



Concept Environmental and Social Review Summary

Concept Stage

(ESRS Concept Stage)

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BASIC INFORMATION

A. Basic Project Data

Country	Region	Project ID	Parent Project ID (if any)
Pakistan	SOUTH ASIA	P179003	
Project Name	Sindh Livestock and Aquaculture Sectors Transformation Project		
Practice Area (Lead)	Financing Instrument	Estimated Appraisal Date	Estimated Board Date
Agriculture and Food	Investment Project Financing	1/9/2024	7/24/2024
Borrower(s)	Implementing Agency(ies)		
Islamic Republic of Pakistan	Livestock and Fisheries Department, Sindh Province		

Proposed Development Objective

To support the competitive, inclusive, green, and resilient development of the livestock and aquaculture sectors in Sindh

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]

The first component 'Strengthening the Enabling Environment for the Adoption of BMPs' aims to facilitate the adoption of climate-smart BMPs by livestock and aquaculture producers for an inclusive, climate-resilient, and sustainable sector development. It will do so by (i) improving the policy, strategic, and regulatory frameworks for the sector, and improving and centralizing data collection and monitoring mechanisms for evidence-based decision making; and (ii) strengthening the delivery of essential public good knowledge, inputs, and services to livestock and aquaculture producers by the public and private sectors.



Sub-Component 1.1 'Improvement of Sector Policies, Strategies, and Regulations and of Evidence-based Decision Making' will provide technical assistance to the L&FD for the formulation and adoption of sector policies and action plans, as well as the establishment of inclusive policy dialogue and monitoring mechanisms. It will also support (i) the formulation or update of specific sector strategies and regulations (i.e., breeding strategies, animal health strategies and regulations, disease surveillance and control plans, ecosystem-based approach implementation and environmental impact reduction strategies, aquaculture post-harvest strategy, and so on); and (ii) the preparation of contingency plans against priority diseases, as well as for climatic emergencies. This sub-component will also strengthen the capacity of institutions in the livestock and aquaculture sectors to collect and centralize data for sector-wide data analysis, monitoring, and evidence-based decision making. This will include in particular (i) strengthening disease reporting systems; (ii) creating databases and performance recording systems for breeding stock; (iii) establishing georeferenced sector databases and dashboards, which allow to apply integrated zone management plans and to identify climate risks and vulnerabilities, (iv) creating data and knowledge sharing system; and (v) strengthening the L&FD's capacity for data analysis.

Sub-Component 1.2 'Strengthening the Delivery of Knowledge, Inputs, and Services' will support public and private institutions providing key knowledge, inputs, and services to livestock and aquaculture producers, such as (i) animal health services; (ii) breeding and genetic improvement services; (iii) extension and advisory services (e.g., Farmers Field Schools, Pond Schools, village demonstration units); (iv) research and development and technology transfers; and (v) certification and quality control services. This support will entail investments in public infrastructure (i.e., livestock and aquaculture public institutions), equipment (e.g., laboratory equipment, climate smart equipment), inputs (i.e., vaccines for vaccination campaigns), and capacity building of staff (e.g., on improved equipment utilization). Special large-scale operations such as vaccination campaigns against transboundary animal diseases and the distribution of improved genetic material, as well as awareness campaigns will also be supported.

The second component 'Promotion of Climate-Smart Production, Value Addition, and Inclusive Access to Markets through Productive Alliances (PA)' will seek to support growth-oriented farmers through a PA approach to (i) intensify and add value to their production; and (ii) establish and/or upgrade their market linkages with off-takers in a market-driven, profitable, and sustainable way. Producers and PGs will receive both TA from local service providers and direct financial support, including support to strengthen their climate resilience and potential for climate mitigation.

Subcomponent 2.1 'Capacity Building and Development of Horizontal and Vertical Alliances' aims to (i) strengthen the technical and business capacities of growth-oriented small and medium producers; and (ii) establish/upgrade market linkages between these producers organized in PGs and buyers following a PA approach. This subcomponent will finance goods and services needed to build the capacity of small and medium producers, establish PAs, and develop BPs as part of PAs.

Subcomponent 2.2 'Improving the Market Integration of PGs for Increased Climate-Smart Production and Value Addition' aims to (a) increase productivity and production in a climate-smart way; and (b) improve market integration and value addition. Increased value addition is expected to lead to reduced FLW, which, combined with productivity increases, will lead to reduced GHG emissions intensity. This subcomponent will provide matching grants for investments in TA, productive assets, and inputs.



D. Environmental and Social Overview

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

The project will be implemented in the province of Sindh, Pakistan. Sindh has been adversely affected by recent floods. 33 million people have been displaced, and more than 8,330 km kilometers of roads destroyed. The flooding has damaged 1.27 million houses, around 4,410 million. ha of agricultural land was inundated and killed an estimated 0.8 million livestock, all adversely affecting rural livelihoods. Sindh is particularly vulnerable to natural disasters due to its geographical location (lowest riparian and home to the Delta of River Indus), socioeconomic fragility due to skewed incomes, and climatic conditions. Natural disasters include drought, heatwaves, floods, cyclones, windstorms, tsunamis, and earthquakes. While most of Pakistan experiences high temperatures in summer, Sindh is most exposed to its impacts . In some areas, summer temperatures can exceed 50 degrees Celsius, threatening human health, productivity, and food security. Sindh is also home to a coastline, has numerous wetlands (including Ramsar sites) and is host to a considerable stretch of River Indus, draining within Sindh into the Arabian Sea.

In Sindh, about 30-35 percent of the population lives below the poverty line and the poor are found to derive 56 percent of their income from agriculture. Livestock provides critical income security for many rural households and is of particular importance to women and people lacking clear land tenure rights. In Sindh, agriculture contributes 24 percent of provincial GDP and 70 percent of employment. Livestock and aquaculture also contribute significantly to nutrition. Currently around 70 percent of milk is consumed at home resulting in seven to eight liters of milk consumed per household per day. At the same time, the prevalence of undernourishment and stunting in children under five in Sindh is 34 percent and 45.5 percent respectively, and exceeds the national averages of 20 percent and 40 percent respectively.

D. 2. Borrower's Institutional Capacity

The Sindh Livestock and Fisheries Department (L&FD) will lead the implementation of the proposed Project. The L&FD has prior experience on a World Bank funded project (Sindh Agricultural Growth Project- P128307) closed in June, 2019. The project was under safeguards policies with category B and received a satisfactory rating upon completion. Currently, however, the L&FD does not have dedicated staff or resources to manage environmental or social risks associated with the proposed project. Also, the proposed Project is being processed under ESF, on which the client needs detailed orientation and training. Hence the borrower capacity in ESF is considered low at the concept stage. A Project Coordination Management Unit (PCMU) at the level of the Secretary of L&FD will oversee most of the project's activities and will delegate implementation to the Department's relevant Directorates. Environment specialist, social specialist and a gender specialist will be hired in PCMU to provide support to both directorates of livestock and fisheries. The project will reassess the capacity needs and staffing requirements of the project during project preparation.

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

A. Environmental and Social Risk Classification (ESRC)

Substantial



Environmental Risk Rating

Substantial

Overall, the project will have positive environmental benefits through introducing sustainable and climate smart practices in livestock and aquaculture production resulting in reduction of GHG emissions. The main environmental risks of the project are associated with civil works to support rehabilitation and reconstruction of infrastructure (office building, laboratories etc.) and aquaculture activities to be supported under the project. The civil works related anticipated environmental risks are related to localized air and noise pollution, generation of wastewater and disposal of solid waste generation with most of the anticipated impacts are reversible small scale and likely to occur only during construction. There are environmental pollution and CHS/OHS risks associated with use and disposal of vaccines/syringes procured by the Projects. The aquaculture interventions to be supported under the project could have potential environmental impacts related to water pollution and waste disposal of aquaculture activities, risks associated with intentional or accidental introduction of invasive species and risks of water scarcity and water use competition among different water users. The environmental impacts of aquaculture investments can also lead to degradation of land if interventions are planned in already stressed critical habitats like wetlands and mangroves forests of Sindh . The project also has built in design measures including on-farm adoption of climate-smart best management practices (BMPs), which will in turn lead to increased resilience, increased productivity, and to reductions of GHG emissions intensity and reduce the environmental impacts of the project, however at concept stage the exact location, design and scale of activities are not known . Considering above environmental risks associated with the project and low capacity of the borrower, the environmental risk at concept stage is assessed as substantial.

Social Risk Rating

Moderate

Social risks of the project are assessed to be moderate at the concept stage. There are positive livelihood impacts associated with improved breeds, disease control and enhanced knowledge of producers on livestock and aquaculture management. The primary social risk is associated with targeting and selection of beneficiaries for productive alliances and for producer groups, especially in provision of technical and financial assistance to these groups. Other risks involve inequitable distribution of project benefits/resources, loss of livelihoods due to inadequate administration of vaccines and/or misinterpreted practice of feeding and breeding (and all other associated husbandry practices), labor and OHS risks, CHS risks associated with malpractices in livestock/aquaculture management (inappropriate use of vaccines, feeds, improper disposal of waste, etc.) and possible occurrence of GBV, SEA, and SH. This risk is partially mitigated within the Project design by focusing on small and medium farmers, and will be further mitigated during preparation stage by the development of selection criteria and control mechanisms.

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:

ESS1 is relevant. The expected environmental and social impacts will generally be positive given that the project consists largely of institutional strengthening and technical assistance, improved service provision, capacity building, and formation of productive alliances. The anticipated environment and social risks associated with localized civil works, procurement of vaccines and aquaculture investments are provided in Section II.



At this stage the exact nature, location and scale and the allocation of investments between livestock and aquaculture are not known, therefore the risks for each sub project activity will be assessed further during project preparation.

A framework approach will be adopted considering that subprojects will only be identified during implementation. The Environmental and Social Management Framework (ESMF) will be prepared by the client for all the overall project. ESMF will provide guidance to screen and determine relevant E&S risks of each project component; determine criteria for preparation of site-specific Environmental and Social Management Plans (ESMPs) , include eligibility criteria and Standard Operating Procedures (SOPs) for component-2, provide institutional monitoring and reporting arrangements; and describe the institutional arrangements and staffing requirements. ESMF will (a) follow GIIP such as those described on WBG EHS Guidelines relevant to the project, including but not limited to General, Aquaculture, and Mammalian Livestock Production, and (b) include an exclusion list of non-eligible activities. ESMF will also include social assessment for establishing baseline for gender disaggregated data for livestock and aquaculture and will provide practical recommendations for gender equality in these sectors. ESMF will be a comprehensive document covering risks and mitigation measures as required under ESS2, ESS3, ESS4 and ESS6 and ESS8. The ESMF will be prepared by the L&FD, and reviewed and cleared by the bank, and shall be disclosed on both the L&FD's and the World Bank's website.

Areas where “Use of Borrower Framework” is being considered:

Not used

ESS10 Stakeholder Engagement and Information Disclosure

This standard is relevant. A Stakeholder Engagement Plan (SEP) will be prepared by the Sindh Livestock and Fisheries Department (L&FD) during project preparation to provide a framework for effective and inclusive engagement with stakeholders at all stages of the Project. The SEP will ensure that appropriate Project related information (including information on risks and impacts) is disclosed to stakeholders in a timely, understandable and accessible manner. It will describe all stakeholder parties, including Affected parties (Aps), other interested parties (OIPs) and vulnerable groups, and provide guidance for Project implementers on how to meaningfully engage with these groups through the Project lifecycle. The SEP will also include a grievance redress mechanism (GRM) to receive and facilitate the resolution of concerns and grievances including SEA/SH incidents. The draft SEP will be prepared and disclosed at appraisal stage. The guidance provided in the SEP will be especially crucial for the implementation of Components 1 and 2 which involve awareness raising and mass communications campaigns, and training for small and medium farmers/farming communities.

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



At the concept stage, the project is expected to involve direct workers working for the L&FD/PCMU, and contracted workers and primary suppliers (for animals and fish breeds, machinery equipment, etc). The employment of these workers may pose labor related risks which include lack of compliance with national and provincial labor and occupational health and safety (OHS) laws; unsafe and unhealthy working conditions; and possible gender based-violence (GBV), sexual exploitation and abuse (SEA), and sexual harassment (SH) committed by or against project workers. The L&FD will therefore prepare comprehensive Labor Management Procedures (LMP) during Project preparation which will contain detailed guidance on employment terms, and other information related to labor and working conditions. Project workers will be provided a mechanism to raise workplace concerns and complaints through the implementation of an effective GRM, as required by ESS10. If required, the L&FD will prepare an Occupational Health and Safety plan—either as part of the ESMF, or a standalone document depending on the severity and magnitude of OHS risks identified. ESMF will also cover child labor and forced labor issues and establish the age limit for children if involved in family operations of livestock and aquaculture practices without interfering their schooling.

ESS3 Resource Efficiency and Pollution Prevention and Management

The Project may involve the procurement of livestock vaccines and use of syringes, which could generate hazardous waste, if not properly disposed. Similarly, waste and effluent generated from aquaculture and livestock activities can also lead to contamination of water and soil. The scale of activities and anticipated waste generation and effluent from these activities are not known at this stage and will be further assessed during project preparation. The project may also procure pesticides and fertilizers used in livestock production activities and which may generate adverse environmental impacts as well as OHS and CHS risks. The project is anticipated to support small scale civil works which could have limited impacts related to use of materials like sand, cement, gravel and stones. The ESMF will include measures for efficient use of materials from approved quarries and appropriate measures for handling of hazardous and non hazardous waste and and issues related to water governance and efficient use of water resources. The L&FD shall prepare a Waste Management Plan (WMP) as part of ESMF during project implementation to identify and characterize type of wastes and to provide adequate waste management measures .

ESS4 Community Health and Safety

The standard is relevant. As the Project will involve significant contact between Project workers and beneficiary communities (through mass awareness campaigns, farmer field schools, pond schools, village demonstration units), there is a possible risk of such contact leading to an increase in the rate of communicable diseases, GBV, SEA, and SH. The improper use and / or disposal of syringes used for vaccines, and that of pesticides, fertilizers and feed for livestock and fish, may also pose a risk to the community who may be inadvertently exposed, and to informal waste/sanitation workers that are prevalent in the region. All of these risks are, however, localized and of low severity within their scope and impact. ESMF will address these risks and advise mitigation as per their magnitude assessed.



ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

This standard is relevant. At this stage as there is no land acquisition or involuntary resettlement anticipated as a result of this Project, however the details of investments for producer groups alliances for livestock and aquaculture activities are not known at this stage, therefore this standard is deemed relevant and will be further assessed during project preparation stage.

ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

The standard is relevant. Aquaculture activities which may also include inland fisheries in fresh water can have adverse impacts on freshwater lakes and rivers in the project areas due to water pollution and generation of waste from aquaculture activities and issues related to impacts on stream hydrology caused by diversions and/or small dams. The aquaculture activities if planned in critical habitats like mangroves forests and wetlands can further lead to degradation of already stressed and vulnerable habitats of Sindh, if not managed properly. These impacts will be thoroughly assessed during project preparation and adequate mitigation measures will be provided in the ESMF. The project will also support dissemination of genetic material for animals, fish and fodder which could lead to risks associated with intentional or accidental invasive species. The ESMF to be prepared under ESS1 will include negative list and screening criteria and measures to avoid intentional or accidental introduction of invasive alien species to avoid any risks of destroying native species.

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

This standard is not relevant. No indigenous people meeting the ESS7 criteria are present in the Sindh province.

ESS8 Cultural Heritage

ESS8 is relevant. The project activities planned under the project are not anticipated to directly impact any cultural heritage site. The project investments include civil works related excavation, therefore ESMF will include chance find procedures and screening checklist which will guide handling of cultural heritage discovered during commencement of Project.

ESS9 Financial Intermediaries

Not relevant.

B.3 Other Relevant Project Risks

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C. Legal Operational Policies that Apply

OP 7.50 Projects on International Waterways No

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

Not Applicable

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

Actions to be completed prior to Bank Board Approval:

- Preparation and Disclosure of LMP
- Preparation and Disclosure of ESMF
- Preparation, consultation and disclosure of SEP
- Preparation and disclosure of ESCP

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

- Recruitment of environmental specialist, social development specialists and a gender specialist in the PCMU.
- Preparation and Implementation of ESMF, SEP and LMP by project appraisal
- Preparation and implementation of the sub-project specific environmental and social management instruments such as ESMPs or Checklists as needed before start of civil works or procurement of any subproject activity
- Environmental and social monitoring and reporting throughout project implementation
- Capacity building measures for Implementing Agencies on ESF and instruments preparation

C. Timing

Tentative target date for preparing the Appraisal Stage ESRS

01-Jan-2024

IV. CONTACT POINTS

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Public Disclosure



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Borrower/Client/Recipient

Borrower: Islamic Republic of Pakistan

Implementing Agency(ies)

Implementing Agency: Livestock and Fisheries Department, Sindh Province

V. FOR MORE INFORMATION CONTACT

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VI. APPROVAL

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Practice Manager (ENR/Social)	Robin Mearns Recommended on 13-Apr-2023 at 15:47:28 EDT
Safeguards Advisor ESSA	Pablo Cardinale (SAESSA) Cleared on 17-Apr-2023 at 11:31:47 EDT