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PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE

Report No.: PIDA1184

Project Name	National Agricultural Innovation (P131013)
Region	LATIN AMERICA AND CARIBBEAN
Country	Peru
Sector(s)	Agricultural extension and research (80%), Central government administration (20%)
Theme(s)	Rural services and infrastructure (35%), Rural policies and institutions (35%), Participation and civic engagement (10%), Indigenous peoples (10%), Other environment and natural resources management (10%)
Lending Instrument	Investment Project Financing
Project ID	P131013
Borrower(s)	Government of Peru
Implementing Agency	Instituto Nacional de Innovacion Agraria
Environmental Category	B-Partial Assessment
Date PID Prepared/Updated	25-Oct-2013
Date PID Approved/Disclosed	15-Nov-2013
Estimated Date of Appraisal Completion	24-Oct-2013
Estimated Date of Board Approval	17-Dec-2013
Decision	

I. Project Context

Country Context

1. Peru is a middle income country in Latin America bordering the Pacific Ocean. The country can be divided in three major geographic zones: a coastal strip along the Pacific (Costa, covering 10% of the country area and hosting 55% of the population), which has a very dry climate; an Andean mountain range (Sierra, 30% of the area and 32% of the population) that reaches up to 7000m above sea level; and the lowland Amazonian forest areas (Selva, 60% of the country and 13% of the population) that stretch towards Brazil. Peru has an estimated population of 29.5 million inhabitants with an average age of 26 years (INEI, 2007). The GDP per capita is US$ 6,570. During the last 15 years, Peru has enjoyed economic growth averaging 7.5% per year. However, the distribution of wealth is unequal, with a Gini coefficient of 0.481 (2009) and with the Costa progressing more quickly than the Sierra or Selva. Peru has reduced poverty rates in the last decade significantly, by 14.6 percentage points between 2007 and 2011, however, 34% of the population still lives in poverty and 9% in extreme poverty, with the levels in rural areas of the country, especially in the Sierra, being substantially higher. The country has traditionally relied on mining

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development, agriculture and fisheries, however, in recent years there has been a remarkable growth and diversification in sectors such as agribusiness and energy. While the mining sector is the main exporter, it has also caused environmental pollution and social tensions. The further development of other sectors such as agriculture and tourism is key to creating gainful employment, reducing social tensions and diversifying the economy.

Sectoral and institutional Context

While Peru has a large surface, most of it is desert, rugged mountains or dense forest. Agricultural activities cover only 4.3% of the total surface area (not including pastures). The main agricultural products are coffee, potato, rice, cotton, asparagus, sugar and corn. A modern, competitive agro-export sector in the Costa coexists with medium sized farms with low input use, (51% of cultivated area); small and medium sized farms with high input use (31% of the area); and subsistence farms, mainly in in the Sierra and the Selva (15% of the cultivated area). The limited availability of agricultural land in the Costa and Sierra is one of the causes of the migration of rural people towards the Selva, where land may be acquired at minimal costs. The agricultural area of Peru has been expanded through two main developments: more irrigation in the coastal deserts to support modern export-based agriculture, but with the risk of overexploiting water resources; and the often illegal or unregulated clearance of forest in the Selva, by poor peasants.

Primary agriculture represents about 9% of GDP. Considering the added value of the agroindustry, the contribution increases to 16% of GDP. Outside of Lima, the capital city, agriculture and agribusiness may represent between 20% and 60% of regional GDP, even in regions where mining is of high importance. During the last twelve years, Peruvian agriculture has grown at an average rate of 4.3%, with the livestock subsector growing at a 5.1% annual rate. 2.35 million families (close to 10 million people) depend on agriculture, with the majority of them being located in the Sierra. Agriculture creates 7 million jobs but at very different income levels: annual net income per farm family is US$2,800 in the Costa, US$1,900 in the Selva and only US$1,000 in the Sierra.

Data from the LAC Equity Lab show that 60% of rural Peruvians are considered poor (daily income below $4), versus less than 20% of urban dwellers. Close to 30% would be qualified as vulnerable (daily income between $4 and $10). Less than 10% of rural Peruvians are part of the middle class, versus 40% in the urban areas. Agricultural development, to which the proposed project strongly contributes will have major impacts on rural income levels, and will make major contributions to reduced poverty and shared prosperity.

Peruvian agriculture has a variety of challenges to overcome: low yields, also in comparison with other countries in the region; small and fragmented production plots facing high transaction costs; fragile soils with drainage, salinity and erosion problems; limited water availability; lack of connectivity especially in the Sierra; and an unpredictable climate. Low levels of technology contribute to the productivity gaps observed. Out of the 20 major agricultural products (by value of production), six (potato, cassava, corn, wheat, barley, bean) have gaps of 100% or more in comparison with the best country in Latin America, seven have gaps between 25% and 100%, and three have gaps of around 25%.

Peruvian agriculture has had some major achievements: agricultural exports - particularly of non-traditional sectors (e.g., horticulture and organic coffee) - have grown quickly and the sector supports a national gastronomy culture of worldwide reputation.

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The country has had mixed success with the implementation of its agricultural innovation policies. Public investment levels in agricultural innovation are below the average in other Latin American countries. In 2008, public investments in agricultural research as a % of agricultural value added) were around 0.47, compared to 1.22 for Chile, 1.21 for Mexico and 1.66 for Brazil. The university system contributes little in terms of research, and private participation in research and development is almost zero. Links between public research organizations and the private sector are almost absent. The regionalization of the agricultural innovation agenda, envisaged in various policy documents, is proceeding slowly and with difficulties, due to an institutional design that remains centralized and the weak capacity of the regional governments.

In Peru, long term climate change is characterized by two major impacts, the retreat and disappearance of glaciers, reducing water supply in coastal and Andean areas, and changes in the El Niño phenomenon that impacts atmospheric cycles. Reduced water supply and intense competition with urban water use constrain the growth potential of agriculture, especially in the Costa. The changes in the El Niño phenomenon concern both intensity and frequency and are making Peru' agriculture more uncertain. This happens through several meteorological events: frost, cold fronts, droughts and floods impact food security crops such as corn, potato, yellow corn, barley grain, rice, banana, wheat, dry beans and beans.

The National Agricultural Innovation Institute (INIA, in Spanish) was established in 1978. INIA has been charged with designing and im plementing, in partnership with the private sector and the universities, the national strategy for agricultural innovation. It is also responsible for agricultural research, technology transfer, and technical assistance, as well as the conservation of genetic resources and production of seeds, seedlings and breeding of species of high genetic value. INIA has been continuously reorganized. After some initial successes in the 1980s and 1990s, it slowly lost significance, experienced flat or falling annual budgets and is now in need of substantial institutional strengthening. In 2008, through Legal Decree 1060, INIA was tasked with leading the National Agricultural Innovation System (SNIA), with the support and the guidance of a newly to be established CONICA (National Commission for Innovation and Training in Agriculture). Until 2013 INIA made little progress on this new mandate.

The SNIA includes, together with INIA, private and public universities, research centers, private sector agribusiness, public and private suppliers of agricultural advisory services, and producer organizations. The SNIA has been operating in a weak institutional environment, lacking the necessary responsiveness to the producers' needs, and struggling to prioritize strategic areas of intervention. So far, the system has only been operating informally and never developed into a connecting network used to inform public policies, coordinate private initiatives and implement shared research projects. This lack of synergy prevents the Peruvian agricultural sector from realizing the productivity gains that would be provided by a more integrated system.

From 2002 to 2010 the World Bank supported the INCAGRO (Innovation and Competitiveness for the Peruvian Agro) program, which operated a series of competitive funds to strengthen strategic and adaptive research as well as technical assistance and capacity building. INCAGRO mobilized many research organizations, universities, NGOs and farmer organizations, putting in place a de facto decentralized innovation system with strong private sector participation. INCAGRO's economic impact was assessed by an independent expert team which estimated a rate of return to investments of 24% and commented favorably on the links between public, private, farmer and non-

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governmental organizations. While having a satisfactory return on investments, INCAGRO was not sufficiently institutionalized in the public agricultural sector and was seen by the Ministry of Agriculture as potentially undermining the role of INIA.

To strengthen Peru's agricultural innovation capacity, the Peruvian government is now pursuing a two pronged approach in which INIA's capacity to do research as well as the functioning of the agricultural innovation system will be improved. For this purpose the Ministry of Agriculture has established the National Agricultural Innovation Program (PNIA, in Spanish), which is made up of two main projects: the project to consolidate the national agricultural innovation system (PSNIA, in Spanish), evolving from the earlier INCAGRO program; and the project to improve the strategic research services of INIA (PINIA, in Spanish). PSNIA will be implemented through the World Bank and is the subject of this document. PINIA will be implemented simultaneously through the Inter-American Development Bank (IDB). A summary of PNIA is provided in Annex 8. The GoP is also pursuing a change of legal status for INIA, towards a Specialized Technical Organism, which will provide more autonomy, room for sector based governance, and improved employment conditions.

PSNIA will support the National Agricultural Innovation System (SNIA) and its actors through the institutionalization in INIA of a Technical Secretariat that will coordinate the SNIA. The Technical Secretariat will be equipped with an M&E system, a knowledge management unit, a policy analysis unit, a fund management and a linkage unit, especially towards regional governments. The Technical Secretariat will operate a series of competitive grant funds, supporting the empowerment of producer organizations, strengthening strategic competencies, and supporting skills development for agricultural innovation. The project will consolidate a decentralized agricultural innovation system and institutionalize its leadership.

II. Proposed Development Objectives

To support the effectiveness and cooperation of member organizations of Peru's agricultural innovation system in providing or developing improved agricultural technologies for small and medium sized farms

III. Project Description

Component Name

Strengthening Capacities of the National Institute for Agricultural Innovation (INIA) to Lead the National Agricultural Innovation System (SNIA)

Comments (optional)

Component Name

Consolidating the Market for Innovation Services

Comments (optional)

Component Name

Strengthening Strategic Capacities in the SNIA

Comments (optional)

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Component Name
Project Management
Comments (optional)

IV. Financing *(in USD Million)*

Total Project Cost:	128.70	Total Bank Financing:	40.00
Financing Gap:	0.00		

For Loans/Credits/Others	**Amount**
Borrower	56.95
International Bank for Reconstruction and Development	40.00
Inter-American Development Bank	1.00
Local Farmer Organizations	30.75
Total	128.70

V. Implementation

VI. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	**Yes**	**No**
Environmental Assessment OP/BP 4.01	×	
Natural Habitats OP/BP 4.04	×	
Forests OP/BP 4.36	×	
Pest Management OP 4.09	×	
Physical Cultural Resources OP/BP 4.11		×
Indigenous Peoples OP/BP 4.10	×	
Involuntary Resettlement OP/BP 4.12		×
Safety of Dams OP/BP 4.37		×
Projects on International Waterways OP/BP 7.50		×
Projects in Disputed Areas OP/BP 7.60		×

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Comments (optional)

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