is the principal public provider of research and technical assistance for the agricultural sector. It also developed most of the technologies to be financed by the program. The INTA is the only institution with a significant presence in technical assistance in Chaco and Entre Ríos that has the technical and institutional capabilities and appropriate methodologies for working with the program beneficiaries. The features of the institution therefore justify a single-source selection process for the execution of program technical assistance.
- f. **Private sector – Farmers:** Procedures will follow to market practices, thus ensuring competitive, market prices in line with the needs of the project.

## 2. Table of threshold amounts (US\$000)

Works			Goods <sup>2</sup>			Consulting services	
International competitive bidding	National competitive bidding	Shopping	International competitive bidding	National competitive bidding	Shopping	International publicity Consulting	Short list 100% national
≥ 5,000,000	< 5,000,000 ≥ 350,000	< 350,000	≥ 500,000	< 500,000 ≥ 100,000	< 100,000	> 200,000	< 500,000

Thresholds for ex post review			
Consulting services		Individual consultant	
Works	Goods	Consulting services	Individual consultant
< 5,000,000	< 500,000	< 200,000	< 50,000

Note: The threshold amounts established for ex post review are a function of the executing agency's fiduciary capacity for execution, and may be modified by the Bank to the extent such capacity varies.

## 3. Main procurement processes

Activity	Procurement method	Estimated date	Estimated amount (US\$)
<b>Goods</b>			
Vehicles for PEUs (4)	NCB	II-Year 1	112,000
Equipment for UCAR and PEUs	PC	II-Year 1	45,000
<b>Consulting firms</b>			
Contracting of INTA	SSS	II-Year 1	3,192,200
<b>Individual consultants</b>			
Technical and administrative staff of executing units	SSS/NICQ	I-Year 1 to II-Year 5	314,000
Technical staff for field operations of the PEUs	SSS/NICQ	I-Year 1 to II-Year 5	72,000
<b>Nonconsulting services</b>			
Initial survey	NCB	I-Year 1 and II-Year 5	125,000
Program dissemination	DC/PC	II-Year 1 to II-Year 2	216,000

## 4. Procurement supervision

Procurement processes will be subject to ex post supervision, with the exception of ICB processes, if any, which will be subject to ex ante review. Ex post review visits will be conducted at least once per jurisdiction every 12 months. Ex post review reports will include at least one physical inspection visit,<sup>3</sup> selected from among the procurement processes subject to ex post review. It is important to clarify that no less than 10% of the contracts reviewed will be inspected physically during the program.

<sup>2</sup> Includes nonconsulting services.

<sup>3</sup> The inspection will verify the existence of the procurements, leaving the determination of quality and compliance with specifications to the sector specialist.



## **5. Records and files**

The UCAR and the subexecuting agencies will maintain proper, complete, and up-to-date files of all supporting documents for program financial accounting, as well as supporting documentation for payments made. The UCAR and the subexecuting agencies have the obligation to facilitate access to these files for inspection visits or ex post reviews, at such time as the Bank and external auditors may see fit. Without detriment to the foregoing, the UCAR will retain a copy of all documentation on program processes and activities in its files, for verification by the auditors or the Bank. The executing agency and the subexecuting agency must have sufficient capacity to execute the program, and the Bank may require improvements.

## **VI. Financial management**

### **1. Programming and budget**

The legal foundation for the budget process is established in Law 24156 and its implementing regulations under Decree 1344/07. The National Budget Office is the apex agency of the national public budget system and prepares the consolidated public-sector budget each year. The national budget has program-based categories and other expenditure line items, namely payroll, consumer goods, nonpersonnel services, fixed assets, transfers, financial assets, debt service and reduction of other liabilities, and other expenses. Expenditure categories by economic nature are current expenditures, capital expenditures, and short-term financial instruments. The internal sources of financing may be the national treasury, own resources, earmarks, and internal transfers. No difficulties anticipated for budget management, timeliness of the local counterpart, or system delays affecting execution. The operation was included in the national budget for fiscal year 2012 and will be included in future budgets. There are no special arrangements for project programming and budgeting.

### **2. Accounting and reporting systems**

The executing agency and subexecuting agencies will use the Executing Units for External Loans (UEPEX) system as a financial administration system. Accounting records will be kept on a cash basis, and International Financial Reporting Standards (IFRS) will be followed, as applicable according to the established country criteria. The required financial reports will be: (i) financial execution plan for up to 90 days following the request for an advance of funds; (ii) audited annual financial statements; and (iii) other reports as requested by the fiduciary specialists.

### **3. Disbursements and cash flow**

The loan proceeds will be requested from the Bank under the advance of funds modality, based on the project's actual liquidity needs, backed by signed commitments (contracts) or anticipated with a high degree of certainty for a predetermined term period agreed upon with the executing agency, for the purpose of prompt payment of eligible expenditures chargeable against loans or other types of Bank financing. This method contributes in general to effective management and control of the use of the project funds, and in particular facilitates accounting for projects that mark their physical and financial progress in relation

to targets or milestones. These liquidity needs are based on the project's financial plan, which must be coordinated with the project execution plan and the annual work plan (AWP) which incorporates the procurement plan. One point that should not be overlooked is to ensure that the project resources from the various sources of financing have been included in the national general budget; otherwise, they are unlikely to be executed in a timely manner.

Advances will be deposited into a special account at Banco de la Nación Argentina exclusive to the program and managed by the UCAR, which will transfer the funds to the provinces for execution on the same terms applicable to the UCAR as executing agency. The executing agency and subexecuting agencies will exercise strict and effective control over the use of advanced funds with mechanisms for the verification and reconciliation of available balances in their records with those in the Bank's records for the same items (LMS1 report).

Accounting for eligible expenditures related to advances received will be provided once 80% of the advance has been expended, or there is a special need for funds according to the financial plan, which will cover up to 90 days and be submitted at the time of each request for advance. Neither the borrower nor the executing agency may receive another advance of funds until such accounting has been provided and accepted by the Bank. The financial management specialist may request additional information: (i) itemization of commitments; and (ii) physical and financial progress estimate reports on the program. The frequency and time covered by the advance will not exceed 180 days. When accounting for advances, the following information will be provided to the Bank: (i) disbursement request form with certifications; (ii) program implementation status; (iii) reconciliation of Bank resources; (iv) itemization of payments; and (v) other reports that help to demonstrate program status. When rendering accounts, no supporting documentation will be required for expenditures or payments made. This shall not be construed as Bank approval of such outlays.

The Bank's online e-Disbursements system will be used, enabling the executing agency to prepare and submit disbursement requests electronically to the Bank, lowering transaction costs and enabling the Bank to review and process the submitted requests remotely.

#### **4. Internal control and internal audit**

The country internal control body is the Office of the Receiver General (SIGEN), which audits the program through the MAGyP Internal Audit Unit (UAI). The UCAR also has an internal control unit that reports to the executive coordinator.

#### **5. External control and reports**

The country external control system is exercised through the Office of the Auditor General (AGN), an agency under the authority of the National Congress that provides support in control of the status of public sector accounts and has performed external audits of several Bank-financed projects. In relation to Article 7.03 of the General Conditions, the program financial statements will be audited by an independent audit firm acceptable to the Bank or by the AGN during project execution. They will be delivered within 120 days after the close of the fiscal year. The closing financial statements will be delivered within 120 days after the last disbursement. The audit costs related to an independent audit firm will be included in the program cost and financed using the loan proceeds. In addition to the annual audit

report, the executing agency will deliver financial and operational audit reports, based on terms of reference previously agreed upon with the Bank.

## **6. Financial supervision plan**

The initial financial supervision plan is based on the fiduciary risk and capacity assessments performed as part of the “onsite” and “desk” reviews envisaged for the project, covering the scope of operational, financial, and accounting actions, and those related to compliance and legality, as well as their frequency and responsible entity.

## **7. Execution arrangements**

The program executing agency will be national government, acting through the Unit for Rural Change (UCAR) of the Ministry of Agriculture, Livestock, and Fisheries (MAGyP). To support the performance of its duties and responsibilities, the UCAR will have a coordination team consisting of an executive coordinator and a program-specific national technical coordinator, as well as assistance from the technical and administrative support areas of the UCAR.

The provincial governments will be responsible for program execution at the provincial level. Provincial executing units (PEUs) will be established within the ministries of production of each province, to operate as the program’s subexecuting agencies. In the case of Entre Ríos, provincial coordination will be the responsibility of the Agriculture Department, and provincial technical coordination will be handled by the Rural Development and Family Agriculture Office. In Chaco, provincial coordination will be the responsibility of the Ministry of Production. The PEUs will have a provincial coordinator and a provincial technical coordinator, and at least three work areas: administration, project management, and monitoring and evaluation. The chiefs of these areas will be appointed by the provinces and may be provincial ministry staff. The monitoring and evaluation area will be responsible for implementing the monitoring and evaluation system. Each province will establish a provincial approval committee.

## **8. Other financial management agreements and requirements**

Advances issued to the subexecuting agencies and transfers made through the services provided by the INTA will be reconciled at least once a month.

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-\_\_\_/12

Argentina. Loan \_\_\_/OC-AR to the Argentine Republic  
Rural Development and Family Agriculture 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 Argentine Republic, as Borrower, for the purpose of granting it a financing to cooperate in the execution of a rural development and family agriculture program. Such financing will be for an amount of up to US\$30,000,000 from the Ordinary Capital resources of the Bank, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on \_\_\_\_)

LEG/SGO/CSC/IDBDOCS: 36883413  
Pipeline No. AR-L1068