Project Information Document (PID)

Appraisal Stage | Date Prepared/Updated: 25-Oct-2021 | Report No: PIDA32508

BASIC INFORMATION

A. Basic Project Data

Country	Project ID	Project Name	Parent Project ID (if any)
Argentina	P176905	Climate Intelligent and Inclusive Agri-food Systems Project	
Region	**Estimated Appraisal Date**	**Estimated Board Date**	**Practice Area (Lead)**
LATIN AMERICA AND CARIBBEAN	18-Oct-2021	17-Dec-2021	Agriculture and Food
Financing Instrument	**Borrower(s)**	**Implementing Agency**	
Investment Project Financing	Argentine Republic	Dirección General de Programas y Proyectos Sectoriales y Especiales (DIPROSE)	

Proposed Development Objective(s)

The objectives of the project are to (i) support economic recovery and promote climate smart practices among Project beneficiaries in Argentina's agri-food system; and (ii) respond effectively in case of an eligible crisis or emergency.

Components

1. Public Infrastructure for Agro-industrial Development
2. Agro-industrial Entrepreneurship and Resilient Rural Livelihoods
3. Innovation for a Green and Inclusive Agri-food System Transformation
4. Project Coordination and Management
5. Contingent Emergency Response Component - CERC

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	550.00
Total Financing	550.00
of which IBRD/IDA	400.00
Financing Gap	0.00

DETAILS

World Bank Group Financing	
International Bank for Reconstruction and Development (IBRD)	400.00
Non-World Bank Group Financing	
Counterpart Funding	150.00
Borrower/Recipient	150.00

Environmental and Social Risk Classification

Moderate

Decision

The review did authorize the team to appraise and negotiate

B. Introduction and Context

Country Context

1. **The COVID-19 pandemic hit Argentina at a time when its economy faced significant macroeconomic imbalances and a highly uncertain outlook.** Following a two-year recession, high inflation, series of droughts and restricted access to capital markets, the strict lockdown imposed to contain the pandemic triggered a 10 percent GDP contraction in 2020. The economy began to recover in the fourth quarter of 2020, when the Government of Argentina (GoA) eased confinement measures. However, in May 2021, a second COVID-19 wave hit Argentina, prompting the Government to re-tighten social distancing measures to reduce strain on the health system given the slow pace of vaccination.

2. **Real GDP is projected to rebound by 6.4 percent in 2021, but growth performance will face challenges.** Uncertainty, as well as price and capital controls, will limit investment, which is needed to raise productivity and generate formal jobs. Real GDP is projected to rebound partially, by 6.4 percent, in 2021. The economy is not projected to reach pre-pandemic GDP levels before 2023. The 2021 budget foresees a reduction in the primary deficit from an estimated 6.5 percent of GDP in 2020 to 4.2 percent. Uncertainly, as well as price and capital controls, will limit strong investment growth, which is needed to raise productivity and generate formal jobs, after many consecutive years of anemic growth.

3. **Significant economic and social disparities, and high levels of poverty and gaps in access to basic services persist.** Ninety four percent of Argentina's population lives in urban areas, where poverty reached 42 percent of population in the second semester of 2020, with a 10.5 percent extreme poverty and 57.7 percent child poverty. It is estimated that roughly one third of rural residents live in poverty. Inequality, as measured by the Gini index, increased from 41.2 to 42.9 points during 2017-2019 (WB, 2021). While at the national level 12.8 percent of the population has unsatisfied basic needs, 22.9 percent of indigenous households exhibit unsatisfied basic needs; and this number increases notably to one third of the population living in the northern regions of

the country (INDEC, 2010). Disparities exist among and within provinces in terms of levels of economic and social development and access to high-quality basic services, where rural areas have traditionally had lower levels of access to water and other basic services, thus affecting rural inhabitants economic and social development (WBG, 2015).The "digital divide" accentuates existing inequalities; while 60 per cent of the higher income population can do their jobs remotely, the rate is less than 10 per cent for the lower-income population (ILO, 2020).

4. **The confluence of health, macro-fiscal and environmental challenges require Argentina to adopt policies that promote smart, green and inclusive private sector growth.** Argentina has committed to not exceed more than 359 million tons of net emissions of carbon dioxide equivalent (MtCO2e) by 2030. This new goal is ambitious, since it is equivalent to a total decrease in emissions of 19% by 2030, compared to the historical peak reached in 2007, and a reduction of 25,7% compared to the previous NDC submitted in 2016[1]. This commitment as well as other policy initiatives, such as the 2030 Agenda for Sustainable Development and the Partnership for Action on the Green Economy, lay the foundations for a transition from a linear economic system towards circular economic system. Meeting these commitments will require it to rethink its industrial organization and innovations that underpin private sector growth, among others.

Sectoral and Institutional Context

5. **Despite challenges, the Argentinian agri-food sector has grown in the last three decades providing a silver lining to the overall economy.** This growth has been facilitated by technological change and, over much of the period, by high international commodity prices. From 2015-2019, agriculture's contribution to GDP increased from 5.2 to 7.2 percent, while the service sector's contribution declined from 58.8 to 53.6 percent. Agriculture generates approximately 12 percent of direct employment and more than 20 percent of overall employment. The country is a regional leader in agricultural R&D; upstream and downstream technological innovation have had important impacts on productivity, climate change resilience and emissions, and jobs.

6. **Given its economic importance to Argentina, the agri-food sector´s environmental footprint needs to be managed carefully.** Agriculture accounted for about 26 percent of Argentina´s total Greenhouse Gas (GHG) emissions in 2017 (FAOSTAT, 2021). The expanding practice of double cropping of maize/wheat and soybean is expected to raise output through more intensive use of already cultivated land. Benefitting from the intensification of production processes through feedlots, beef production is expected to grow 13.5 percent in the decade to 2030. Poultry and pork production are expected to grow 14.0 percent and 17.5 percent, respectively, in the current decade (OECD, 2020). Irrigated land makes up 5% of agricultural area but 13% of agricultural value. Diversification in Argentina's agricultural export base – including upstream technology exports and downstream value-added products - would reduce the country's exposure to commodity price fluctuations, reduce the sector's environmental footprint, and improve global markets' confidence in Argentina's economy.

7. **Gender gaps in the sector also contribute to persistent agricultural productivity gaps.** Although 45 percent of the registered family farmers in Argentina are women, only 10 percent of the family farming units self-identify as headed by women. Available data suggests that less than 30 percent of women have had access to communal property and only 16 percent have benefited from the allocation of public lands (Ferro, 2013). The lack of employment opportunities for rural women in highly mechanized production systems has concentrated the greatest female participation in agriculture in peasant and indigenous family farming. Women receive a tiny

[1] MAyDS, 2020. Second National Determined Contribution of the Republic of Argentina.

part of the monetary benefits, by being linked to little or no commercialized products or processes; and there is a perception that their salaries are "supplementary" to the salaries from men.

8. **Climate Change and other weather-related events present critical risks for agriculture and the welfare of farmers.** Rising temperatures and precipitation variability are expected to lead to more frequent and intense natural disasters, such as heat waves, floods and droughts, impacting people's health, water resources and food security. It is estimated that productivity losses associated with climate change can reduce agricultural GDP between 3 percent and 17 percent in some countries of the region[2]. Small-scale farmers and rural populations are particularly vulnerable to the effects of climate change due to their dependency on rainfed agriculture for food production and income generation, as well as their limited capacity to adapt. Securing future investments from damaging storms, adapting infrastructure in response to erosion and flooding, as well as raising awareness and improving technical capacity to cope with climate change impacts are key to improve adaptation of human activities and livelihoods which will be impacted by these events.

9. **Sustainable management of natural capital offers important opportunities to mitigate against and adapt to climate change effects**. In 2016, thirty-seven percent of Argentina's Greenhouse Gases (GHG) emissions came from agriculture, livestock, silviculture, and other land use sectors. Particularly, 9.8 percent of total emissions came from land-use change and silviculture, largely due to deforestation for livestock and agriculture production (SAyDS bis, 2019). It is envisaged that the increase in total agricultural production by 2030 will be driven by agricultural technification, improved productivity and yields, as well as increase in meat and crop production, and some area expansion. To manage the associated adverse environmental impacts and enable green and resilient agricultural sector growth, public policy instruments and financing to provide incentives for clean and green agricultural intensification.

10. **Digital agriculture presents a unique opportunity to promote sustainable economic growth, but challenges still persist [3]**. The Digital Agriculture Profile for Argentina leverages the expertise of stakeholders to evaluate the current landscape of digital agriculture in Argentina, considering its key actors across value chains, the main challenges they face, and the potential to overcome these barriers through the adoption of innovative digital technologies. Currently, 80 percent of farmers use basic technologies, while about 10 percent farmers used advanced digital technologies (i.e., remote sensing, machine learning tools, etc.). Mainstreaming digital agriculture will require further analysis of enabling factors, but identifying and prioritizing digital technologies allows donors, governments, investors, and other stakeholders to focus on the technologies with the highest potential in order to maximally improve food production in Argentina.

11. **Over the past decades, the agriculture sector has been driving productivity innovation in the country, ahead of other productive sectors of the economy in terms of output and cost efficiency.** Between 1973 and 2016, agricultural production increased 3.35 times, compared to overall GDP which increased by 2.30 percent and GDP per capita by 1.35 percent (Lema & Hermo, 2019). For the latest data available (2019), research and development in the agriculture sector represented 16.9 percent of the public sector funds assigned to research and development, against 9.5 percent of the private sector funds allocated to the same end. Digital agriculture presents a unique opportunity to promote sustainable economic growth, but challenges still persist. Currently,

[2] *Estudio de la Potencialidad de Ampliación del Riego en Argentina* (FAO- UTF/ARG/017/ARG; 2015).
[3] Argentina Digital Agricultural Profile (DAP); World Bank-FAO, 2020

80 percent of farmers use basic technologies, while about 10 percent farmers used advanced digital technologies (i.e., remote sensing, machine learning tools, etc.)

12. **Despite the availability of technical resources provided by the public innovation ecosystem, small and medium enterprises in the agri-food sector face serious difficulties to access financial services that would allow them to invest in innovation and new technologies.** Access to the two main financial instruments offered in the market to finance innovative initiatives, loans, and equity, are constrained by macroeconomic considerations and federal financial regulations. Overall foreign direct investment in the country is estimated to be less than 1.5 percent of GDP[4]. Moreover, in 2020, small and medium enterprises (SMEs) received on average only 18.4 percent of the total amount of the monthly outstanding loans in national and foreign currency (BCRA, 2021)[5].

C. Proposed Development Objective(s)

Development Objective(s) (From PAD)

The objectives of the project are to (i) support economic recovery and promote climate smart practices among Project beneficiaries in Argentina's agri-food system; and (ii) respond effectively in case of an eligible crisis or emergency.

Key Results

Economic recovery

a. Jobs created under initiatives supported by the Project (cumulative numbers of people employed (full-time equivalent).
b. Percentage increase in volume of sales of the agro-industrial SMEs/producer organizations benefited by subprojects under the Project
c. Subprojects by agro-industrial SMEs or producer organizations operational and maintained 12 months after the investment completion (percentage).

Climate Smart Practices

d. Beneficiaries with access to new or improved rural public infrastructure for agricultural risk mitigation and natural resources management (cumulative number).
e. Subprojects financing the adoption of climate-smart technologies and-or practices to anticipate and prevent negative impacts of climate (cumulative number).
f. New climate-smart technologies and practices to avoid negative impacts of climate identified or tested by research subprojects funded through innovation promotion mechanisms under the Project (cumulative number).

D. Project Description

13. **The proposed Project is an Investment Project Financing (IPF) with a total estimated cost of US$ 550 million, comprising an IBRD loan of US$ 400 million that is expected to leverage US$ 100 million of counterpart funding from the Borrower, and US$ 50 million in contributions from local beneficiaries.** The Project cost is

[4] World Bank, 2021.
[5] https://www.bcra.org.ar/PublicacionesEstadisticas/Cuadros_estandarizados_series_estadisticas.asp

expected to be implemented over a 5-year period. The Project will be implemented at the national level, although giving emphasis to lagging provinces and regions to solve existing constraints and bottlenecks limiting development of agri-food systems, responding to demands expressed by provincial governments and private sector initiatives.

14. **The Project is structured into components that seek to provide a comprehensive response to the need to generate conditions for the recovery and consolidation of a modern and more inclusive agro-industrial sector in Argentina.** Thus, it combines investments in public goods (Component 1); private investments to stimulate market access and market development, private investments to stabilize and improve the vulnerability of rural inhabitants (Component 2); investments to develop intellectual production and statistical evidence, and investments to promote agricultural innovation in start-ups (Component 3). All of them permeated by a logic of economic recovery and climate resilience that should allow for growth and development of the sector with greater inclusion and sustainability.

15. **Beneficiaries.** The proposed Project's main target group consists of agro-industrial MSMEs and rural producers' associations (including small and medium family farmers and will promote the inclusion of women, youth, and indigenous people). The Project would also indirectly benefit other agri-businesses, rural enterprises and local population through the expansion of public infrastructure and connectivity services, as well as through the strengthening of key public sector institutions, especially INTA, which are providing support to the agri-food systems[6].

Project Components:

16. **Component 1: Public Infrastructure for Agro-industrial[7] Development.** The component's main objective is to increase the coverage and quality of rural public infrastructure in order to support green, sustainable and inclusive economic recovery, by addressing climate vulnerabilities and increasing competitiveness and job creation in the agri-food system. The main areas of investment include: (i)Climate-resilient infrastructure investments to strengthen and expand *connectivity* with a focus on "last mile" segments in existing networks (e.g., rural/tertiary roads, coverage of internet and digital services, and rural electricity); and (ii) habilitation and improvement of existing primary irrigation and drainage works[8] to protect against climate-induced water scarcity and better management of water resources for agricultural production and processing (expanding works under public domains), in coordination with private investments in downstream segments.

17. **Component 2: Agro-industrial Entrepreneurship and Resilient Rural Livelihoods.** This component will support private investments in agribusiness initiatives and rural livelihoods. Investments will be made through thematic Calls for Proposals (CFP)[9] that will be tailored to respond to specific territorial conditions, with due attention to responsible natural resources management and climate considerations, and the needs of vulnerable beneficiary groups. The Component will operate through four investment windows. Windows 1 and

[6] Public sector institutions are those considered strategic for the proper functioning of the country's agri-food system, for the provision of capacity building and technical assistance to producers and for the development and implementation of innovative and technological solutions in the agriculture sector

[7] When the term "agro-industrial" is used alone, it includes agricultural and agri-food systems, as well as agro-industries.

[8] Investment in new irrigation and drainage schemes that rely on waters of international waterways are not expected.

[9] There will be dedicated CFPs for vulnerable groups, such as women, youth, IPs, etc., which will be held to ensure the participation of said sector of the population.

2 will be dedicated to rural livelihoods investments and windows 3 and 4 will be for agro-industrial businesses. This 4-window mechanism will enable the possibility of an internal graduation of beneficiaries.

18. **Component 3: Innovation for a Green and Inclusive Agri-food System Transformation.** This component seeks to strengthen the institutional capacity of the National Institute of Agricultural Technology (INTA) for it to play a key role in a sustainable economic recovery and development of the country. The main beneficiaries targeted under this component will be: (i) INTA; (ii) INTA Staff; and (iii) Agro-industrial Startups and SMEs that seek funding for the development and/or scaling-up of an agro-industrial innovation. This component aims to promote agri-tech innovation, including digital agriculture, climate-smart practices, and in particular among the rural youth and for enabling a generational transition. Investments are organized in three subcomponents described below.

a. **Subcomponent 3.1: Institutional modernization of INTA.** This subcomponent aims to promote innovation, and improve the agribusiness enabling environment and contribute to strengthen the climate resilience of the Argentinian agri-food sector by contributing to the modernization of INTA´s stock of infrastructure and human capital.
b. **Subcomponent 3.2: Agri-tech ecosystem investments.** Through direct investments in agro-industrial startups and SMEs, this subcomponent will support the development of innovative enterprises in the field of agriculture technology and climate smart agriculture. The activities executed in this subcomponent will leverage existing agri-tech capacity and scientific knowledge of the country from private sector, universities, NGOs, and INTA.
c. **Subcomponent 3.3. Information for strategic analysis and decision making.** This subcomponent will finance key data collection and analytics for strategic decision-making in policy areas related to agriculture sustainability, climate change and rural livelihoods.

19. **Component 4: Project Coordination and Management.** This component will finance overall project management, coordination, and implementation by the the General Directorate of Sectorial and Special Programs and Projects (DIPROSE, by its acronym in Spanish), that is the existing project management unit, located within the Ministry of Agriculture, Livestock, and Fisheries (MAGyP, by its acronym in Spanish).

20. **Component 5: Contingency Emergency Response Component (CERC).** The objective of this component is to provide immediate response to an Eligible Crises or Emergency, as may be presented in the future.

Legal Operational Policies

	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

Summary of Assessment of Environmental and Social Risks and Impacts

21. **The environmental risk classification is Moderate at this stage**. The Project provides many positive environmental impacts. For example, the Project is developed to improve agriculture and through investing in resilient planning systems, Climate Smart Agriculture (CSA), and infrastructure. In addition, it is expected to generate significant climate co-benefits. Interventions are to improve the management of natural resources and provide sustainability to interventions while reducing vulnerability and increase resilience by means of activities to impact on connectivity (roads, electricity, water), innovation in agrotechnology, employment (jobscreation) and livelihoods. From an environmental perspective, project related risks will stem from road construction, road rehabilitation, power supply, water supply, and farmland investments. The anticipated key concerns are (i) consumption of water and raw materials for civil works; (ii) generation of construction related wastes; (iii) nuisance related to dust generation, vibration and noise; (iv) water overuse for irrigation purposesand (v) occupational health and safety hazards for the workforce. Such impacts are expected to be site-specific (once geographically determined), limited in scope and duration, and easily mitigated with proven technologies and measures.

22. **The social risk classification of the Project is Moderate**. The proposed project is expected to generate important positive impacts for small farmers, considering the social inclusion of young people, women, and Indigenous People in its benefits. Benefits will include i) job creation in the agri-food system, ii) access to rural/tertiary roads, to water; to coverage of internet networks, digital services, rural electricity; iii) Support for private agricultural and agro-industrial investment through a facility to provide matching grants to leverage local initiatives to promote sustainability in the agri-food systems and improve competitiveness; iv) finance demand-driven rural investments subprojects aimed at improving the living conditions and address basic unmet needs of the targeted poor rural communities, including women, youth and indigenous people and consisting of, inter alia, small-scale investments such as the rehabilitation or construction of rural community/agricultural production infrastructures, food-security activities and the construction or improvement of household sanitation systems, iv) TA and capacity building for beneficiaries. The construction and/or rehabilitation of roads could pose some risks in land acquisition and involuntary resettlement. However, these impacts are expected to be moderate since the project will include in its exclusion list and as part of the Environmental and Social Management Framework (ESMF) any activity that would cause physical displacement. There are also other moderate cross-cutting social risks, including (i) possible exclusion of vulnerable populations and groups whose interests could be under-represented, such as women, elders, youth, persons with disabilities, sexual and gender minorities, indigenous peoples, if targeted strategies to ensure their engagement is not incorporated into the project design; (ii) labor influx risks, despite project efforts to promote local hiring of community workers; (iii) the intersection with the ongoing COVID-19 health emergency, which could pose additional health challenges particularly for project workers and communities.

23. Measures to mitigate these risks and impacts on vulnerable people will be identified during the project preparation phase. They will be included in the project ESCP, ESMF, SEP, RFP, IPPF, and LMP.

E. Implementation

Institutional and Implementation Arrangements

24. **The agency responsible for implementation is DIPROSE of MAGyP**. DIPROSE has overseen a wide range of projects with external multilateral financing, as well as bilateral donors, for a long time. DIPROSE has been responsible for different Bank-financed operations since early 1990s. It has received continuous support to expand and enhance its capacity. It has a large cadre of staff covering relevant implementation areas such as

financial management, procurement, monitoring and evaluation, and client engagement. During implementation, DIPROSE will seek cooperation agreements with other agencies of the federal and provincial governments, according to the nature of the activities, aiming at increasing efficiency in the service delivery and results. DIPROSE will have as a role the Environmental and Social Framework implementation. Similarly, for the implementation of investment sub projects, DIPROSE will also sign agreements with other national or provincial institutions as required by the nature and the coverage of the activities, building on past experiences and lessons learned, and delegating to them part of the responsibilities for implementation or supervision.

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