Public Disclosure Authorized

Public Disclosure Authorized
Public Disclosure

Concept Environmental and Social Review Summary

Concept Stage

(ESRS Concept Stage)

Date Prepared/Updated: 08/19/2022 | Report No: ESRSC02947

BASIC INFORMATION

A. Basic Project Data

Country	Region	Project ID	Parent Project ID (if any)
Peru	LATIN AMERICA AND CARIBBEAN	P179037	
Project Name	Irrigation for Climate Resilient Agriculture		
Practice Area (Lead)	Financing Instrument	Estimated Appraisal Date	Estimated Board Date
Water	Investment Project Financing	11/8/2022	2/1/2023
Borrower(s)	Implementing Agency(ies)		
Republic of Peru	Programa Subsectorial de Irrigaciones - PSI		

Proposed Development Objective

The project development objectives (PDOs) are to (i) increase the efficiency, productivity, and resiliency of irrigation systems and (ii) improve the capacity of Water User Organizations (WUOs) and subnational governments to provide irrigation services appropriate to the needs of farmers.

Financing (in USD Million)	Amount
Total Project Cost	125.00

B. Is the project being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?

No

C. Summary Description of Proposed Project [including overview of Country, Sectoral & Institutional Contexts and Relationship to CPF]

Peru experienced exceptional economic growth over the past two decades, yet high levels of inequality persist. The inequality is especially visible when comparing rural, where the majority of the country's poor reside, and urban areas. The majority of the rural labor force works in the agricultural sector. Although irrigated yields are double those of rainfed (dryland) yields in Peru and are far more resilient to climate change, only 22 percent of agricultural land—

Public Disclosure

2.6 million hectares—is under irrigation. This is significant given the role irrigation can play in lowering poverty levels, achieving better food security, and reducing farmers' vulnerability to climate change and climate variability.

The Sub-sectoral Irrigation Program (Programa Subsectorial de Irrigaciones, (PSI)) is the governing body of the irrigation subsector at the national level and is responsible for improving agricultural productivity. Water users' organizations (WUOs) are responsible for distributing water and the operational management of irrigation systems. WUOs cover more than 1.4 million hectares and serve almost three-quarters of a million users, yet lack technical capacity, specialized equipment, and reliable information about the availability and use of water resources. This makes it difficult for them to manage water resources sustainably and efficiently.

The project development objectives (PDOs) are to (i) increase the efficiency, productivity, and resiliency of irrigation systems and (ii) improve the capacity and capability of WUOs and subnational governments to provide irrigation services appropriate to the needs of the farmers.

Component A: Efficient Irrigation Investments (US108$ million, of which US$86 million IBRD). This component will improve irrigation services and agricultural productivity for 130 farmer user groups vulnerable to climate variability and climate change. The component is divided into two sub-components: (i) improving efficiency of water delivery systems, which includes modernizing infrastructure and management; and (ii) improving irrigation efficiency on farms. Component A will support work across 8,000 hectares.

Component B: Improving Governance and Promote Investments in Irrigation and Drainage (US$12 million, of which US$10 million IBRD). This component will support policy and institutional reforms, tools, and capacity building of administrative systems at the local, regional and national levels to develop and manage irrigation services and inform water governance. This component may also support pilots to contribute to the achievement of a sustainable nexus between water resources management and agriculture productivity.

Component C: Project Management and Interagency Coordination (US$5 million, of which US$4 million IBRD). This component includes activities to support the administration of the Project and the strengthening of the project implementation unit (PIU) within the PSI.

The Project is closely aligned with the current Country Partnership Framework FY17–FY21, specifically Pillar I Productivity for Growth, Objective 3 Facilitate absorption of skills and technology, especially by small- and medium-sized businesses, and Pillar III Natural Resources and Climate Change Risk Management, Objective 8 Strengthen the Management of Natural Resources. A Country Assistance Strategy is currently under formulation.

Public Disclosure

D. Environmental and Social Overview

D.1. Detailed project location(s) and salient physical characteristics relevant to the E&S assessment [geographic, environmental, social]

Peru is the third largest country in South America and hosts a population of 34 million. It has habitats ranging from the arid plains of the Pacific coastal region in the west to the peaks of the Andes mountains extending from the north to the southeast of the country to the tropical Amazon basin rainforest in the east with the Amazon River. Peru is one

of the twelve countries considered megadiverse and is estimated to possess between 60 and 70% of the world's biological diversity. This advantageous situation has been threatened by inadequate management of existing resources, leading to critical levels of deterioration in certain areas of the country.

Most of the agricultural land in Peru's coastal region is irrigated to sustain commercial agriculture. However, in the highlands and high-altitude areas of the rainforest, where 50 percent of the rural population lives in poverty, only about 20 percent of the cultivated land is under irrigation (FAO, 2022). Most of these consist of small, traditional irrigation systems supplied mostly from surface water sources through open canals, and that are characterized by low efficiency. Water user organizations (WUOs) are responsible for distributing water and the operational management of these. These associations are groups of private water users, who pool their financial, technical, material, and human resources for the operation and maintenance (O&M) of a water system. The subprojects to be financed are managed through these traditional systems already in operation.

Peruvian agriculture is a smallholder economy in which 85% of farmers have plots of less than 10 hectares, with a predominance of productive units with an area of between 3 and 10 hectares (33%). Of the existing 5.7 million rural properties, only one third (1.9 million) are registered in the public registry, and smallholdings continue to grow (MIDAGRI, 2015). Small and medium-sized Peruvian agriculture is diverse, operates in very heterogeneous contexts, and shows different degrees of articulation with markets (GRADE, 2015). Productive units can differ in land tenure, size and level of fragmentation, level of specialization/diversification in cultures and animal husbandry production, origin of workers, and crop destination, among other differentiating factors. Conditions in each natural region, infrastructure and services coverage, and level of access to markets also influence the potential to develop sustainable agriculture activities for these small and medium productive units. Certain areas of the country are reported to have illegal crops and higher levels of violence risk, but there is no information available at this time to ascertain if this is the case where the subprojects will be developed.

Among Peruvian cultivators, subsistence family farmers are among the most vulnerable groups, and they account for 73% of the production units in the sector (GRADE, 2015). These PUs are managed by indigenous people (47%) or women (30%) with educational levels of primary school or less (45%). They have a higher percentage of their agricultural production destined for self-consumption (37%), a lower percentage of purebred animal ownership (17%), and a lower percentage of total surface area registered in Public Registries (15%). Child and formative labor is prevalent in the agricultural sector in Peru, particularly in rural and indigenous communities of the country.

The project's direct beneficiaries will include families that belong to rural and/or native communities (IP), that collectively manage resources (land and water) , as well as small independent agriculture landowners and land users. Indirect beneficiaries will include institutions involved in the management of water resources, local and regional governments that play a role in the local and regional economic development, as well as population at large because of production improvement (food security, local job creation, contribution to the GNP, etc.).

D. 2. Borrower's Institutional Capacity

The implementing agency will be the Sub-sectoral Irrigation Program (Programa Subsectorial de Irrigaciones, or PSI) which is the decentralized governing body of the irrigation subsector at the national level and is an entity attached to the Ministry of Agrarian Development and Irrigation (MIDAGRI). Based on available information, the PIU is expected to be staffed with PSI personnel and additional hires. It is expected to have an E&S team at headquarters and territorial teams in 7 provinces. These institutional arrangements will be verified and assessed during project preparation.

Public Disclosure

During the identification mission, PSI mentioned that it has previous experience working on projects with multilateral lenders, including the World Bank. As such, it has experience in applying WB safeguard policies and the environmental and social (E&S) standards of other development banks, as it was the implementing unit of the Sierra Irrigation Subsector Project (P104760) whose ICR indicates a good track record of safeguards implementation performance. Therefore, the implementing unit for the proposed project is considered to have relevant prior experience in projects' E&S assessment and management processes following development banks' E&S standards.

As PSI has not implemented projects under the ESF, the Bank will provide specific training to its specialists to help them identify and manage E&S risks and impacts relevant to the proposed project activities in accordance with the ESF requirements. In addition, in an attempt to build adequate institutional capacity, the WB task team will work closely with the implementing agency to develop a training plan during the early stages of implementation on (i) E&S management tools; (ii) ESCP requirements; (iii) management of potential GBV/SEA risks; and (iv) monitoring of E&S requirements and performance.

Finally, due to the geographic scope and overall scale of the project (with a total of 130 subprojects), it is likely that additional resources will be needed to support the PSI during implementation, both at the central office in Lima and at the decentralized regional offices and local units. During project preparation, the client will carry out a a capacity need assessment to determine the resources and budget necessary to support the PSI's headquarters and local offices, including the mechanism for institutional coordination; with numerous agencies involved at national, regional and local levels, the project will require the design of an appropriate institutional set-up for implementation with enough capacity for sound E&S management. The institutional strengthening measures will be part of the project's ESMF and reflected in detail in the project's ESCP. Key measures that PSI should pay attention are timing of recruitment of staff, early and continued training of staff, and sequencing of project activities to ensure there is sufficient time for the recruited staff to receive training prior the start of implementation and civil works.

Public Disclosure

II. SCREENING OF POTENTIAL ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

A. Environmental and Social Risk Classification (ESRC) — Substantial

Environmental Risk Rating — Substantial

From an environmental perspective, project related risks and impacts will mainly stem from construction of conveyance systems (canals and water mains), rehabilitation and/or construction of small water reservoirs, installation of equipment, pipes, meters, pressure regulators, sprinklers, drips systems, and land leveling in previously intervened areas. As such, the anticipated key issues are related to: (i) consumption of water and raw materials for civil works; (ii) generation of construction related wastes; (iii) nuisance related to traffic, dust generation, vibration and noise; (iv) water overuse for irrigation purposes; (v) possible encounters of archaeological remains; (vi) occupational health and safety hazards for the workforce; and (vii) possible risks to downstream communities and environment due to reservoirs' rehabilitation, construction and/or operation (although at this stage there is limited information about the number and size of reservoirs, these are expected to be farm ponds and low embankment tanks with small storage capacity; as such the environmental and safety risks are not likely to be significant. This will be confirmed during project preparation. Therefore, due to the small to medium scale and location of the civil works

anticipated for each subproject, most risks and impacts are expected to be predictable, temporary, reversible, low in magnitude, site-specific (once geographically determined), and with low probability of major adverse effects to human health or the environment; in addition, such potential risks and impacts can be easily mitigated in a predictable manner. In relation to Borrower's capacity, and as indicated in the previous section, PSI has experience in WB's safeguards policies and track record of past good performance; and due to the size and nature of the project (130 subprojects distributed throughout the national territory with numerous agencies involved at national and local levels), the institutional arrangement is likely to be complex with the need of high coordination efforts. A potential positive environmental impact generated by the project includes the generation of climate co-benefits while reducing vulnerability and increasing resilience through increase innovation in agrotechnology and generation of jobs. Based on the above, and making use of the precautionary principle, the task team has assessed the environmental risk rating as substantial at this stage because: i) the limited information available about the number and size of reservoirs and therefore their potential environmental and safety risks; and ii) the complexity of the project's overall institutional arrangements and the need of high coordination efforts (the project's ESMF will comprise measures to assess and manage these risks and impacts appropriate to the scale and nature of the activities, including an appropriate institutional set-up for implementation with enough resources and capacity for proper project's E&S management). The environmental risk rating will be reassessed during preparation once (i) the full scope and size of the reservoirs to be financed is known; and (ii) the ESMF details the institutional set-up for E&S management.

Social Risk Rating Substantial

The social risk classification of the project is Substantial. The proposed project is expected to generate important positive impacts and opportunities for small farmers and their families, considering the outcomes of similar past projects in Peru . Potential social risks of the project preliminarily identified, include: (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, and indigenous peoples, if targeted strategies to ensure their engagement is not incorporated into the project design (preparation and implementation); (ii) minor labor influx risks, even though project efforts will focus on promoting 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. These risks could be more pronounced as a result of a sensitive context associated with water usage in rural agricultural areas, which could lead to (iv) increased tensions and even potential conflicts if stakeholder engagement processes are not properly carried out, particularly in relation to the different activities planned under Components A and B. Likewise, agricultural technical assistance potentially involves the risk of (v) replacing indigenous agricultural knowledge with unwelcome new approaches, particularly if cultural pertinence measures were not properly taken into account during execution. Currently there is insufficient available information to evaluate these potential risks, as such due diligence on these issues will continue during project preparation and the relevant information will be reflected in the A-ESRS. A cross-cutting risk that might impact beneficiaries and other stakeholders from benefiting and/or accessing expected project benefits is related to weak/deficient level of coordination between the multiple entities that need to be involved to prepare and implement the project, including the implementing agency PSI and other areas of MIDAGRI, the decentralized offices of both entities, the different levels of WUOs (Juntas, Comités and Comisiones de Usuarios de Agua), regional governments, and local intersectoral agencies. Based on the above and making use of the precautionary principle, the task team has assessed the social risk rating as substantial at this stage. The social risk rating will be revisited prior to Appraisal to determine if this needs to be downgraded to Moderate, depending on the findings of analytical work underlying the E&S instruments to be prepared, and feedback received from stakeholder engagement activities, which are expected to provide further clarity on the severity and likelihood of the potentially adverse E&S impacts and risks of the project.

Public Disclosure

B. Environment and Social Standards (ESSs) that Apply to the Activities Being Considered

B.1. General Assessment

ESS1 Assessment and Management of Environmental and Social Risks and Impacts

Overview of the relevance of the Standard for the Project:

This standard is relevant. The proposed project seeks to implement 130 subprojects that will be implemented nationwide in coastal, highlands and rainforest areas, in 19 departments. The proposed irrigation scheme targets small and medium-size family farming producers and the Client estimates that the project will impact 8,000 hectares directly, which is expected to benefit 7,462 families. Given that the exact scope and locations of most of the 130 subprojects will be defined only during project implementation, the project has adopted a framework approach to E&S risk management. As such, a draft version of an Environmental and Social Management Framework (ESMF) will be developed, consulted, and disclosed by appraisal to provide information on requirements and processes for E&S due diligence of the planned investments under the project during the implementation stage.

The ESMF will provide: (i) the potential direct and indirect E&S risks and impacts from the proposed investments, based on the typology of activities and location, (ii) a characterization of potential contextual E&S risks and issues which may be present in different beneficiary locations, including potential SEA/SH risks, risk of child labor, and potential intensification of social conflicts over the proposed water usage measures; (iii) identification of applicable national legislation; (iv) management and mitigation measures to potential identified E&S risks and impacts, both during construction and operation; (v) identification of vulnerable groups, and specific measures to prevent adverse impacts on them and improve their inclusion opportunities; (vi) details of the requirements for site-specific Environmental and Social Management Plans (ESMPs); and (vii) implementation arrangements, capacity building measures, and budget for E&S management.

Based on the scope and nature of the proposed activities under Component A the ESMF will include, inter alia: (i) an E&S Screening Checklist for risk classification of site-specific project (sub projects) activities; (ii) a negative list of activities to exclude those that may result in long term, permanent or irreversible negative environmental and/or social impacts and impacts on highly sensitive areas in terms of their biodiversity and cultural heritage value; and (iii) generic E&S risk management procedures, based on the relevant WB ESS and WBG Environmental, Health and Safety (EHS) Guidelines (General and applicable specific guidelines for Agribusiness and Food Production).

From an occupational health and safety perspective, the ESMF will include an Infectious Disease Prevention and Response Procedure (IDPRP) for potential communicable infectious diseases which could affect project workers including COVID-19. These procedures will be in line with the WBG's EHS Guidelines and Good International Industry Practice, including WHO and PAHO guidance. The Occupational Health and Safety Plan (OHSP) will include requirements for the use of Personal Protective Equipment, planning of training activities, and investigation/reporting of accidents, while the IDPRP will include measures for prevention, infection control and case management of infectious diseases. The Client will consider gender-based violence issues in the LMP and identify available service providers that can be used as part of a referral pathway for any GBV case possibly identified within the context of the project activities. Based on the available information, no use of child labor is foreseen as part of the irrigation project activities under Component A.

Public Disclosure

The project anticipates the support of construction, rehabilitation and operation of small water reservoirs, which could involve safety and environmental risks. Although these are expected to be farm ponds and low embankment tanks with small storage capacity, the type and size of the reservoirs is expected to be known during preparation. Therefore, it is estimated that the potential impacts and risks will be identified prior Appraisal and reflected within the Appraisal-ESRS. Further details are included in ESS4.

Furthermore, the borrower will prepare and incorporate into the ESMF a Social and Gender Assessment (SGA), an Indigenous Peoples Planning Framework (IPPF), and a Resettlement Framework (RF). The SGA will allow the borrower to identify potential barriers that might limit the participation of groups whose interests could be under-represented in the already established farmers user groups and WUOs, such as women, elders, youth, persons with disabilities, indigenous peoples, etc., and recommend measures to maximize their inclusion in the project preparation and implementation. The ToR to be prepared for the SGA will be based on secondary sources and primary field information that PSI might have on hand and will be completed with targeted interviews/focus groups with key informants and local authorities as required. The need for both primary and secondary informational sources will be reflected in the ToR for the SGA, which will cover the three natural regions.

Site-specific ESMPs will be prepared by the borrowers to address the E&S management for each of the sub projects. ESMPs will be provided by the measures set out in ESS1 and will be developed in accordance with: (i) E&S management considerations established by local legislation, including the measures outlined in the respective E&S permits issued by the authorities; and (ii) all E&S management measures detailed above for the ESMF and relevant ESSs. Aiming to ensure the content and scope of the ESMPs, TORs and project bid documents shall be prepared in a manner acceptable to the Bank.

In addition to the above ESMF and ESMPs, the borrower shall prepare an Environmental and Social Commitment Plan (ESCP) including all material actions and measures to be undertaken by the borrower during project implementation, along with timeframes for their completion and monitoring and evaluation arrangements.

In sum, before appraisal the borrower will develop, consult, and disclose the following core project instruments to assess and manage E&S risks and impacts: (i) a draft ESMF; (ii) a draft ESCP; and (iii) a draft SEP. In addition, the borrower will develop the following instruments as annexes to the ESMF: (i) a SGA; (ii) a draft IPPF; (iii) a draft RF, and iv) a draft LMP. These annexes will be disclosed separately from the ESMF to facilitate stakeholders review of the risks and proposed measures to manage these issues.

Site-specific ESMPs will be consulted and disclosed before proceeding with activities. Engineering & design plans will be grounded in existing national laws and the WB's ESS. In areas with the presence of Indigenous Peoples, the project will also develop indigenous peoples plans (IPP), to be prepared in accordance with the IPPF.

The start of works on a subproject under Component A will be subject to compliance with the E&S requirements of the subproject's E&S instruments, and local stakeholder engagement activities, in a manner acceptable to the Bank.

In relation to Technical assistance (TA) activities, one of the two project's goals is related to increasing access to efficient irrigation to farmers while providing on farm TA on irrigation management and agricultural productivity. So,

Public Disclosure

TA activities are embedded in the overall's project scope and purpose. As such, the requirements set out in paragraphs 14-18 of the ESS1 will also be applied to any TA activities as relevant and appropriate to the nature of the risks and impacts. In addition, drafting any terms of reference defining the scope and outputs of any TA activity will also be consistent with all relevant ESS. The ESMF will be presenting the overall E&S approach for both physical and TA activities.

Areas where "Use of Borrower Framework" is being considered:

None.

ESS10 Stakeholder Engagement and Information Disclosure

This Standard is relevant. The proposed project will have multiple stakeholders with different levels of involvement and/or interests. Key stakeholders will include direct beneficiaries such as: (i) the small and medium agriculture and livestock producers and their families (an estimated 8,000 families), that will benefit from access to improved irrigation systems and strengthening of their technical and productive capabilities in irrigation, crop management and business management; (ii) farmer user groups that have been created and will be assisted in the management and administration of the improved irrigation systems (130 groups); (iii) producers trained and accredited as irrigation operators (an estimated 650 producers); (iv) irrigation managers, technicians and users of the irrigation systems (estimated 35,000 persons), irrigation Water User Organizations (WUO) that will be involved in the project through strengthening of their knowledge of irrigation good practices and management to improve operational efficiency of the irrigation systems and services (339 WUO); and (v) other water users (non-irrigator) that might share the same common hydraulic system with the agriculture producers, among others.

These stakeholders will be in 21 departments covering coastal, highland mountains and Amazon rainforest areas. These stakeholders will include a diversity of socioeconomic characteristics and profiles, that will require differentiated approaches to engage, consult and inform them in an inclusive and culturally appropriate manner regarding: (i) the proposed projects design (type of irrigation system, infrastructure, equipment, conditions and commitments; methods of knowledge sharing, training, management practices and related commitment; proposed scaling up activities, commitment and responsibilities); and (ii) expected benefits, risks and impacts, and measures that will be taken to mitigate these, among other aspects. Preliminarily, these stakeholders are expected to include men, women, young, elderly, indigenous peoples, afro-descendants, members of peasant and/or indigenous rural communities, independent producers, producers' associations, and other economic agents that rely on water use,. Furthermore, local authorities involved in economic development and the management of water resources will also need to be engaged. Moreover, efforts will be made to identify and engage during preparation and implementation, in an inclusive and appropriate manner, members of other vulnerable/disadvantaged groups, such as people with disability, illiterate people and/or low level of education, poorest, migrants/refugees, among others, that could potentially be affected adversely and/or excluded from the project potential benefits.

Initial consultations with key stakeholders, mainly interested farmers and farmer users organizations, have already been carried out and detailed information on these will be provided by the borrower during project preparation and will be documented in the SEP. Furthermore, this information will serve as a basis for updating the stakeholder mapping and identify appropriate disclosure and consultation activities that will be carried out prior to appraisal. The results of the activities under ESS10 and feedback received from stakeholders during preparation will be included in the draft SEP. These shall include, as a minimum, representatives of indigenous peoples' organizations and of farmer

Public Disclosure

associations from the Andean region, representatives of national association and NGOs working with women in the agricultural sector, representatives of the key government agencies involved in the project, civil society, among others to be identified as part of the SEP's stakeholder mapping exercise. The stakeholder engagement activities planned to be carried out after appraisal, and those anticipated during project implementation, will be also described in the SEP.

The successful development of improved irrigation systems in the participating regions will require a strong engagement with various institutional stakeholders that will be involved through sectorial authorities and agencies (MIDAGRI, AGRO RURAL, AGROIDEA), intersectoral authorities such as The National Water Authority (ANA), and regional, and local governmental authorities and/or agencies such as the Regional Governments (21) and Regional Agrarian Directorates of Agriculture (21).

During project preparation, PSI will prepare, consult, and disclose a draft Stakeholder Engagement Plan (SEP) to map out the various project stakeholders, share project information, mitigate potential social risks and/or misconceptions about project impacts and benefits, and solicit feedback on the project. PSI has already engaged and consulted with the farmers for the conformation of the farmer users groups for the proposed subprojects to be financed under the Project. The SEP will outline (i) who the potential key stakeholders are; (ii) how they are to be engaged; (iii) how often the engagement will occur throughout the project; (iv) how disclosure will take place throughout the project; (v) how feedback will be solicited, recorded and monitored over the project; (vi) who will be charged/responsible with this engagement; (vii) timeline and cost.

Public Disclosure

The SEP will furthermore outline the process to be carried out at the subproject level, during project implementation, to identify and map out subproject-level stakeholders, and design and carry out meaningful engagement with different groups as part of subproject design and implementation, with differentiated strategies to reach the most vulnerable, especially indigenous people, and the details of the project's grievance redress mechanism (GRM), including SEA/SH grievances. Engagement planning and implementation will also put in place all necessary measures to facilitate the participation of diverse stakeholders, particularly those in need of special assistance, and to encourage women's, youth and indigenous peoples' active participation, among others. The draft SEP will be disclosed prior to appraisal with the objective of receiving and incorporating the feedback about the overall project design and the project's E&S instruments, and the proposed management arrangements as documented in the ESMF and the SEP itself.

Given the communication and engagement limitations posed by the COVID-19 health emergency, stakeholder engagement strategies will point out ways to minimize close contact and will follow the guidance in the WB technical Note: "Public Consultations and Stakeholder Engagement in WB-supported operations when there are constraints on conducting public meetings", from March 20, 2020.

A project-level Grievance Redress Mechanism (GRM) will be established and, during implementation, managed by the project's E&S Team. It will be described in the SEP and be operational upon project effectiveness. The project GRM will take into account traditional conflict resolution mechanisms, language and other considerations to facilitate access for IPs in a culturally appropriate manner. Particular attention will be paid to ensure that the GRM will be available and inclusive and easily accessible to all stakeholders, including vulnerable ones, and that it keeps track and follows up on all project-related grievances, in a prompt manner. The GRM will have a policy of zero tolerance to

retaliation and will allow for confidentially and anonymity of stakeholders submitting grievances, if they so require. The GRM will have separate sections to treat different types of grievances in their own specificity, including procedures to address project-related complaints, SEA/SH complaints, IP complaints, among others.

B.2. Specific Risks and Impacts

A brief description of the potential environmental and social risks and impacts relevant to the Project.

ESS2 Labor and Working Conditions

This standard is relevant. Project implementation will involve direct workers (PIU) and contracted workers. The project will be implemented by staff from the PSI and additional consultants could be hired. Other types, such as community workers and/or primary suppliers workers of project workers will be identified once activities are determined in greater detail. It is likely that contractors will be required for civil works for the irrigation infrastructure and equipment. Potentially, community workers could be involved (Component A); this will be assessed during preparation. In the case of community workers, there will be an assessment of relevant risks and the measures, as detailed in para 37 of ESS2. It is not expected that primary supplier workers will be involved in subprojects, this will be assessed during preparation. Should primary supplier workers be involved in the project (Component A), there will be an assessment of relevant risks and the measures, as detailed in para 39 to 42 of ESS2.

Based on available information, it is estimated that implementation of infrastructure and equipment activities might require, for each subproject, approximately 20 skilled workers as part of the contractor's crew. Moreover, unskilled workers will also be required and they will be hired locally and remunerated by the contractor. Based on that information, no significant risks related to labor influx is expected.

Throughout project preparation, the client will prepare a draft Labor Management Procedures (LMP), which will be consulted and disclosed prior to appraisal, which will identify the different types of workers and risks according to the activities they may perform under the project. The LMP will lay out requirements to promote transparency in terms and conditions of employment, fair treatment, non-discrimination and equal opportunity; minimum working age and measures to prevent the use of all forms of child labor and forced labor; and worker's organizations. In addition, the LMP will include a GRM specifically for all project workers to ensure they have a mechanism in place for complaints and grievances. The minimum age for project workers will be 18 years old. Moreover, the LMP and ESMF will identify measures to prevent child labor practices among the beneficiaries.

Among other elements, to ensure health and safety of workers during the construction and implementation phases of the project, the LMP will also include a generic Occupational Health and Safety Plan (OHSP) for likely civil works activities under Component A, in line with the WBG general guidelines. Some of OHS hazards associated with the project activities may include among others: (i) operation of heavy machinery, (ii) slips, trips and falls; (iii) hazardous material handling; (iv) exposure to hazardous substances; and (v) traffic safety. The OHSP will include generic measures addressing these and other types of typical OHS issues, as well as procedures for incident/accidents investigation, reporting and recording, emergency preparedness and response procedures, and continuous trainings for workers. It will also contain measures to address potential risks and impacts that may arise from the interaction between project workers and local communities. To ensure that the project promotes safety of women, and to avoid beneficiaries to become targets of sexual harassment or assault, the LMP will include a code of conduct, and both the

Public Disclosure

labor GRM and the overall project GRM will include specific grievance channels, to be managed by trained personnel, for potential complaints related to gender based violence (GBV) or sexual exploitation and abuse (SEA) and sexual harassment (SH). These risks will be further analyzed during project preparation, and as relevant, potential security measures for workers will be included in the LMP. Other health related issues for workers are included in the ESMF as described under ESS1. All project workers will abide to the Workers' Code of Conduct in their relationships with the beneficiary community populations. Contractors and subcontractors will be requested to expressly abide to the Code of Conduct.

Government civil servants are expected to work in connection with the project, whether full-time or part-time. They will remain subject to the terms and conditions of their existing public-sector employment agreement or arrangement unless there has been an effective legal transfer of their employment or engagement to the project. ESS2 will not apply to such government civil servants, except for the provisions of Protecting the Work Force Occupational Health and Safety and child and forced labor.

ESS3 Resource Efficiency and Pollution Prevention and Management

This standard is relevant. The proposed investments include civil works throughout the territory. Nevertheless, project activities and civil works investments are not expected to be significant sources of pollution, emissions (including GHG's), or use of resources as considered by ESS3. The types of potential pollution sources include construction waste, runoff from construction sites and from civil works activities, use of materials, including hazardous materials for construction and petroleum-based products for vehicles and machinery, and air pollution from operation of machinery and vehicles.

Pollution, air emissions, and noise: These may be generated during the construction phase from the use of heavy vehicles, machinery, and construction activities. The project design will be geared to incorporate best practices to reduce discharge and waste and is not expected to imply major potential for air pollution, disturbance by noise, or other forms of pollution. The project is not expected to be a large user or generator of hazardous materials, therefore measures will be taken to ensure minimization of adverse risks and impacts on human health and the environment including proper storage, handling, use, and disposal of hazardous, flammable or potentially contaminating wastes. The ESMF will define institutional responsibilities and will guide the preparation of site-specific E&S management plans as needed, including dust suppression, vehicle and heavy machinery maintenance, and a sufficient budget for monitoring equipment and capacity-building regarding pollution prevention and emergency incident response among other measures. Subproject ESMPs to be prepared will include these measures as necessary.

Vegetation and soil: Soil removal and clearance of vegetation may occur during the construction of reservoirs and water mains. All construction material needed for this type of infrastructure (sand, stones, timber, etc.) will be obtained from licensed quarries and certified timber suppliers.

Waste management: Construction waste will include mostly waste from excavated soil and debris. Hazardous waste, consisting of hydrocarbon oils, could also be generated from construction machinery and vehicles. Any waste generated by project activities will be disposed of according to national regulations, Good International Industry Practice (GIIP), and EHS Guidelines. The ESMF will include generic measures for the management of hazardous material, and the subproject ESMPs will also include specific measures for waste management.

Public Disclosure

Use of Pesticides and fertilizers: Where potential environmental liabilities are identified as part of subproject level assessment and planning, these shall be assessed and, where necessary, site-specific remedial plans developed as part of subproject level ESMPs and executed under the project. These requirements will be outlined in the ESMF. The environmental and health risks associated to the use of agrochemicals will be assessed in the ESMF and guidance will be provided on the development of subproject-specific Pest Management Plans (PMP). In addition, measures will be defined to prevent and mitigate against potential adverse health impacts on project beneficiaries and adjacent communities. WBG EHS Guidelines on Agribusiness/Food Production, and Chemicals will be considered in the ESMF. While the project will not finance the use of chemical fertilizers and pesticides, it will minimize and control its use in the agricultural activities and promote the use of less hazardous materials (i.e., organic fertilizers) to the extent possible (one of the lessons learned from the previous project with the PSI is the PSI's emphasis of the importance of integrated pest management practices and the inclusion of PMPs into the Operations Manual).

Water use: Project water requirements are expected to be limited and water sources are expected to come mainly from surface and rainwater and these resources will be used for irrigation purposes as part of the agricultural activities. By promoting irrigation technification, the very implementation of the project implies the mitigation of non-rational water use, to which end the project will include investments for the construction of efficient irrigation systems.

Public Disclosure

ESS4 Community Health and Safety

This standard is relevant. Various activities proposed under Component A may expose communities to health and safety risks, especially for those located immediately or close to construction sites and activities. The potential risks and impacts to nearby communities will be confirmed during project implementation, as part of the ESMPs once the exact locations of the project construction activities are determined. Risks include potential for accidents from increased traffic of project vehicles, machinery, and trucks. Some impacts resulting from civil works that may cause inconvenience to local communities may include air emissions and odors, noise, dust, vibration, hazardous materials, closure of roads, traffic disruptions, and others. The ESMF will identify and lay out generic measures to minimize community risks to these and other issues, while site-specific planning will confirm relevant issues and include more detailed management measures in the site-specific ESMPs. Additionally, measures to reduce road and pedestrian accidents around or near-by construction/rehabilitation of irrigation infrastructure and equipment will be included in the ESMF. Site-specific ESMPs will include traffic management plans and measures for local communities to ensure pedestrian safety, as well as requirements for the adoption of signage and safety barriers in or near construction zones and safe storage arrangements for construction machinery and equipment, measures to avoid the spreading of COVID-19 and other potential infectious diseases, and GBV and SEA/SH risk management procedures. Due considerations will be put to the specific needs of vulnerable groups such as elderly, women, children and persons with disabilities.

As the subprojects are still in conceptual design, there is not information available about the type and characteristics of the small water reservoirs to be financed, therefore, the significance of potential downstream risks and impacts could not be assessed at this stage. During preparation, the ESMF will confirm that there will be no or negligible risk of significant adverse impacts to local communities and assets due to potential failure of reservoirs' structures. Any

potential dam safety measure for the reservoirs to be designed and/or rehabilitated under Component A will be in compliance with ESS4 (e.g., dam safety measures for new reservoirs designed by qualified engineers in accordance with GIIP will be adopted and implemented). A lesson learned from the previous project with the PSI is the need for proper signing and fencing of all the small reservoirs to avoid potential risk of people accidentally falling in and drowning. This should be part of the subprojects' design.

The SEA/SH risk is not expected to be significant, particularly considering the low number of skilled outside workers, the use of local workers (semi skilled and unskilled) as much as feasible, the implementation of a code of conduct, awareness raising activities expected for all workers regarding VBG and SEA/SH, and elaboration and implementation of provisions to attend cases of SEA/SH complaints.

Currently there is insufficient information on the nexus between the possibility of conflict and the use of scarce water resources in the areas where the 130 subprojects will be developed; consequently, due diligence on this issue will be carried out during preparation based on the results of the SGA and the relevant information will be reflected in the ESMF and A-ESRS.

ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

This standard is currently relevant. While no risk of involuntary resettlement (including physical and/or economic displacement) or involuntary restriction on land and/or water use has been identified as part of the project so far, there is the possibility that some project works could involve additional impacts under ESS5. Currently there is insufficiently detailed information available; thus the due diligence on these issues will be completed during preparation and the relevant information will be reflected in the A-ESRS.

If small areas of land were to be needed to accommodate repertories, catchment intakes, and other headworks, these may be processed as voluntary cessions or donations. In such cases, each involved member of the participating farmer user groups will need to state that they own and/or are recognized holders of their farmland, providing the documentary evidence to support it, as applicable, and the members of the group and affected farmers, on a consensual and voluntary basis, and without any coercion, will formally grant free cession of those small areas. These procedures will be formalized in a protocol, to ensure that the donations are fully voluntary. The procedures for scenarios in cases where the land tenure has not been formalized will be also described in the protocol.

As per note 10 of the ESS5, PSI's protocol will permit to demonstrate that: (i) donors have been appropriately informed and consulted regarding the project and options offered to them; (ii) that they were aware that refusal of the donation is an option and confirmed in writing their willingness to proceed with the donation; (iii) the amount of land is minor and will not reduce the donor's capacity to maintain donor's livelihood at current level (the major infrastructures would be the small reservoirs that would require between 0.5 to 1 ha based on the available information); (iv) no household relocation nor involuntary will be involved; (v) the donor will benefit directly from the project; and (vi) for community or collective land, donations can only occur with the consent of individuals using or occupying the land. The protocol will also define the circumstances in which a compensation (in kind or in cash) may be needed in certain scenarios, particularly in cases of vulnerable populations, even if voluntary. In addition, donors will have the option to refuse the proposed uses, which may lead to the realignment of the original design of the

Public Disclosure

small works proposed. During a field mission, the project team confirmed the availability of that option and that the option to refuse works is already being exercised by some beneficiaries of PSI's national irrigation program.

Based on the above and making use of the precautionary principle, PSI will also prepare and disclose a resettlement framework (RF), which in addition to the protocol for cases of land donation, will include procedures to address cases where involuntary resettlement (physical and/or economic displacement) cannot be avoided, such as works that do not permit flexibility in their locations, like reservoirs that require specific technical criteria or that may need be placed in certain locations to ensure safety or functionality, which would fall out of the scope of the voluntary donation cases. Other potential scenarios that would involve land acquisition, restriction in access, or that would potentially involve the establishment of easements, will be also covered under the RF, which will be prepared, consulted, and disclosed prior to project appraisal. Although the RF will be incorporated into the ESMF as an Appendix, it will be disclosed separately to facilitate access to interested stakeholders.

ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

This standard is relevant. The project is expected to reverse the negative impacts of existing land-use practices through the application of sustainable agricultural practices that will contribute to reducing erosion and water loss while improving biodiversity conservation of the entire ecosystem; therefore, it is expected that the impacts related to environment from the proposed activities are positive. Notwithstanding, the potential impacts to biodiversity and living natural resources cannot be ruled out at this stage, such as the potential replacement of native species by non-native crops with higher market demand. Consequently, given the diverse ecosystems across the country, the ESMF will provide guidance on subproject-level biodiversity screening, assessment, identification of mitigation, and management measures to ensure that project activities do not alter or cause destruction or degradation of any critical or sensitive natural habitats, especially forests and wetlands.

According to the project design, the interventions are not expected to affect areas of high biodiversity, such as natural ecosystems or species of conservation concern, as project activities will be conducted in previously disturbed areas (modified habitats according to the ESF). However, at this stage, the specific locations of the subprojects (works) are not yet known. In case a subproject foresees the implementation of activities with potential negative risks or impacts on environmentally sensitive areas such as natural habitats, either within the direct or indirect area of influence, the borrower will not implement any project-related activities unless appropriate mitigation measures are put in place, in accordance with the mitigation hierarchy, to achieve no net loss and, where feasible, preferably a net gain of biodiversity over the long term.

To avoid any potential damage to ecologically important environments, the ESMF will provide guidance on ESS6 requirements and include an exclusion list to avoid any potential risks and impacts on critical or fragile ecosystems and biodiversity. These activities will also follow the general WBG and sector-specific guidelines referenced in ESS3. If deemed necessary, site-specific environmental management plans will address impacts on biodiversity.

ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities

The standard is relevant. It is expected that indigenous peoples, conceived of as rural agricultural communities, "Comunidades Campesinas", particularly in the Andean region, and native communities, "Comunidades Nativas",

Public Disclosure

located in the rainforest, might be present in some subprojects area, particularly in the mountain highlands (4 indigenous peoples) and in the Amazon rainforest (51 indigenous people). Moreover, indigenous peoples (IP) are expected to benefit directly from the project.

There is a risk that the agricultural technical assistance planned as part of the project, could potentially involve the risk of replacing indigenous agricultural knowledge with unwelcome new approaches and technologies , particularly if cultural pertinence measures were not properly taken into account during execution. IPs could also see themselves adversely impacted by the new national water use strategy (whose implementation is planned to be supported under Component B) if the activities and priorities are not consistent with their traditional water management practices, which highlight the importance of making sure that IP are involved throughout the process. These engagements will need to be prioritized in the SEP.

During project preparation, PSI will determine which IP will be involved, if any, using the Ministry of Culture IP data base, which will in turn be taken into account to prepare and carry out the SGA. The results of the SGA will inform the preparation of an Indigenous Peoples Planning Framework (IPPF) that will be consistent with ESS7. PSI will prepare, consult and disclose the IPPF, before Appraisal. Although the IPPF will be incorporated into the ESMF as an Appendix, it will be disclosed separately to facilitate access to interested stakeholders.

The concerns and preferences of indigenous peoples will be addressed through meaningful and culturally appropriate consultation and project design, and documentation will summarize the consultation results and describe how IP issues have been addressed in project design and how feedback received has been applied to it. The key outcomes of the consultations with IP will be reflected in the SEP version to be disclosed prior to appraisal. The final version of the IPPF (revised to incorporate the outcome of consultations with IP) would be adopted and disclosed in accordance with the timeframe to be defined in the ESCP. Arrangements for ongoing consultations during project implementation and monitoring will also be described.

Public Disclosure

ESS8 Cultural Heritage

This standard is relevant. According to the available information some of the potential project areas, mainly in the Highlands area, may include tangible and intangible cultural resources. The ESMF will include provisions for subproject-level screening and assessment of any known sites of cultural or historic importance which may be impacted locally, as well as identification of any sites of cultural/social importance for local communities (the ESMF's exclusion list will include a specific provision to avoid any potential damage to cultural heritage). The ESMF, and all future site-specific ESMPs as needed, will furthermore include, inter alia: (i) Chance Finds Procedures for the construction areas, and construction contracts will include clauses requiring civil contractors to take proper protective measures in case cultural heritage sites are discovered, including to stop construction activities if cultural property sites are encountered during construction; (ii) a Cultural Heritage Management Plan (CHMP) for civil works outlining mitigation measures to be considered to avoid or reduce impacts on community cultural heritage sites directly affected by the project; and (iii) any needed mitigation measures to avoid or restore community cultural sites. All site-specific ESMP measures will be reflected in corresponding bid documents and construction contracts.

The Chance Finds Procedure will set out how chance finds associated with the project will be managed and include a requirement to: (i) notify relevant authorities of found objects or sites by cultural heritage experts; (ii) fence-off the area of finds or sites to avoid further disturbance; (iii) conduct an assessment of found objects or sites by cultural heritage experts; (iv) identify and implement actions consistent with the requirements of this ESS and national law; and (v) train project personnel and project workers on the chance finds procedure.

The risk of potential loss of valuable indigenous agricultural knowledge will be addressed under the IPPF.

The application of ESS8 will be further assessed during project preparation when a more detailed description of the proposed activities and areas or sites are available.

ESS9 Financial Intermediaries

This standard is not relevant, as the project will not make use of Financial Intermediaries.

C. Legal Operational Policies that Apply

OP 7.50 Projects on International Waterways	TBD
OP 7.60 Projects in Disputed Areas	No

Public Disclosure

III. WORLD BANK ENVIRONMENTAL AND SOCIAL DUE DILIGENCE

A. Is a common approach being considered? No

Financing Partners

No.

B. Proposed Measures, Actions and Timing (Borrower's commitments)

Actions to be completed prior to Bank Board Approval:

The borrower will prepare, consult, and disclose prior to the beginning of appraisal:

- a draft ESMF that will include an exclusion list to segregate subprojects that could fall under the E&S classification of "Substantial" or "High";
- a draft SGA, as an appendix to the ESMF;
- a draft IPPF, as an appendix to the ESMF;
- a draft RF, as an appendix to the ESMF;
- a draft LMP, as an appendix to the ESMF; and
- a draft SEP, as a standalone document.

The Borrower will also disclose a draft Environmental and Social Commitment Plan (ESCP).
The operational manual of the Project will contain the details of roles and lines of approving and reporting of E&S documents.

Possible issues to be addressed in the Borrower Environmental and Social Commitment Plan (ESCP):

- Establish and maintain a Project Management Unit with qualified E&S staff and resources to support management of E&S risks and impacts of the Project.
- Define clear roles, responsibilities and authority, as well as designate specific personnel to be responsible for the implementation and monitoring of the E&S risk management instruments.
- A requirement for the PIU to train its E&S team in the identification and management of E&S risks and impact in accordance with E&S standards requirements.
- Regular monitoring reports on the environmental, social, health and safety (ESHS) performance of the Project, including stakeholder engagement activities, and functioning of the grievance mechanism.
- Deadlines for the Final versions of the ESMF, SGA, LMP, RF, SEP, and IPPF (preliminary considered within 30 days of Effectiveness).

C. Timing

Tentative target date for preparing the Appraisal Stage ESRS 14-Oct-2022

IV. CONTACT POINTS

World Bank

Contact:	Carmen Rosa Yee-Batista	Title:	Senior Water Supply and Sanitation Specialist
Telephone No:	5357+2387 / 51-1-6222387	Email:	cyeebatista@worldbank.org
Contact:	Griselle Felicita Vega	Title:	Senior Agriculture Specialist
Telephone No:	5357+2306 / 51-1-622-2306	Email:	gvega@worldbank.org
Contact:	Martin Benedikt Albrecht	Title:	Senior Water Resources Management Specialist
Telephone No:	+1-202-458-7419	Email:	malbrecht@worldbank.org

Borrower/Client/Recipient

Borrower: Republic of Peru

Implementing Agency(ies)

Implementing Agency: Programa Subsectorial de Irrigaciones - PSI

Public Disclosure

V. FOR MORE INFORMATION CONTACT

The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 473-1000
Web: http://www.worldbank.org/projects

VI. APPROVAL

Task Team Leader(s):	Griselle Felicita Vega, Martin Benedikt Albrecht, Carmen Rosa Yee-Batista
Practice Manager (ENR/Social)	Rodolfo Tello Abanto Recommended on 16-Aug-2022 at 16:27:24 GMT-04:00
Safeguards Advisor ESSA	Angela Nyawira Khaminwa (SAESSA) Cleared on 19-Aug-2022 at 09:40:35 GMT-04:00

Public Disclosure