

**COMBINED PROJECT INFORMATION DOCUMENTS / INTEGRATED
SAFEGUARDS DATA SHEET (PID/ISDS)
APPRAISAL STAGE**

Report No.: PIDISDSA20236

Date Prepared/Updated: 12-Oct-2016

I. BASIC INFORMATION

A. Basic Project Data

Country:	Peru	Project ID:	P156250
		Parent Project ID (if any):	
Project Name:	Strengthening the Science, Technology and Innovation System in Peru (P156250)		
Region:	LATIN AMERICA AND CARIBBEAN		
Estimated Appraisal Date:	26-Sep-2016	Estimated Board Date:	15-Dec-2016
Practice Area (Lead):	Trade & Competitiveness	Lending Instrument:	Investment Project Financing
Borrower(s):	Ministry of Economy and Finance		
Implementing Agency:	CONCYTEC		
Financing (in USD Million)			
Financing Source			Amount
Borrower			55.00
International Bank for Reconstruction and Development			45.00
Total Project Cost			100.00
Environmental Category:	B - Partial Assessment		
Appraisal Review Decision (from Decision Note):	The review did authorize the team to appraise and negotiate		
Other Decision:			
Is this a Repeater project?	No		

B. Introduction and Context

Country Context

Peru has emerged as a growth star in Latin America and the Caribbean (LAC). Its economy grew an average of 6.4 percent per year during the last decade, the second fastest in the region. Over the same period, Peru doubled its per capita income, whereas the region as a whole increased per capita income by only half. Growth helped Peru reduce poverty from 54.8 percent to 25.8 percent of the population between 2001 and 2012, faster than other countries with similar incomes. Peru also made strides in terms of shared prosperity: between 2004 and 2013, the real income per capita of the poorest 40 percent of Peru's population grew at an average 6.8 percent, above the 4.4 percent national average.

Strong macroeconomic and structural reforms over the last 20 years have driven these successes. Macroeconomic stabilization in the 1990s included the introduction of a more flexible exchange rate regime, inflation-targeting, fiscal discipline, and continued public debt reduction. Structural reforms covered areas such as financial liberalization, trade, and product and factor market regulations. As a commodity exporter, Peru also benefited significantly from the commodity boom, particularly between 2004 and 2013. Relative to other countries in LAC, Peru used a significant part of the commodity boom for capital accumulation. Together with the demographic dividend, this provided Peru with enough inputs to fuel growth. Total factor productivity also contributed about a third of growth over the past 15 years.

Peru has a sound macroeconomic policy framework to face the headwinds of the new global context. Growth slowed to 2.4 percent in 2014, but has since recovered to 3.3 percent in 2015, a trend that is expected to continue in 2016-17. Ample macroeconomic buffers allowed the country to undertake moderate, prudent, and temporary counter-cyclical fiscal policy. The technocratic government that took office on July 28, 2016 is expected to maintain a prudent macroeconomic stance and to continue and deepen key structural reforms.

Sectoral and institutional Context

To sustain growth, Peru needs to spur productivity. Overall progress notwithstanding, Peru still suffers from large income and productivity gaps with high-income countries. Its output per worker is still only 25 percent of the United States, lower than that of Mexico (35 percent) and Chile (36 percent). Government efforts, therefore, will need to focus on fostering productivity gains, across and within firms (including process and product innovation), and accelerating private sector investments. The agenda in this area is significant, but Peru has started with simplification of regulation on business entry, operation, and exit, increased transparency of product market regulations, and implemented reforms that enable factors of production (labor, capital and land) to move seamlessly from the least efficient to the most innovative firms, which raises productivity.

Within-firm productivity growth depends on firms' ability to innovate effectively. This, in turn, depends on the technologies, processes, human capital, and managerial skills available to them, their own growth aspirations and internal capabilities, and the expected profitability of target markets. Unfortunately, Peruvian firms invest too little in innovation (2.5 percent of sales compared to 3.5 percent in Chile and 5.6 percent in the EU), indicating that the innovation system might not be functioning properly. Shortcomings in Peru's innovation system limit reliable access to the technologies, human capital, and know how that firms need to innovate.

To become more competitive and increase countrywide productivity, Peruvian firms need to invest in high-return innovation. Firms that invest in innovation are more likely to introduce new

products, but low returns deter further investment. Peruvian firms that spend on innovation are more likely to introduce new products or processes than firms in other LAC countries except Chile. However, Peruvian firms that introduce new products or processes see only about 38 percent higher sales per employee, compared to about 100 percent higher sales per employee in Colombia, Panama, Uruguay, Costa Rica, and Chile.

Peru's science, technology, and innovation (STI) system was created in the late 1960s and reformed in the mid-2000s. The 2004 Science, Technology, and Technological Innovation Framework law (Law No. 28303) entrusted the National Council for Science, Technology, and Innovation (CONCYTEC) with the responsibility for governing the STI system and for developing, promoting, and coordinating STI policy. The law also entrusted CONCYTEC with policy implementation through Fondo Nacional de Desarrollo Científico Tecnológico y de Innovación Tecnológica (FONDECYT), its operational arm. FONDECYT manages programs to support basic and applied research, technology transfer, and higher education. Other public actors in Peru's STI system include the Ministry of Production, the Ministry of Economy and Finance (MEF), the Ministry of Education, the Presidency of the Council of Ministries (PCM), the Development Finance Corporation (COFIDE), and the ministries and their respective sector-oriented research and technology organizations and funding programs. An eight-fold increase in CONCYTEC's budget (from US\$5 million in 2012 to US\$39 million in 2015) has supported the government's priority to strengthen the STI system in Peru.

C. Proposed Development Objective(s)

Development Objective(s)

The project's development objective is to strengthen the STI system to improve research skills and firm-level innovation.

Key Results

In terms of expected results, the project expects to finance (among others): i) 100 research papers submitted for publication to internationally indexed journal, ii) 56 students enrolled in PhD programs supported by the project, iii) 5 innovation clusters and iv) an improvement in the effectiveness of innovation programs through the evaluation of 20 programs under the Public Expenditure Review methodology and the incorporation of at least 6 recommendations in official government documents.

D. Project Description

The Project comprises four components. Each component will contribute to strengthening the STI system of Peru. The components are: (1) Improving the Institutional Framework of the National STI System (2) Strategic Programs: Productivity & Innovation Fund and Competitiveness Reinforcement Initiatives for Productive Innovation (3) Research and Innovation Capacity and (4) Project Management and Monitoring & Evaluation. While Component 3 builds upon CONCYTEC's established record of promoting scientific research, Components 1 and 2 will provide novel and innovative contributions to initiate a systemic reform of the STI system in Peru and to re-align it with the priorities of the private sector.

Component Name

Improving the Institutional Framework of the National STI System

Comments (optional)**Component Name**

Strategic Programs: Productivity & Innovation Fund and Competitiveness Reinforcement Initiatives for Productive Innovation

Comments (optional)**Component Name**

Research and Innovation Capacity

Comments (optional)**Component Name**

Project Management and Monitoring & Evaluation

Comments (optional)**E. Project location and salient physical characteristics relevant to the safeguard analysis (if known)**

The Project will be implemented in the Republic of Peru.

F. Environmental and Social Safeguards Specialists

Alonso Zarzar Casis (GSU04)

Raul Tolmos (GEN04)

II. Implementation**Institutional and Implementation Arrangements**

The implementing agency of the project will be the National Council for Science, Technology and Innovation (CONCYTEC), which will be responsible for all project implementation, procurement, safeguards, financial management and disbursements. As an independent agency under the PCM, CONCYTEC is the coordinating agency of the STI system of Peru, which includes highly specialized public institutions, among which are universities and public institutes. Law 28303 of 2004 made CONCYTEC responsible for developing, promoting, and coordinating STI policy.

III. Safeguard Policies that might apply

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	This Project is categorized as environmental risk Category B, given that the proposed activities are not likely to result in significant negative impacts on human populations and/or environmentally important areas. While no direct, physical, environmental

		impacts are anticipated to result from the proposed project, some of the grant and research financing to be supported may have some environmental impacts, both positive and negative. An Environmental Management Framework (EMF) has been prepared since it appears to be more appropriate to support the screening and development of measures, as needed, to address potential environmental impacts and risks. Moreover, since activities financed under Subcomponent 3.2 (Improving research infrastructure) may also have environmental implications (e.g. disposal of materials/waste, rehabilitation of facilities etc.), they have been addressed through this EMF.
Natural Habitats OP/BP 4.04	No	This policy is not triggered since the proposed activities will be carried out in existing locations and no conversion of natural or critical habitats is involved.
Forests OP/BP 4.36	No	This policy is not triggered given that the Project activities are to be carried out in existing locations without any involvement on forest activities.
Pest Management OP 4.09	No	This policy is not triggered since the project activities will not involve the purchase or use of significant quantities of pesticides.
Physical Cultural Resources OP/BP 4.11	No	This policy is not triggered given that the proposed activities are to be carried out in existing locations without affecting physical cultural or archaeological resources.
Indigenous Peoples OP/BP 4.10	No	The project is aimed at academic institutions and enterprises interested in productive innovation and technology upgrading as well as to individuals holding PhD degrees for human capital strengthening. The project will operate in the main urban areas of the country, where the relevant indigenous peoples benefiting from the project do not meet the characteristics to trigger OP 4.10. Furthermore, no adverse impacts are expected, and therefore the project does not trigger this policy. No civil works will be financed outside of existing research facilities and there will be no impacts on Indigenous Peoples communities.
Involuntary Resettlement OP/ BP 4.12	No	This policy is not triggered since the Productivity and Innovation Fund under subcomponent 2.3 will exclude proposals that would require land acquisition that could entail physical or economic displacement of people. No civil works will be financed outside of

		existing research facilities and therefore there will be no need for land acquisition.
Safety of Dams OP/BP 4.37	No	This policy is not triggered given that the project will not support the construction or rehabilitation of dams nor will support other investments which rely on the performance of existing dams.
Projects on International Waterways OP/BP 7.50	No	This policy is not be triggered because the project will not affect international waterways as defined under the policy.
Projects in Disputed Areas OP/BP 7.60	No	This policy is not triggered because the proposed project will not affect disputed areas as defined under the policy.

IV. Key Safeguard Policy Issues and Their Management

A. Summary of Key Safeguard Issues

<p>1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:</p> <p>None of the social safeguard policies has been triggered for the project. It is not expected to have involuntary resettlement or the involuntary use of land, or impacts in assets. There are no Indigenous People being either adversely affected or benefited by the project. In accordance with OP/BP 4.01 on Environmental Assessment, an Environmental Management Framework (EMF) was completed. The Project was classified as category B, since its components were found to have relatively limited potential environmental impacts.</p>
<p>2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:</p> <p>Most Project components are unlikely to have significant, if any, environmental effects. It is expected that most environmental effects, also limited, might be associated to installation and operation of some equipment in academic research centers.</p>
<p>3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.</p>
<p>4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.</p> <p>An Environmental Management Framework (EMF) has been prepared by the Borrower and reviewed by the Bank. The EMF includes the legal and regulatory framework applicable to the Project as well as institution arrangement to ensure compliance of national environmental regulations and WB environmental safeguards. As stated in the EMF, beneficiary academic institutions receiving funding for purchasing of applied research equipment will have to prepare a matrix containing potential risks and impacts on the environmental, health and safety as well as corresponding mitigation measures.</p>
<p>5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.</p> <p>The National Council for Science, Technology and Innovation (CONCYTEC) will be the implementing agency of the project and will be responsible for all safeguards.</p>

B. Disclosure Requirements

Environmental Assessment/Audit/Management Plan/Other	
Date of receipt by the Bank	13-Sep-2016
Date of submission to InfoShop	19-Sep-2016
For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors	
"In country" Disclosure	
Peru	16-Sep-2016
<i>Comments:</i> The EMF was disclosed on CONCYTEC's main websites.	
If the project triggers the Pest Management and/or Physical Cultural Resources policies, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/Audit/or EMP.	
If in-country disclosure of any of the above documents is not expected, please explain why:	

C. Compliance Monitoring Indicators at the Corporate Level

OP/BP/GP 4.01 - Environment Assessment	
Does the project require a stand-alone EA (including EMP) report?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Are the cost and the accountabilities for the EMP incorporated in the credit/loan?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
The World Bank Policy on Disclosure of Information	
Have relevant safeguard policies documents been sent to the World Bank's Infoshop?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
All Safeguard Policies	
Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Have costs related to safeguard policy measures been included in the project cost?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]

V. Contact point**World Bank**

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Borrower/Client/Recipient

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VII. Approval

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Approved By		
Practice Manager/ Manager:	Name: Alvaro Enrique Quijandria Fernandez (PMGR)	Date: 12-Oct-2016
Country Director:	Name: Alberto Rodriguez (CD)	Date: 17-Oct-2016