2025

Philippine Sustainable Agriculture Transformation (PSAT) ENVIRONMENTAL AND SOCIAL SYSTEMS ASSESSMENT Program for Results (PforR) Financing



Philippine Sustainable Agriculture Transformation (PSAT)

Program for Results (PforR) Financing

Environmental and Social Systems Assessment (ESSA)

(Final Draft)

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ACRONYMS

4Ks	Kabuhayan at Kaunlaran ng Kababayang Katutubo
ADB	Asian Development Bank
AEW	Agricultural Extension Worker
AGRI-DPP	Development Partnership Project
AO	Administrative Order
ATI	Agriculture Training Institute
AWD	Alternative Wet-and-Dry
BARMM	Bangsamoro Autonomous Region of Muslim Mindanao
CDA	Cooperative Development Authority
CDP	Cluster Development Plan
COMPETE	Advancing Philippine Competitiveness
CPAFEP	Collaborative Provincial Agriculture and Fisheries Extension Program
CPF	Country Partnership Framework
CSO	Civil Society Organization
DA	Department of Agriculture
DAO	Department Administrative Order
DBCC	Development Budget Coordination Committee
DENR	Department of Environment and Natural Resources
DLI	Disbursement Linked Indicator
DSO	Department Special Order
DTI	Department of Trade and Industry
EMB	Environmental Management Bureau
EMSs	Environmental Management Systems
E&S	Environment and Social
ESSA	Environmental and Social Systems Assessment
EU	European Union
FGD	Eocus Group Discussion
FMR	Farm-to-Market
HVC	High-Value Crop
FAO	Food and Agriculture Organization
FCA	Farmer Cooperatives and Associations
F2C2	Farmers and Fisherfolk Clustering and Consolidation
FFRS	Farmer and Fisherfolk Registry System
FishCoRE	Philippine Fisheries and Coastal Resiliency Project
FOD	Field Operations Division
GAA	General Appropriations Act
GAP	Good Agricultural Practice
GDP	Gross Domestic Product
GIZ	German Agency for International Cooperation
GOP	Government of the Philippines
IA	Implementing Agency
	Investment Coordination Committee
ICT	Information and Communication Technology
	Information and Communications Technology Service
IFC	Information, Education and Communication
IFAD	International Fund for Agricultural Development
IMC	Intervention Monitoring Card
ISE	Informal Settler Family
JICA	Japan International Cooperation Agency
LGU	Local Government Unit
MBP	Para sa Masaaanana Baaona Pilipinas

M&E	Monitoring and Evaluation
MRIDP	Masagana Rice Industry Development Program
MMT	Multi-Partite Monitoring Team
NAFMIP	National Agriculture and Fisheries Modernization Plan
NEDA	National Economic and Development Authority
NFA	National Food Authority
NIA	National Irrigation Authority
NRP	National Rice Program
PAF	Project-Affected Family
PAP	Program Action Plan
PAP	Project-Affected Person (Resettlement-related)
PAPs	Programs, Activities, and Projects
PDO	Project Development Objective
PDP	Philippine Development Plan
PforR	Program for Results
PhilMech	Philippine Center for Postharvest Development and Mechanization
PhilRice	Philippine Rice Institute
PMED	Planning, Monitoring & Evaluation Division
PPSA	Philippines Partnership for Sustainable Agriculture
PSAT	Philippine Sustainable Agriculture Transformation
PRDP	Philippine Rural Development Program
RA	Republic Act
RAs	Result Areas
RAPID	Rapid Agro-Enterprise Partnerships for Inclusive Development and Growth
RCEF	Rice Competitiveness Enhancement Fund
RFO	Regional Field Office
RSBSA	Registry System for Basic Sectors in Agriculture
RTL	Rice Tariffication Law
SPCMAD	Special Projects Coordination and Management Assistance Division
TWG	Technical Working Group
USAID	United States Agency for International Development

EXECUTIVE SUMMARY

1. The Environmental and Social Systems Assessment (ESSA) for the Program-for-Results (PforR) Program, entitled 'Philippine Sustainable Agricultural Transformation (PSAT)', was undertaken with four objectives: (i) assess the likely E&S effects of Program activities as of January 2025, specifically considering the agriculture sub-sectors of rice, livestock and inland aquaculture; (ii) evaluate the capacity of the Department of Agriculture (DA) to manage E&S effects at the systems level, i.e., policy and legal framework, implementation and organizational capacity, and performance vis-à-vis regulatory requirements of the Government of the Philippines (GOP) and E&S core principles as per Bank guidelines; (iii) determine the likelihood of Program activities complying or deviating from GOP and Bank E&S guidelines and requirements; and (iv) determine and incorporate E&S actions in the Program Action Plan to enhance DA's E&S management systems for the Program and ensure positive E&S outcomes during Program implementation. The systems-level E&S assessment excluded the work of the DA in E&S safeguards planning and implementation for donor-assisted projects through its Special Projects Coordination and Management Assistance Division (SPCMAD).¹

ESSA preparation adhered to the 2020 Bank Guidance on PforR Financing Environmental and 2. Social Systems Assessment.² At the Program Identification in September 2024, an orientation on the ESSA was provided for DA divisions and counterpart implementing agencies. Based on the initial batch of Program activities (Results Areas (RAs) and Disbursement Linked Indicators (DLIs)), initial screening was conducted of likely E&S effects and significant contextual, institutional, political, and reputational risks. During the Program Preparation/Pre-Appraisal from October 2024 to January 2025, report preparation started with primary and secondary data gathering, site visits, and team review meetings. On October 4, 2024, the E&S team participated in the consultation workshop conducted by DA with the private sector. From November 12 to December 2, 2024, the E&S team held focus group discussions (FGDs) with 11 DA divisions/ offices/programs, 3 bureaus, 3 attached agencies, and 1 attached corporation. The FGD agenda covered E&S system implementation and performance, practices, and capacity constraints. In January 2025, site visits were conducted, covering two regional field offices (RFOs) located in Regions II (Tuguegarao City, Cagayan) and Region III (San Fernando, Pampanga), the Philippine Rice Research Institute (PhilRice in Munoz, Nueva Ecija), and six farmer cooperatives and associations (FCAs) scoped by the RFOs.³ The FCAs belonged to Levels 1 to 3, based on DA's categorization of FCAs under the Farmers and Fisherfolk Clustering and Consolidation (F2C2) program. FCA meetings were participated by the local government unit (LGU) representatives as well as FCA partners from the private sector and civil society. The FGDs and site visits involved extensive coordination and assistance provided by DA through the SPCMAD and the PforR Technical Working Group (TWG) under the Office of Special Concerns and for Official Development Assistance (ODA). The draft ESSA will be disclosed, and consultation meetings will be held in March 2025.

3. The ESSA adopted the 11 exclusionary principles for a PforR and arrived at seven excluded activities pertinent to Program boundaries and activities outlined under three results areas (RAs) and its disbursement-linked indicators (DLIs). The seven excluded activities are as follows: (i) construction of large-scale infrastructure such as main canals, branch channels, reservoirs, and large barrages; (ii) development of fish ports and other investments supported through ongoing Bank-assisted projects (i.e., PRDP, PRDP-SU, FishCoRe);⁴ (iii) activities involving significant conversion or degradation of critical natural habitats; (iv) activities conducted in areas with significant legacy pollution; (v) exploitation of groundwater for paddy field irrigation where physical conveyance or water allocation can significantly change water quality, water availability, and local aquatic ecosystems; (vi) activities involving land use or acquisition for

¹ SPCMAD is the division in DA responsible for E&S risk management and safeguards implementation for foreign-assisted projects. ² Bank Guidance: Program-for-Results (PforR) Financing Environmental and Social Systems Assessment, issued 18 September 2020.

³ The location of site visits was recommended by DA. The details of FGDs and consultations are in Section 7 Stakeholder Engagement of the ESSA.

⁴ The acronyms stand for the Philippine Rural Development Program (PRDP), Philippine Rural Development Program-Scale Up Project (PRDP-SU), and Philippine Fisheries and Coastal Resilience Project (FishCoRe)

non-agriculture facilities; and (vii) land pooling or consolidation activities resulting in relocation, land acquisition, land use rights redistribution.

4. **The E&S systems assessment focused on physical and non-physical Program activities.** Physical works are distributed across three agriculture sub-sectors, as follows: (i) rice-based activities, i.e., work involving upgrade, reconstruction, and rehabilitation on agricultural land; agricultural equipment and machinery; construction of processing facilities and related infrastructure; promotion of agricultural technologies and extension services; (ii) livestock activities focusing on hog and pig, buffalo, and chicken farming; and (iii) inland aquaculture activities, i.e., extensive and semi-intensive systems for aquaculture production of the aquatic species. Non-physical activities comprise Program-supported policy studies, research, capacity building, information sharing, and monitoring and evaluation (M&E).

5. **The Program will not involve any associated or linked activities/facilities as defined by the Bank's PforR ESSA Guidance.** Associated (or linked) activities are those necessary to achieve PforR objectives but are not explicitly defined as PforR activities nor are included in the Expenditure Framework. The rice-based systems covered by the Program are assumed to be accessible to existing water sources — the national irrigation systems (NIS) run by the National Irrigation Administration (NIA), and small water impounding projects (SWIPs) under the Bureau of Soils and Water Management (BSWM).

6. The overall E&S rating is Substantial, informed by the likely E&S effects of Program activities. Program design is not expected to compromise the location's natural landscape, biodiversity, habitats, or ecosystem services. However, potential E&S adverse effects during construction include dust, noise, agricultural pollution; workers' and community health and safety risks; poor working conditions and exclusion of vulnerable workers (e.g., landless workers, rural women, and youth, indigenous peoples) as well as the incidence of child labor and forced labor. Land requirements may be minimal, with field trials, new or improved farming practices, mechanization, and facilities development occurring in existing agricultural land or government property. New facilities will likely involve small civil works or prefabricated machinery, and equipment readily installed and requiring little space. Due diligence, though, is necessary for land acquisition and/or land donations causing significant E&S risks and impacts, as to loss of land, structures, and livelihoods. During operation, risks include threats to biodiversity, contamination of aquatic systems, health hazards from pesticide use, occupational health and safety, community health and safety, solid waste and wastewater pollution, and greenhouse gas and air emissions. Social inequalities may worsen without culturally sensitive approaches and effective grievance mechanisms. As the 2024-2027 Masaqanang Bagong Pilipinas (MBP) is an existing government program, stakeholder engagement is not considered new or complicated and can leverage the consultative approaches used by DA's regional field offices (RFOs) and partners in its banner programs and regular activities. Despite this, a gap worth addressing is the streamlining of grievance redress mechanisms (GRM) within DA and across RFOs where no standard system is reported. Adverse E&S effects can be well identified and readily avoided, minimized, and mitigated through a thorough screening mechanism, meaningful consultations, enhanced project design, and the implementation of mature technologies and good agriculture and food safety management practices.

7. **Contextual and political/reputational risks are deemed moderate while institutional risks are substantial.** As to context, Program activities will be carried out in situ although at risk in the face of extreme and unusual weather events (e.g., successive typhoons, drought). Meanwhile, E&S risk management systems and policies may support sustainability goals and improve internal processes in the DA and attached government institutions, the LGUs, and FCAs. Political buy-in though would take time. Adoption can be challenging in the initial stages due to delays in preparation, shortage of capable staff, staff resistance, and implementation costs. Substantial institutional risk stems from the Program being the first PforR in the country and the first for DA. DA's E&S risk management systems are contained in one division only (i.e. SPCMAD) and developed from its experience in implementing Bank-assisted projects. These systems are not institutionalized in the DA RFOs or streamlined in banner programs and activities. Other relevant institutional risks include the removal of NIA as a line agency under DA whose irrigation facilities serve many Program areas; FCAs having low capacity in engaging with E&S permitting systems;

and the absence of policies on the subsidization of power costs of FCAs operating large-scale processing and cold storage facilities.

8. The Environmental Management Systems Assessment focused on the legal framework, implementation mechanisms and procedures, and the institutional/ organization performance in four areas of interest. These are: (i) environmental impact assessment (EIA) management system; (ii) ecological environment and biodiversity protection; (iii) water and soil conservation management system; and (iv) agricultural pollution management system. DA's environmental (and social) management systems are anchored on the GOP's 1977 Environmental Policy and the establishment of the Philippine Environmental Impact Statement System (PEISS) in 1978 under Presidential Decree (PD) 1586. PEISS implementing rules and regulations took effect in 2003 under DENR Administrative Order (DAO) No. 30. DAO 2003-30 sets out the environmental and social impact assessment requirements that apply to Program activities. Under the PEISS, all development projects in the Philippines are subject to evaluation of potential environmental (and social) impacts and are required to secure either an Environmental Compliance Certificate (ECC) or Certificate of Non-Coverage (CNC). Key findings of the assessment are as follows:

- i. DA can also rely on an array of robust policy and legal frameworks as well as institutional mandates and implementation arrangements resting on itself, partner line agencies, and multi-sector bodies that involve the private sector, communities, and CSOs (e.g., protected area management boards or PAMB). The systems cover biodiversity and protected areas management, wildlife resources conservation and protection; fisheries, forestry, agricultural modernization; water resources management, pollution prevention and control, sanitation and air quality and emission standards, solid waste management, fertilizer and pesticide use including integrated pest management (IPM), climate change adaptation in agriculture and fisheries, and food safety and security.
- ii. A crucial gap, however, is substantial responsibility heaped on FCAs in meeting and complying with E&S requirements, in a manner that may not be at par with Bank expectations. Under the PEISS, ensuring compliance to E&S requirements, from the preparation of EIA documentation, securing permits and requisite monitoring and reporting lies on the Project owner or the implementing unit or the end-user of a proposed development facility. In the case of PforR, a substantial responsibility is vested on the FCAs, for which majority of Program activities will be downloaded. Other than EIA requirements, FCAs also must contend with special E&S requirements should Program activities be situated within areas declared as protected areas. Other responsibilities include the safe and optimal use of fertilizers and pesticides. For projects that are spearheaded by the Central Office of the DA and depending on the threshold level of the project being proposed, the DA Central Office will facilitate the preparation of the EIA documentation and submit the application for the ECC from the DENR Central Office.
- iii. The E&S risk management responsibilities resting on FCAs are substantial and uneven compared to existing capacities, which implies further capacitation and strengthening of DA as the Program's implementing agency directly linked to FCAs. The knowledge and experience of FCAs and project end-users in preparing baseline studies, conducting environmental impact assessments (EIA), and preparing relevant Environmental Impact Statements (EIS) is relatively limited. This situation stems from the lack of awareness of environmental regulatory requirements or the lack of understanding of technical aspects of environmental impact assessment. The FCAs heavily rely on the assistance of the DA and its field offices to meet such EIA and ECC regulatory requirements of the DENR. Some facilities were given penalties by the DENR EMB for operating without an approved ECC.

9. The Social Management Systems Assessment, framed against the ESSA's six core principles, consists of six areas of analysis. These are: (i) correlation analysis with Bank's core principles; (ii) assessment of social regulations and policies; (iii) assessment of social management mechanisms and capacity; (iv) assessment of measures to address social effects; (v) capacity assessment for PforR social risk and impact management; and (vi) overall assessment of consistency of social management systems with

the core principles. Social management systems overlap with environmental and are fluid across the six core principles. The PEISS is also the governing framework in social impact assessment (SIA) where the identification, assessment and management of adverse social risks and impacts are guided by a diverse range of national legislation and sector policies. With respect to Program activities, the social policy and legal framework traverses labor and working conditions for agricultural workers, the preservation and protection of cultural heritage; land and right-of-way acquisition and involuntary resettlement; protection for vulnerable workers and members of agricultural communities from exclusion, discrimination and prohibitive practices namely child labor and forced labor; and the prevention and resolution of social conflict. Key findings of the assessment echo that for the Environment, and are as follows:

- i. Enabling mechanisms are present to generally address the core principles although some gaps between national and Bank requirements may undermine the PforR. These regulations and policies transcend national and department central office levels to the subnational. A case in point is with Core Principle 4 on land acquisition, specifically in providing compensation sufficient to purchase replacement assets of equivalent value prior to taking land or restricting access. The national law provides for 50% downpayment for land and 70% for other assets like structures and access can be restricted. The Bank requirement, however, is 100% payment of compensation before any form of land take can commence. Another is land donation, being the first option preferred by some FGD participants in RFO-Region III. In practice, the RFO lacked a due diligence process for projects involving land donations in accordance with best practice or with the Bank's minimum requirements. This key finding informs the E&S action of adding a Program conditionality that Program activities be implemented only in lands that FCAs own or have other forms of secure tenure, e.g., long-term lease, usufruct.
- ii. While social risk and impact management agencies are available to execute policy and institutional arrangements, on-ground implementation is unclear and weak largely due to lack of capacities and human resources to fulfil E&S requirements under national law and Bank policy. This is a crucial finding common with the Environmental systems assessment. The DA only has SPCMAD responsible for E&S risk management for foreign-assisted projects. Line bureaus like the BSWM and the Bureau of Plant Industry (BPI) and other attached agencies largely rely on the RFOs to link with LGUs as cooperating partners. For instance, to comply with social risk management like securing the Free and Prior Informed Consent (FPIC) for areas within ancestral domains. In another example, PhilRice was able to directly process the FPIC requirements for its project in Sarangani. Otherwise, it had to rely on the RFOs for other such undertakings like the heirloom rice for the Cordillera Administrative Region (CAR), where the RFO is comprised mostly of IPs from the region. Targeted programs like the Adaptation and Mitigation Initiative in Agriculture (AMIA) and the Kabuhayan at Kaunlaran ng Kababayang Katutubo (4Ks) can comply with social and risk management requirements, perhaps due to the focused and relatively narrower scale of influence. For other regular activities and other banner programs, the RFOs deal directly with FCAs and must perform handholding functions when FCAs are required to apply for an ECC, conduct E&S due diligence and submit the requisite feasibility studies, detailed design, and EIA. As reported in the two RFOs visited, the lack of regular staff, especially in-house E&S specialists; high staff turnover, and high staff workload in DA are aggravating factors to building E&S capacity from the ground up.
- iii. Implementation of social measures will entail thorough screening to ensure exclusionary principles and the ESSA's list of excluded activities are observed. Screening is most crucial for Core Principles 4 (Land Acquisition) and 5 (Special Attention to Indigenous Peoples and Vulnerable Groups) where compliance borders between risk avoidance and exclusion. A thorough screening process is important because Program activities can induce indirect effects that have adverse social implications. One such example is the cash advance payments made by seed producers in Region II to secure labor arrangements to cope with labor shortages in the area. Such activities may result in debt bondage or patron-client relations that characterize forced labor.

10. There are eight E&S actions proposed to address the Substantial E&S risks of Program activities.

These actions revolve around: (i) implementation of TASAT recommended E&S streamlining in DA, forms, and manual; (ii) appointment of E&S staff at the DA and Regional Field Offices for monitoring of implementation of the E&S actions (iii) conducting of E&S screening; (iv) preparation and implementation of ESMP for moderate to substantial risk subprojects ; (v) implementation of E&S capacity building activities; (vi) establishment of an additional condition that activities supported by PforR must be on lands under formal title or under secure tenure arrangements by concerned FCAs; (vii) formulation of protocols into the E&S Manual for conducting meaningful consultations with IPs, ensuring compliance with FPIC guidelines, and incorporating benefit sharing and monitoring; and (viii) mapping and integration of agricultural information databases to consider including data on child and forced labor hotspots in agriculture.

1. INTRODUCTION

1.1 The Philippine Sustainable Agriculture Transformation Program-for-Results

1. The agricultural sector in the Philippines has high potential for socio-economic development but has grown slowly at 1.2% in 2023, contributing only 8.6% to the country's gross domestic product (GDP). On the one hand, a complex and fragmented institutional and regulatory system has hindered development and private investments. Agricultural policy has focused on food security, mainly through rice self-sufficiency. Furthermore, the Rice Tariffication Law (RTL) and the Rice Competitiveness Enhancement Fund (RCEF) brought significant changes to the rice sector. On the other hand, poorly developed food chains result in high post-harvest losses, affecting food security and incomes. Climate change also poses challenges to agricultural development.

2. In recognition of the challenges facing the agri-fishery sector, the Philippine Development Plan (PDP) 2023-2028 emphasizes the critical need to transform and modernize the sector. The PDP strategy has four pillars: (i) changes in farm scale; (ii) modernization; (iii) industrialization; and (iv) professionalization. These have been embodied in the National Agriculture and Fisheries Modernization and Industrialization Plan (NAFMIP) 2021-2030 which calls for transformative shifts to: (i) diversify incomes and employment of smallholder farmers and fisherfolk; (ii) define the role of urban and peri-urban areas in agriculture growth; (iii) optimize synergistic impacts using a spatial framework to geographically focussed investments; and (iv) match the supply and demand for food.

3. To operationalize the transformative strategies of the PDP and NAFMIP, the Department of Agriculture developed the *PARA SA MASAGANANG BAGONG PILIPINAS* 2024-2027 (MBP) program ⁵. This 4-year plan aims to reinvigorate the agri-fishery sector by addressing key issues that have hindered the desired paradigm shift and actions by stakeholders. The MBP focuses on specific actions to meet the country's food and nutritional needs and develop the sectors into profitable industries for farmers, fisherfolk, and all stakeholders in the food value chains. It spans the duration of the current government administration and addresses policy, regulatory, service, and investment gaps that have constrained the agrifood sector modernization.

4. The Department of Agriculture (the DA) with the support of the World Bank (referred to as the "Bank" in the document) has prepared and will implement the Philippine Sustainable Agriculture Transformation (PSAT) Program, through the Program-for-Results (PforR) financing modality. The PforR aims to support the implementation of the MBP to improve agrifood systems resilience and enhance food security through climate-responsive approaches, diversification of rice-based systems, an enabling policy environment and enhanced fiscal performance. The proposed program is aligned with the World Bank's Philippine Country Partnership Framework (CPF) 2025-2028 and three high level objectives, i.e., (i) inclusive growth and jobs, (ii) resilient communities, and (iii) environmental sustainability. The proposed PSAT Program is also aligned with the World Bank Group's Global Challenge Program on Food and Nutrition Security, the Paris Agreement (2015), and the Philippines' Nationally Determined Contributions (NDCs) (2021).

1.2 ESSA Objectives

5. The Environmental and Social Systems Assessment (ESSA) is an instrument that aims to address the environmental and social (E&S) risks and impacts of the PforR Program using national and local legal and policy frameworks and E&S management systems. The ESSA aims to:

- i. Assess the potential E&S effects of PSAT's Program-level activities, including the direct, indirect, induced, and cumulative effects, considering the agriculture sub-sectors of rice, livestock, and inland aquaculture;
- ii. Evaluate the capacity of the Department of Agriculture to manage the E&S effects of Programlevel activities, including an assessment of its current legal framework, regulatory authority,

⁵ Para sa Masaganang Bagong Pilipinas or for a prosperous new Philippines.

organizational capacity, and performance level in managing E&S risks in line with the E&S core principles of the World Bank's PforR guidance document, and the applicable E&S regulatory requirements of the Government of the Philippines (GOP);

- iii. Determine the likelihood that the operation and implementation of the PSAT Program activities would achieve or deviate from relevant country E&S objectives and the World Bank's E&S core principles as per Bank guidelines; and
- iv. Where prior gaps exist and improvements are necessary, formulate an agreed Program Action Plan (PAP) to enhance both the current E&S management systems of the DA and to ensure positive E&S outcomes during the implementation of the PSAT Program activities.

1.3 ESSA Methodology

6. The ESSA was conducted to ensure consistency with the six "core principles" embodied in the World Bank's policy on PforR Financing (paragraph 9). The ESSA was prepared to contribute effectively to managing the E&S risks and impacts of the Program and accordingly, promote sustainable development. The six core principles are:

- **Core Principle 1:** Program E&S management systems are designed to (a) promote E&S sustainability in the Program design; (b) avoid, minimize, or mitigate impacts; and (c) promote informed decision-making related to a Program's E&S effects.
- **Core Principle 2:** Program E&S management systems are designed to avoid, minimize, or mitigate adverse impacts on natural habitats and physical, and cultural resources resulting from the Program. Program activities involving significant conversion or degradation of critical natural habitats or critical physical, and cultural heritage are not eligible for PforR financing.
- Core Principle 3: Program E&S management systems are designed to protect public and worker safety against the potential risks associated with (a) the construction and operation of facilities or other operational practices under the Program; (b) exposure to toxic chemicals, hazardous wastes, and otherwise dangerous materials under the Program; and (c) reconstruction or rehabilitation of infrastructure located in areas prone to natural hazards.
- **Core Principle 4:** Program E&S systems manage the land acquisition and loss of access to natural resources in a way that avoids or minimizes displacement and assists affected people in improving or restoring their livelihoods and living standards.
- Core Principle 5: Program E&S systems give due consideration to the cultural appropriateness or equitable access to, Program benefits, giving special attention to the rights and interests of Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities and the needs or concerns of vulnerable groups.
- **Core Principle 6:** Program E&S systems avoid exacerbating social conflict, especially in fragile states, post-conflict areas, or areas subject to territorial disputes.

7. The World Bank E&S Team (staff and consultants) prepared the ESSA in accordance with the Bank Guidance on PforR Financing Environmental and Social Systems Assessment⁶. The Team relied on relevant information provided by the borrower through the DA and counterpart implementing agencies on internal E&S management systems that apply to the PSAT Program. The borrower played a crucial role in connecting the World Bank Team to counterpart implementing agencies. Focus group discussions (FGDs) took place with these agencies in November-December 2024 to discuss their respective E&S system performance, capacity constraints, and current practices regarding environmental and social sustainability. Additionally, with coordination assistance from the borrower, the World Bank E&S team conducted interviews and site visits to Regional Field Offices (RFOs) in Regions II and III, the Philippine Rice Research Institute (PhilRice), and six farmer cooperatives and associations (FCAs) in January 2025. The FCAs were at various levels of organization and maturity based on the DA system under the Farmers and Fisherfolk Clustering and

⁶ Program for Results Financing Environmental and Social Systems Assessment, September 18, 2020.

Consolidation (F2C2) program. In most cases, the World Bank and the borrower collaborated closely in organizing formal stakeholder engagement and public consultation events at various stages of the PforR Program cycle. The ESSA tasks performed at the Program identification and preparation stages, along with the stakeholder consultation activities and ESSA disclosure, are described below.

1.3.1 Program Identification

8. The E&S team joined the identification mission in September 2024, participating in technical meetings with the DA and line departments to discuss the program's Project Development Objective (PDO), result areas (RAs), and disbursement-linked indicators (DLIs). The E&S team had dedicated meetings with DA and the Special Projects Coordination and Management Assistance Division (SPCMAD), the unit responsible for E&S risk management and safeguards implementation for foreign-assisted projects. The meetings provided the venue for presenting the environmental and social requirements of the Program, the objectives and approach of the ESSA, and the responsibilities of both the Bank and the DA in Program preparation. The E&S team conducted an initial screening of potential environmental and social effects, including a preliminary assessment of significant contextual, institutional, political and reputational risks facing the Program.

1.3.2 Program Preparation

9. The E&S team carried out a comprehensive ESSA by: (a) analyzing the E&S effects of activities associated with the defined Program; (b) analyzing the borrower's systems for managing identified E&S effects, including reviewing regular programs, activities and plans (PAPs), practices and implementation performance ; (c) comparing the borrower's systems—laws, regulations, standards, procedures, and implementation performance—against the core principles and key planning elements to identify any significant gaps that could affect Program performance; and (d) formulating recommended measures to address capacity and performance gaps as well as policy issues and specific operational aspects relevant to managing the Program risks. Consultations with key stakeholders have taken place on the draft ESSA report to agree on the recommended actions which have been incorporated into the Program Action Plan (PAP), and the final ESSA has been disclosed on the Bank and governments' websites. In preparing the ESSA, the following activities were undertaken:

- Review of the relevant E&S national laws, regulatory frameworks, and guidelines.
- Review and assessment of the institutional roles and responsibilities for environmental and social risk management and analysis of current capacity and performance to carry out those roles and responsibilities, consistent with the Bank Policy and Directives with a focus on the activities implemented by DA agencies and related stakeholders.
- Review of available documents and data on E&S issues of the agriculture sector and analysis of the potential E&S effects, risks and impacts of the proposed Program activities.
- Public consultations were held with various implementing agencies and key stakeholders, including DA agencies at the central and regional level, FCAs, community representatives, civil society organizations (CSOs), the private sector, vulnerable groups, and regulatory authorities. These meetings aimed to explain the objectives of the ESSA, identify environmental and social issues and challenges, assess the need for technical assistance and capacity building, and gather feedback on the E&S management systems. Interviews and working meetings with DA representatives at central and regional levels, as well as key stakeholders, were held in October and December 2024 and January 2025. A public consultation on the draft ESSA will be held in March 2025, and feedback from previous consultations and this consultation will also be incorporated into the final version of the ESSA. Section 7 provides details of the consultation meetings held from October 2024 to January 2025, and the Stakeholder Engagement Plan throughout the implementation of the PSAT Program.
- The draft ESSA was disclosed in February 2025 through the World Bank's external website and on the websites of the DA at the central and regional levels. Public comments solicited during the

disclosure period. The final ESSA will be disclosed after Program negotiations and before Bank approval on the World Bank's external website and the websites of the DA at the central and regional levels.

2. PROGRAM DESCRIPTION

2.1 Summary of the Philippine Government's Agricultural Development Program

10. Recognizing the critical role of the agriculture sector in the country's socio-economic development agenda, the Government of the Philippines has emphasized the need for modernization of the sector in the PDP 2023-2028. The PDP strategy for agrifood sectoral transformation consists of four pillars: (i) changes in farm scales; (ii) modernization; (iii) industrialization; and (iv) professionalization. More specifically, the NAFMIP-2021-2030 calls for transformative shifts to: (i) diversifying incomes and employment of smallholder farmers and fisherfolk; (ii) defining the role of urban and peri-urban areas in agriculture growth; (iii) optimizing synergistic impacts using a spatial framework to geographically focused investments; and (iv) matching the supply and demand for food. The strategy calls for transformative changes in the foci and organization of primary agricultural production, as well as in the linkages between primary production and rest of the food systems, spurred by increased investment in agrifood clusters, logistics, processing, and trade. Additionally, the DA has "Banner" programs consistent with the above PDP strategy. These programs aim to increase farm income and productivity in order to address issues on food security, poverty alleviation and sustainable growth. These programs are: (i) National Rice Program to increase rice production; (ii) National Corn Program to increase quality production of corn and cassava; (iii) National Livestock Program to fast-track the development of poultry and livestock sector; (iv) National High-Value Crops Development Program to promote production and distribution of high-value crops (HVC); (v) National Organic Agriculture Program (NOAP) to implement organic agriculture practice in the country; and (vi) National Urban and Peri-Urban Agriculture Program (NUPAP) to promote urban and peri-urban agriculture and other emerging agriculture practices. These programs receive annual budget under the yearly General Appropriations Act (GAA).

11. The government has sought to reinvigorate the agriculture sector transformation through the MBP. The program focuses on the specific actions needed to achieve the food and nutritional needs of the country, and to develop the sectors as profitable industries for farmers, fisherfolk and all stakeholders involved in the value chains. The program spans the duration of the current administration and has been designed to address the policy, regulatory, service and investment gaps that have constrained the agrifood sectoral modernization efforts.

2.2 Program Boundary and Results Areas

12. The proposed PSAT PforR boundary would be nested within the DA's MBP. The MBP program has been designed to address pervasive constraints to sector modernization and transformation. The strategic objectives of the MBP are to: (a) accelerate agrifood sector growth and competitiveness as envisaged in both the PDP 2023-2028, and the DA's longer-term plan for sectoral transformation under the NAFMIP 2021-2030, (b) strengthen food security and agrifood system climate resilience, and (c) increase farm income, expand rural growth and provide livelihood opportunities. The MBP has 10 key areas for action as summarized in **Table 2-1**. The proposed PforR would support all except key action area #10 which aims to achieve "available and accessible finances that encourage investment and minimize risks". This would be supported through a separate World Bank operation, now under preparation.

13. The proposed RAs would be limited to those where implementation is within the institutional mandate of DA, with some exclusions. The Program would be national in scope but will exclude the Bangsamoro Autonomous Region of Muslim Mindanao (BARMM) which has a different budgetary and decision-making process. Likewise, the MBP's plan to develop fish ports is also excluded as this is being supported by the Asian Development Bank (ADB). Also excluded are investments supported through ongoing World Bank loans and grants, including the Philippine Rural Development Project (PRDP), the PRDP Scale Up, and Philippine Fisheries and Coastal Resiliency Project (FishCoRe). As the National Irrigation

Authority (NIA) has recently been transferred to the Office of the President under the Executive Order No. 69 series 2024⁷, the functions of NIA are also not included in the PSAT Program. The DA no longer has control over that agency's investment decisions.

2.3 Program Development Objective

14. The PDO is to promote climate resilient agrifood systems for increased productivity, enhanced diversification, and efficient use of public resources in the Philippines. The nine action areas of the MBP program to be supported through the PforR have been grouped into three RAs as described below. The RAs were selected considering that these: (i) have the potential to make a strong contribution to achieving the government's targets; (ii) are linked to specific measurable results; and (iii) allow for quick results and disbursements in the early years of the PforR.

- **Result Area 1: Enhanced production and incomes in rice-based farming systems.** The goals of this RA are to increase the productivity and efficiency of rice-based farming systems through the implementation of a suite of affordable and proven climate-smart agriculture technologies, increased mechanization and practices, and improved provision of farm inputs.
- <u>Result Area 2: Enhanced efficiency and resilience of food value chains</u>. The goals of this RA are to increase climate-resilient, high-value crop production (primarily vegetables), and to support post-harvest and logistics infrastructure to reduce food losses and increase the quality and quantity of marketable products for increased incomes and resilience for producers, agro-processors, exporters etc. This would be achieved through, *inter alia*, promotion, and support to farmers' cooperatives and associations, increased warehouse storage facilities, and improved market linkages.
- <u>Result Area 3: Enhanced institutional delivery and performance</u>. The goal of this RA is to accelerate agricultural growth and competitiveness through institutional and systems enhancements that allow better alignment of budget allocations with MBP's strategic objectives while improving the efficiency and effectiveness of public spending programs and crowding in the private sector.

Aspect	Government programs	Program Activities Supported by PforR
• Achieve food security for the Filipino people foo through boosting agricultural production to di		To promote climate resilient agrifood systems for increased productivity, enhanced diversification and efficient use of public resources in the Philippines.
	 nutritious food Develop the Agri-Fishery sector as a profitable industry for farmers fisherfolk and all stakeholders in the value chain 	
Duration	2024 to 2027 – MBP 2021 to 2030 – NAFMIP	2025 to 2030
Coverage	Nationwide except BARMM which has a different budget source and decision-making process	Nationwide except BARMM which has a different budget source and decision-making process
Financing	US\$ 14.69 billion	US\$ 8.40 Billion (PSAT Expenditure Program) Out of which US\$ 7.4 Billion is government financing and USS 1 Billion IBRD Financing

Table 2-1: The Government program: Para Sa Masaganang Bagong Pilipinas (MBP) and thePforR PSAT Program Boundary Comparison

⁷ Entitled "Reorganizing the NIA and transferring its attachment from the DA to the Office of the President."

Aspect	Government programs	Program Activities Supported by PforR
Key MBP Actions/ Result Areas	 Expand and improve available agri-fishery areas for increased production Mechanize and modernize agri-fishery production systems Research for Development and Extension (R4D) to optimize sector potential Develop and improve postharvest systems and infrastructure Develop efficient logistics systems for input and production output Improve and expand local and international market access Strong partnership with farmers, fisherfolk, private sector and other stakeholders Proper balancing of both the developmental; and regulatory roles of the DA Science and information driven decision- making through digitalization Available and accessible finances that encourage investment and minimize risks 	 All MBP actions except item no. 10 (see exclusions below). MBP actions have been grouped into three RAs for the PforR, i.e., RA 1. Enhanced production and incomes in diversified rice-based farming systems (MBP actions 1, 2 & 3) RA2. Enhanced efficiency and resilience of food value chains (MBP actions 4, 5, 6, & 7) RA3. Enhanced institutional delivery and performance. (MBP actions 8 & 9) Excluded Actions would be those; (a) outside the institutional mandate of DA, (b) supported through ongoing World Bank financed projects, and (c) under review for World Bank support through other operations viz; (a) credit and insurance, (b) development of fish ports and (c) NIA, given its recent transfer to the Office of the President

15. The strategic relevance/typical activities within the PforR boundary are selected with low to substantial E&S risks from the MBP activities, grouped into the three RAs. The program activities with DLIs are presented in **Table 2-2**.

Table	2-2:	PforR	Strategic	Relevance	and Progra	m Activities	and DUs
lable	2-2.	FIOIN	Juategic	Nelevance	and Frogra	III ACUVILIES	

Program Activities	DLI
RA1: Enhanced production and incomes	in rice-based farming systems
Increase rice yields and climate	DLI 1: Rice production area planted with improved and registered
resilience	varieties adapted to local conditions (ha)
Diversify and increase incomes of rice-	DLI 2: Rice production area being diversified through production
based farming	of other commodities (ha)
Improve rice productivity, seed use	DLI 3: Rice production area under direct mechanical seeding (ha)
efficiency and reduction of GHG	
emissions	
Enhance efficiency and transparency in	DLI 4: Farmers using IMCs (e-voucher) to access RCEF supported
use of RCEF	inputs and services (No.)
Improve sustainability of rice based	DLI 5: Farmers adopting at least two categories of CSA
farming	technologies and practices (No.)
Scale-up rice based farming	DLI 6: Farmer Cooperative and Association production area under
mechanization	mechanized farming (ha)
RA 2: Enhanced efficiency and resilience	of food value chains
Increase climate resilience and quality	DLI 7: Budget increase for high-value crops and organic
of HVC production and post-harvest	agriculture (%)
handling	
Reduce agri-food post-harvest loses and	DLI 8: Volume of perishable agrifood products being processed
spoilage	through new cold storage facilities (cu m³)
Increase agri-food Exports	DLI 9: Promotion of agri-food export growth (No. of regulatory
	processes enhanced)
RA 3: Enhanced institutional delivery and	l performance

Program Activities	DLI
Strengthen Institutional Processes	DLI 10: Alignment of the institutional enabling environment with
	the goals of the agriculture transformation/modernization agenda
	(No. of Administrative Order revisions)
mprove efficiency of agri-food, public DLI 11: Budget process and procedural strengthening enabl	
expenditure	multi-year, result-based planning aligned with MBP priority
	outcomes (percent of DA budget realigned)
Improve evidence-based decision	DLI 12: Command Center Platform for integrated and
making	comprehensive data management developed and operationalized
	(No. of data sets integrated into the platform)
Enhance Fiduciary processes and	DLI 13: Procurement system strengthened for improved budget
transparency	utilization efficiency (% increase budget disbursement)

2.4 Program Implementing Agencies

16. The DA, through its various banner programs, units, bureaus and attached agencies would be responsible for implementing the MBP. Implementation would rely on existing structures, mechanisms and capacity, including monitoring and evaluation (M&E). The MBP proposed actions all fall within the term of the current presidential administration (2022-2028) and are underpinned by a robust set of legislative actions that provide the legal basis for the proposed actions supported through the PforR.⁸

17. The DA has the institutional and technical capacity to undertake the actions supported through the PforR and achievement of the PDO. The DA, benefiting from some 20 years of institutional strengthening supported by the World Bank⁹, has well established mechanisms in place. This includes collaborative DA and Local Government Unit (LGU) planning and investment through a platform that has proven to be effective for leveraging convergence with other government programs and the private sector. The DA also has a strong in-house capacity for developing and utilizing digital approaches for all aspects of its work which will be integral to the proposed PforR actions and verification process. This includes geo-spatial planning and monitoring, along with the use of drones, geo-tagged monitoring of all procurement, and electronic processing and service standards monitoring of document flow.

18. Oversight of MBP program implementation and the PSAT PforR actions would be through a small Project Management Office (PMO) reporting through the Undersecretary for Special Concerns and Overseas Development Assistance (ODA) to the Secretary of Agriculture. This high level PMO will be important given the many DA agencies are involved with program implementation. Day-to-day functions of the PMO would include the monitoring of progress towards achievement of the DLIs, in conjunction with the Planning and Monitoring Service (PMS) of the DA, as well as ensuring the Program Action Plan (PAP) recommended by this ESSA are achieved. At the technical level, the actions to be supported through the PforR would be implemented with inputs from the responsible DA agencies and units, as listed in **Table 2-3**. The PMO will establish support staff for monitoring the E&S aspects of the Program. The key relevant agencies at the central and regional levels are deeply involved in several World Bank-funded projects and programs; and that the staff of these respective departments, particularly the SES Unit of SPCMAD, and the focal E&S staff appointed by the respective regional field offices, have gained and are gaining experiences in managing project-specific E&S risks.

Table 2-3: Lead Implementation Responsibility for	for the MBP and PforR Result Areas
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Action	Lead Institutions			
RA 1. Enhanced Production and Incomes in rice-based farming systems				
Increase rice yields and climate resilience - National Rice Program (NRP) – Lead implementing unit				

⁸ Legislation and Administrative Orders underpinning the proposed PforR actions are described elsewhere. Key among these are (a) The AFMA, or Republic Act 8435 (1997) (b) The Agri-Agra law or Agriculture, Fisheries and Rural Development Financing Enhancement Act of 2022, Republic Act 11901; and the (c)The Sagip Saka Act -Republic Act No. 11321 (2019).

⁹ World Bank supported project over the past 20 years include MRPD I & II, PRDP, PRDP-SU and FishCoRe

Action	Lead Institutions				
Diversify and increase incomes of rice-based farming Improve rice productivity, seed use efficiency and reduction of GHG emissions Enhance efficiency and transparency in use of RCEF Improve sustainability of rice based farming Scale-up rice based farming mechanization	 Philippine Rice Institute (PhilRice) for administering the RCEF funding Philippine Center for Post-Harvest Development and Mechanization (PhilMech) for administering the mechanization Agricultural Training Institute (ATI) for technical training 				
RA2. Enhanced efficiency and resilience of food value chains					
Increase climate resilience and quality of HVC production and post-harvest handling Reduce agri-food post-harvest loses and spoilage Increase agri-food Exports	 High-Value Crop (HVC) Program – Lead implementing unit DA Logistics Office for post-harvest and cold chain facilities DA Policy Research Service (PRS) for regulatory reforms on export promotion ATI on technical training in climate resilient technologies 				
RA3. Enhanced institutional delivery and performance					
Strengthen Institutional Processes	- DA Financial Management Service – Lead				
Improve efficiency of agri-food, public expenditure	Implementing unit supported by the Planning and Monitoring Services (PMS)				
Improve evidence-based decision making Enhance Fiduciary processes and transparency	 DA Administrative Service Procurement Office for procurement systems enhancement Information and Communications Technology Services (ICTS) for the Command Center establishment 				

19. The ESSA looks into the assessment of capacities of the respective agencies of the Department of Agriculture in relation to implementing the environmental and social systems requirements under the PforR program of activities. The review and evaluation of country regulations, and the respective capacities are described across **Sections 4 and 5** of the document, while the evaluation of functions, roles and responsibilities and E&S capacities of the respective departments are presented in **Annex 3 Table A0-5**.

20. Between January 14 and 22, 2025, the Bank Team solicited responses to questions on the capacity assessment of DA agencies using the online Google Form. Responses and feedback were received from 18 staff of the DA and its attached agencies, employed at the Central and Regional levels. The feedback received from the staff relates to observations regarding implementation of Bank-financed projects and recommendations to improving efficiency in E&S compliance requirements of the respective agencies of the Department. Findings are provided in detail in **Annex 4** of the ESSA.

2.5 Program Beneficiaries

21. The beneficiaries of the PSAT Program are FCAs and individual farmers along with other enterprises engaged through joint ventures in providing agri-fishery service facilities. These range from input supply to post-harvest handling storage and logistics, including agri-fishery producers linked through market agreements with exporters and stakeholders involved in various aspects of agri-food value- addition and marketing.

22. The project will directly benefit the approximately 3 million farmers and fisherfolk registered through the RSBSA, of whom 50% are women. Benefits will come through enhanced adoption of climate-smart agriculture (CSA) technology and approaches designed to raise agri-fishery productivity, efficiency gains through mechanization, and better seed and fertilizer input supply and use. Benefits will also arise from diversification programs that can increase incomes and resilience to climate impacts and with reduced post-harvest losses and spoilage due to poor handling, drying, storage and milling practices. It is expected

that more efficient public expenditure programs would be realized, supporting competitive agri-fishery development, based on more effective spatial/ climate suitability planning and leveraging of resources through convergence with all stakeholders.

3. EXPECTED PROGRAM ENVIRONMENTAL AND SOCIAL EFFECTS

3.1 Environmental and Social Screening and Exclusion List

23. **Purpose**: The Bank's core principles and requirements on E&S screening were fully considered during the PforR concept and identification stages, and in ESSA preparation. Screening was conducted on MBP program activities to (1) identify and exclude the activities with significant E&S risks/impacts, and (2) define the scope of activities to carry out ESSA. The details on E&S screening during the concept stage are included in Annex 1.

24. **Exclusionary principles**: In accordance with the PforR Policy and Directive, activities that are judged to have significant adverse impacts that are sensitive, diverse, or unprecedented on the environment and/or affected people are not eligible for financing and are excluded from the Program. More specifically, the following activities with significant E&S risks and impacts are excluded from Program implementation.

- i. Significant conversion or degradation of critical habitats, natural habitats or critical cultural heritage sites.
- ii. Air, water, or soil contamination leading to significant adverse impacts on the health or safety of individuals, communities, or ecosystems.
- iii. Workplace conditions that expose workers to significant risks to health and personal safety.
- iv. Land acquisition and/or resettlement of a scale or nature that will have significant adverse impacts on affected people, or the use of forced evictions.
- v. Large-scale changes in land use or access to land and/or natural resources (e.g. ecological resettlement).
- vi. Adverse E&S impacts covering large geographical areas, e.g. large-scale water (surface and groundwater) resource infrastructure, including large dams, or activities involving the allocation or conveyance of water, including inter-basin water transfers or activities resulting in significant changes to water quality or availability¹⁰.
- vii. Significant cumulative, induced, or indirect impacts.
- viii. Activities that involve the use of forced or child labor.
- ix. Marginalization of, discrimination against, or conflict within or among, social groups (defined by race and ethnicity, among others).
- x. Activities that would (a) have adverse impacts on land and natural resources subject to traditional ownership or under customary use or occupation; (b) cause relocation of indigenous peoples from land and natural resources that are subject to traditional ownership or under customary use or occupation; or (c) have significant impacts on cultural heritage that is material to the identity and/or cultural, ceremonial, or spiritual aspects of the affected communities, including indigenous groups.
- xi. Any activities that due their nature, scale, and scope, would like to be classified as high E&S risk.
- xii. The exclusion principle applies to Program activities that meet the above criteria, regardless of the borrower's capacity to manage such effects. In the PforR context, the concept of exclusion also means that an activity is not included in the identified program of expenditures. In addition, an activity is not included if it requires the completion of a non-eligible activity to achieve its contribution to the PDO or any specific DLI.

¹⁰ Para. 16 of Bank Guidance Program-for-Results Financing Environmental and Social Systems Assessment (September 18, 2020)

25. **Excluded activities**: The agricultural land used for rice and high-value crop (HVC) production is to be operated under preconditions that the agricultural land areas are accessible to existing water irrigation sources and backbone irrigation facilities (such as reservoirs, main canals, branch channels, etc.). Therefore, the construction of large-scale infrastructure such as main canals, branch channels, reservoirs, and large barrages is not within the scope of the PforR.

26. When considering the likely significant risks and impacts, the following types of activities will be excluded:

- i. Development of fish ports, investments supported through ongoing World Bank loans and grants, including PRDP), PRDP SU, and FishCoRe.
- ii. Activities involving significant conversion or degradation of critical natural habitats (e.g., activities within the scope of environmentally sensitive areas like ecological protection redline (ERL) for building small scale storage ponds and ungated weirs for irrigation, etc.).
- iii. Activities that would be conducted in areas with significant legacy pollutions.
- iv. Exploitation of groundwater for paddy field irrigation that would involve the physical conveyance or allocation of water with the potential to result in significant changes to water quality, water availability and local aquatic ecosystem.
- v. Activities that would involve land use or acquisition for non-agriculture facilities.
- vi. Land pooling or consolidation activities that would lead to relocation or acquisition/redistribution of land use rights for many populations (e.g., government-initiated programs to merge agricultural land to achieve the relative concentration of cultivated lands).

27. The Program activities will not be implemented on any international waterways as per the Bank Policy on International Waterways (OP 7.50) or in any disputed areas as defined under the Bank Policy on Disputed Areas (OP 7.60).

3.2 Environmental and Social Assessment Scope

3.2.1 Physical Activities under the PforR

28. In general, the PforR does not support the development of agricultural land beyond the designated agricultural land area. The activities to be supported by the proposed PforR under the three result areas include rice-based activities, livestock activities, and inland aquaculture activities.

29. **Rice-based activities**: (a) physical works mainly involve upgrades, reconstruction, and rehabilitation of existing infrastructure within the existing footprint of designated agricultural land to improve efficiency and production, including construction and upgrading of farm to market roads (FMR), small irrigation and drainage canals, and desilting water storage ponds to improve soil fertility, paddy field soil and water efficiency and productivity; (b) providing agricultural equipment and machinery such as tractors, transplanters, combine harvesters, dryers, stripping machines, etc. for rice, corn, abaca, and high value crops; (c) construction and rehabilitation of processing facilities and infrastructures such as rice mills, food terminals and trading posts, storage warehouses, etc; (d) agricultural technologies promotion and extension for water-saving and low-carbon rice production (e.g., deep returning of straw in rice production, test-based formula fertilization, increased application of organic fertilizer and green manure, green and integrated pests management and integrated water nutrient management, chemical fertilizer and pesticide use reduction and efficiency improvement, alternating wetting and drying (AWD) irrigation, etc.).

30. **Inland aquaculture activities**: Inland aquaculture activities would involve extensive and semiintensive systems for aquaculture production of the main aquatic species. Extensive systems use low stocking densities and no supplemental feeding and may use human-made ponds or, more often, existing natural structures (e.g. lakes or lagoons). Semi-intensive systems use higher stocking densities, supplemental feeding, and additional management (such as water changes) and typically utilize humanmade ponds, pens, or cages. Intensive systems use maximum stocking densities and are dependent on a mixture of natural and formulated feeds. Semi-intensive and intensive systems typically use small pond compartments of up to 1 ha for ease of management. Activities include preparation of ponds, stocking with fry or juveniles, feeding of fry or juveniles, on-growing phase, and harvesting and cleaning of ponds, cages, or pens. The main aquaculture species include seaweeds (mainly *Kappaphycus* and *Eucheuma* spp.), milkfish (*Chanos chanos*), tilapia (mainly *Oreochromis* spp.), and shrimps/prawns (*Peneaus* spp., *Metapenaeus* sp., and *Macrobrachium* sp.) which are the top cultured species produced from the aquaculture sector.

31. **Livestock activities**: Livestock activities would focus on hog and pig, buffalo, and chicken farming. The livestock facilities generally include the following operations: feed storage and handling, livestock housing, feeding and watering, management of animal waste, and pest control. Facilities generally consist of a core production area with an agricultural hinterland. The livestock are gathered in the core production area to facilitate drinking, watering, and animal welfare; the surrounding agricultural hinterland is ideally used for tillage crop production and facilitates the use of the manure as a crop nutrient.

32. These physical activities would generate certain direct and/or indirect E&S risks and impacts during construction and operation but would not involve new construction and/or significant expansion of large infrastructure and are not expected to induce high E&S risks. Farm mechanization tends to be demand-driven, with labor displacement impacts possibly mitigated by training and credit support in off- and non-farm activities as well as skills transfer. The agricultural technologies to be supported by the PforR are considered to bring about positive impacts on reduced pollutants, minimizing the use of chemical pesticides and inorganic fertilizers, improving soil quality, reducing greenhouse gas emissions, and enhancing the ecological environment. Positive social impacts would likely stem from increased income and employment especially among disadvantaged and vulnerable groups like landless and seasonal workers, women, youth, indigenous groups, migrant workers and even PWD workers. Food production bodes well for consumption and dietary intake requirements (e.g., protein). Meanwhile, increasing emphasis on food safety and animal health means enhanced eating quality.

3.2.2 Non-Physical Activities under the PforR

33. Policy studies, research, capacity building, information sharing and M&E would be supported by the PforR, including: (a) improving relevant management regulations, implementation rules and standards: (b) providing policy guidance and technical support; (c) developing and organizing relevant training; (d) strengthening the investment research and extension; (e) supporting information sharing and good practice replication efforts; (f) promoting participation of FCAs; (g) promoting access to domestic and international markets; and (h) improving access to information. Implementation of the non-physical activities would have minimal or no direct adverse E&S risks and impacts, but implementation of the outputs of some of these activities may induce indirect E&S effects.

34. Associated/linked facilities/activities: According to the Bank's PforR ESSA Guidance, associated (or linked) activities are those necessary to achieve the PforR objectives but are not explicitly defined as PforR activities or included in the Expenditure Framework. While agricultural land irrigation requires support from facilities such as dams, reservoirs, and main and branch canals, the agricultural land must be constructed under the condition that these areas are accessible to existing water sources and the main irrigation system. Therefore, the construction of such is not part of the government program, and the PforR will not involve any associated or linked activities/facilities as defined by the Bank's PforR ESSA Guidance. Regarding the safety of existing reservoir dams involved in water-saving irrigation activities, reference is made to the due diligence results of similar Bank-financed projects/programs. The Philippines has a robust dam safety management system, encompassing laws and regulations at both national and provincial levels, as well as detailed implementation at the local level. Each reservoir has an operation and maintenance manual, an emergency response preparedness plan, an instrument plan, and other management documents in compliance with the strictly observed and implemented laws and regulations. All reservoir dams are regularly reinforced or upgraded. Except for some small reservoirs managed at the community level, other reservoirs have established special management units and are staffed with sufficient operation and maintenance personnel.

3.3 Environmental and Social Benefits

35. The PforR Program is anticipated to yield significant environmental and social benefits. These include enhanced protection of cultivated land to ensure food security, increased efficiency in water and soil resource utilization to promote resource-saving agriculture, and an improved agricultural ecological environment. The program aims to reduce pesticide and fertilizer use, promote integrated pest management practices, and reduce agricultural nonpoint source pollution. Additionally, it seeks to enhance soil's potential for carbon sequestration through improved fertility, contributing to the reduction of greenhouse gas emissions (methane, CO₂, and N₂O). This will significantly contribute to the country's green agriculture development, raise awareness and capacity for green agricultural practices, and generate substantial global public goods and climate resilience. Other potential benefits from the proposed PforR program activities include: (i) research and innovation in seed programs, contributing to more sustainable land and water management and decreased erosion; (ii) resilient infrastructure and post-harvest management providing scaling-up and value-addition to the product consolidation of FCAs; (iii) mechanization programs to improve production and reduce labor inputs, resulting in improved farmer health and fiscal performance through budget support for agricultural activities; (iv) adequate and timely provision of extension services, including those related to promoting good agricultural practices (GAP), environmental risk management and biodiversity conservation.

3.4 Potential Environmental and Social Effects

36. The PforR activities are anticipated to generate some negative environmental and social (E&S) impacts; however, these are not expected to be significant due to the exclusion of certain activities and the fact that all typical physical activities are of small to moderate scale and confined within the designated agricultural land. The main E&S impacts are described in the following sections.

3.4.1 Likely Environmental Effects

37. The civil works under the PforR encompass the construction and operation of three groups of activities. The rice-based activities include: (a) physical works primarily involving construction, reconstruction, and rehabilitation of small to medium scale existing infrastructure, such as farm to market roads, small irrigation and drainage canals, and desilting water storage ponds; (b) providing agricultural equipment and machinery, including tractors, transplanters, combine harvesters, dryers, stripping machines, etc., for rice, corn, abaca, and high-value crops; (c) construction and rehabilitation of processing facilities and infrastructures, such as rice mills, food terminals and trading posts, storage warehouses, etc.; and (d) promotion and extension of agricultural technologies for water-saving and low-carbon rice production. Inland aquaculture activities include the preparation of ponds, stocking with fry or juveniles, feeding of fry or juveniles, on-growing phase, and harvesting and cleaning of ponds, cages, or pens. The livestock activities include the construction of production areas, including feed storage and handling facilities, livestock housing, feeding and watering, management of animal waste, pest control, and risks and impacts from illegal use of pesticides and agro-chemicals.

Adverse Environmental Impacts During Construction Work

38. During the construction work phase, the construction and rehabilitation of facilities and infrastructure, along with the use of equipment, may generate solid waste and cause nuisances related to machinery and vehicles, such as dust, noise, emissions, and spills of hydrocarbons and used oils. Additionally, there could be harmful effects like uprooting trees and reducing green spaces. Although these impacts are not permanent and will cease once the developments are completed, their effects can persist, especially the solid waste and potential spills of oils and greases from the equipment. Experience with the past and on-going Bank financed projects in the sector shows that the level of environmental risks and impacts would be expected from low to substantial. Therefore, it is crucial to implement environmental protection procedures during both the operation and cessation of the developments to mitigate these impacts. In particular:

- The work may involve using borrowed materials from nearby quarries.

- Construction machinery and noisy equipment, such as jackhammers and air compressors, will generate noise pollution.
- Occupational health and safety risks and impacts during construction and operation of the machinery and construction activities.
- Dust will be produced by excavation work, improper storage of construction materials and excavated materials, and the movement of construction machinery.
- The movement of construction machinery and potential non-compliance with safety instructions may lead to accidents for workers.
- Construction vehicles will emit greenhouse gases (GHG) from exhaust gases, causing odor nuisances, health risks, and air pollution.
- Construction sites will generate waste, leading to occasional water and soil pollution.
- Some tasks will require the use of vehicles and various machinery, which may increase the volumes of used oils (including hydraulic, engine, gearbox, lubrication oils, insulating oils, and heat transfer fluids).
- Construction activities may cause occupational health and safety risks for the workers as well as community health and safety risks.
- Program activities could affect certain drinking water sources, impacting water quality and concentrating pollutants.
- Some tasks could encroach on protected areas, resulting in the cutting or uprooting of vegetation. However, specific restrictions and mitigation measures, such as planting trees to compensate for the reduction in CO2 sequestration capacity, will be implemented.

39. The mitigation measures for this phase of work include implementing good construction management measures, regularly monitoring the application of site instructions as outlined in the specifications, identifying any non-conformities, and establishing corrective measures. Additionally, it involves monitoring the implementation of these corrective actions.

Adverse Environmental Impacts During Operation

Facilities and infrastructure

40. The negative environmental risks and impacts associated with the operation of program facilities and infrastructure can arise from several factors. These include inadequate design, lack of care and maintenance, improper use, degradation of facilities and infrastructure, insufficient application of safety measures, and inadequate implementation of environmental and social monitoring. Such issues can lead to malfunctions or deterioration of the structures, safety risks, resulting in various negative impacts. The mitigation measures recommended at this level are part of good management practices for facility operation and maintenance as well as safety measure. They generally consist of putting in place emergency measures in the event of serious environmental accidents.

Agriculture activities

41. Intensification of cropping systems to optimize production of these various major crops involve increased cropping frequency (two to three crops per year for the annual crops), increased cropping intensity (more trees or plants per unit area), increased fertilizer application to boost growth and crop yield, increased pesticide application to control pests and diseases, irrigation systems to augment precipitation, adoption of technologies (new cultivars, hybrid varieties), and farm mechanization. These efforts may lead to environmental degradation such as depletion of soil nutrients; leaching of excess fertilizers into the environment; pesticide residues in crops, soil, and water resources; volatilization of greenhouse gases (GHG) into the air; soil erosion; and sedimentation and eutrophication in adjacent water bodies. The continuous and intensive use of chemical pesticides can lead to human poisoning, chemical dependency, new pests, pest resurgence and outbreaks, resistance to pests, and water pollution. Moreover, the cultivation of fragile and marginal upland areas can lead to deforestation, accelerated soil erosion, sedimentation of rivers, and biodiversity loss.

42. Too much use of pesticide can be harmful and result in (a) health diseases; (b) ground and surface water pollution through runoff; (c) food contamination; (d) increased resistance of pest to pesticides, which will then lead to more pest outbreaks; (e) decreased number of helpful insects such as parasites and predators; and (f) decreased number of microorganisms in water and paddy soil which maintain the fertility while decreasing the use of chemical fertilizer. The degree and frequency of these effects are greatly influenced by the type of chemical, its tenacity, and quantities used¹¹.

43. A World Bank study titled "An Overview of Agricultural Pollution in the Philippines – The Crops Sector"¹² (World Bank, 2016) reveals that pesticide use is widespread even among smallholder systems. Pesticides are primarily used for controlling insect pests, followed by fungi and weeds. While contamination of water bodies due to excessive fertilizer nutrients has been detected, adverse off-site impacts have yet to be firmly established. Rice farming is the largest user of pesticides and is suspected of causing environmental contamination. Although herbicide application rates have been rising, the use of insecticides has been declining. Pesticides used in vegetable and banana farming are significant sources of environmental pollutants. The prevalent use of pesticides has had deleterious on-site impacts and suspected off-site impacts.

44. The major sources of greenhouse gas (GHG) emissions from the agriculture sector include methane emissions from irrigated rice and nitrous oxide (N_2O) emissions from synthetic fertilizer application. Crop residue burning releases GHGs into the atmosphere and leads to a decline in soil fertility. In the Philippines, burning of rice, corn, and sugarcane residues is still widely practiced minimizing labor requirements for land preparation for the next cropping season. This practice also helps control pests and is part of the fertilizer management system, as the ashes provide an immediate source of phosphorus and potassium. However, burning crop residues quickly depletes precious nutrients, particularly nitrogen, contributes to GHG emissions (CH4 and N2O), and releases toxic gases into the atmosphere. Consequently, crop residue burning results in the decline of soil organic matter and contributes to the gradual decline in soil fertility and productivity.

Livestock activities

45. New facilities, such as animal farms, farming zones, slaughtering and meat processing plants, feed processing plants, comprehensive utilization of animal waste facilities, related laboratories, storage and transportation units for livestock products, and marketing centers, or existing facilities where new technologies and practices will be applied, extended, or adopted, may pose various environmental problems during operation. These problems include:

- Solid waste: This includes waste feed, animal waste, carcasses, and sludge from wastewater treatment plants or facilities installed for slaughterhouses, feed processing plants, veterinary labs, and animal product quality and safety testing labs.
- Wastewater: This includes non-point source effluents due to runoff from feed (including silage) storage, loading, and unloading, livestock housing, feeding, and watering, waste management facilities, and areas of land application of manure. Additionally, wastewater will be generated during animal slaughter and meat processing, animal disease control, and food safety laboratory operations. Finally, wastewater will be produced during the process of feed processing, livestock and poultry manure treatment, and resource utilization.
- GHG and Air Emissions: The primary sources of greenhouse gases (GHG) and air emissions include ammonia from animal waste management, methane and nitrous oxide from animal feeding and waste management, odors from animal housing and waste management, bioaerosols, and dust from feed storage, loading, unloading, feeding, and waste management activities. Additionally, emissions will result from odors, exhaust gases, dust, and particulates produced during slaughtering

¹¹ Pingali, P. L., and P. A. Roger, eds. 1995. *Impact of Pesticides on Farmer Health and the Rice Environment*. International Rice Research Institute. Kluwer Academic Publishers. Massachusetts

¹² An Overview of Agricultural Pollution in the Philippines – The Crops Sector (World Bank, 2016)

and meat processing. Waste gases will also be generated from animal disease control and food safety testing laboratories, as well as dust produced during feed processing.

- Hazardous Materials: Throughout the livestock production cycles, various hazardous materials are used, including disinfecting agents spread on animals and sheds, antibiotics for controlling animal diseases, hormonal products for animal breeding and milk production, and materials posing occupational and public health risks from pathogens, hazardous biological waste, and chemical waste from veterinary laboratories and livestock quality testing laboratories.
- Pesticides: The use of pesticides in livestock production poses potential pollution risks to the environment and health and safety concerns. These pesticides are used for controlling pests in livestock, sheds, and enclosures, as well as pests and diseases of artificial forage in fodder production areas.
- Forage plantation: Forage plantation requires watering, as well as the application of pesticides and fertilizers, which can lead to the consumption of water resources, agricultural non-point source pollution, and soil compaction. The use of chemical agents and pesticides for pest control in forage cultivation areas can negatively impact the environment. Additionally, forage production may involve the introduction of imported grass and fodder species, which could have broader effects on biodiversity. However, these adverse impacts can be significantly reduced by adopting climate-smart farming techniques, low-emission technologies, and measures in the PforR, as well as promoting the green livestock development model of circularity in crop and livestock production.
- Occupational health and safety (OHS): OHS hazards in the daily operations of livestock breeding and farming include exposure to physical hazards and potential injuries from machinery used in livestock slaughtering and processing. Workers may also face chemical hazards from pesticides applied to livestock and sheds, organic dust in sheds, pathogenic substances such as bacteria, molds, mites, and viruses, as well as detergents and disinfectants used in slaughtering and processing workshops. Additionally, there are risks associated with confined spaces. There are also risks to the health to the operators and safety of the community from improper disposal of hazardous biological and chemical waste in veterinary laboratories and animal product quality testing laboratories and improper disposal of sick & dead animals. These health and safety risks will be significantly mitigated and improved through the construction and upgrading of livestock sheds, animal disease prevention and control facilities and the provision of services by government-led and entrusted professional organizations, as well as through the adoption and practice of better animal health practices.
- Animal disease: Animal disease-causing agents can spread rapidly, particularly in intensive livestock operations. These diseases can enter a facility through new animals, equipment, and people, directly affecting animal health. They also pose risks to the health and safety of operators who have direct contact with animals, as well as the surrounding communities, especially concerning zoonotic infectious diseases.
- Animal welfare in animal husbandry: The high-density, low-activity spaces of livestock farms or farming zones with harsh environmental conditions in intensive livestock operations, along with the mistreatment of animals and frightening behaviors of livestock stockmen during feeding, transportation, and slaughtering, can easily cause animal sickness with low immunity. The use of prohibited antibiotics, such as "clenbuterol," or other drugs in feed, as well as the excessive use of trace elements, can lead to the residue of harmful substances in animal products. This not only affects animal health and leads to a high incidence of animal disease but also reduces breeding efficiency and affects the quality of agro-food products, which in turn impacts public health and the safety of agro-food consumers.

Inland aquaculture activities

46. Challenges of the aquaculture sector: Aquaculture is a significant contributor to the country's total fishery production. However, the aquaculture sector in the Philippines faces many challenges despite large volume of production in recent consecutive years. The most common challenges are pests and diseases,

water quality degradation, the occurrence of harmful algal blooms, and lack of capital and government support.

47. *Pests and* Diseases: Tilapias are affected by diseases, especially bacterial and viral diseases, despite being a nearly hardy fish. The most commonly reported bacterial diseases are *streptococcosis*, motile *Aeromonas septicemia*, and *Pseudomonas* infections¹³. In addition, Tilapia Lake Virus, a viral disease that emerged recently, threatens tilapia aquaculture in the country as well as worldwide¹⁴. Disease outbreaks in shrimp aquaculture have resulted in substantial production decline over the last decades, which has become more challenging for the country to claim back the title as the global shrimp leader. Shrimp diseases can be viral, bacterial, and protozoan. Among the most common diseases which have significant impacts are white spot disease, white feces disease, early mortality syndrome, hepatopancreatic *microsporidiosis*, *luminous vibriosis*, filamentous bacterial disease, shell disease, ciliate infestation, black gill disease, and chronic soft-shell syndrome¹⁵. The use of therapeutics, especially antibiotics, is now strongly regulated in the Philippines due to the strict requirements of the country, including importing markets.

48. Water quality degradation: Water quality degradation in ecosystems that support aquaculture is still a main issue in the Philippines, especially in Luzon. For example, in Taal Lake, concentrations of phosphates, nitrates, and total dissolved solids were significantly higher in aquaculture cage sites than in areas without aquaculture activities¹⁶. Moreover, high water temperature (>32 °C) was the major challenge that has a significant impact on tilapia aquaculture, particularly in Luzon and Mindanao activities¹⁷.

49. *Harmful algal blooms:* Harmful algal blooms have been a country's problem for the last decades affecting the aquatic environment, aquaculture sites, infected farmed species, country's economy, and even a human's life. For instance, in Laguna de Bay, due to human activity such as disposal of nutrients (nitrate and phosphate), under favorable environmental conditions, algal blooms can be expected degrading water quality like low oxygen and toxin production. This is the main cause of fish kill in most Luzon in recent years¹⁸. Harmful algal blooms resulted in; a) economic losses and damages amounting to 2.2 million pesos, b) extensive economic damages, c) problem in the international trades, d) unemployment of many shellfish industries, and e) displacement and losses of livelihood for thousands of fishers¹⁹.

50. *Lack of capital and government support:* In tilapia aquaculture, lack of capital and government support has been identified as one of the prime causes of low tilapia production.

51. The environmental issues associated with the aquaculture sector primarily include threats to biodiversity, contamination of aquatic systems, and hazardous materials.

Threats to Biodiversity

52. Threats to biodiversity are mainly associated with the conversion of natural habitats during construction; potential release of alien species into the natural environment during operations; potential loss of genetic resources due to the collection of larvae, fry, or juveniles for aquaculture production; potential release of artificially propagated seed into the; sustainability of fish meal and fish oil ingredients

¹³ Reyes, A.T., Fajardo, L.J. & Abando, A.K.Y. (2019). Antibiotic susceptibility of *Streptococcus agalactiae* isolated from Tilapia pond sediment in Lubao, Pampanga, Philippines. *Journal of Drug Delivery and Therapeutics*, 9(2-s), 370-375.

Legario, F.S., Choresca Jr, C.H., Turnbull, J.F. & Crumlish, M. (2020). Isolation and molecular characterization of streptococcal species recovered from clinical infections in farmed Nile tilapia (*Oreochromis niloticus*) in the Philippines. *Journal of Fish* Diseases, 43(11), 1431-1442.

¹⁴ Aich, N., Paul, A., Choudhury, T. G. & Saha, H. (2021). Tilapia Lake Virus (TiLV) disease: Current status of understanding. Aquaculture and Fisheries.

¹⁵ Hays, L. (2020). Aquaculture in the Philippines: The Top 10 Diseases Shrimp Farmers Should Be Aware Of. Retrieved from: https://www.qb-labs.com/blog/2020/05/25/top-10-diseases<u>https://www.qb-labs.com/blog/2020/05/25/top-10-diseases-shrimp-farmers-should-be-aware-of</u>shrimp-farmers-should-be-aware-of.

¹⁶ Querijero & Mercurio, 2016; Cruz et al., 2019: Querijero, B.L. & Mercurio, A.L. (2016). Water quality in aquaculture and nonaquaculture sites in Taal Lake, Batangas, Philippines. *Journal of Experimental Biology and Agriculture Sciences*, *4*, 109-115.

¹⁷ Guerrero, R.D. (2019). Farmed tilapia production in the Philippines is declining: What has happened and what can be done. *Philippine Journal of Science*, 148(2), 11–15.

¹⁸ De Vera-Ruiz, E. (2021). Fish Kill: Why do they occur? Manila Bulletin. Retrieved from: https://mb.com.ph/2021/01/06/fish-kill/. ¹⁹ Red Tide. Retrieved from: https://www.bfar.da.gov.ph/redtideinfo.jsp.

for fish and crustacean feeds; and development of antibiotic resistance in pathogenic bacteria that can then spread from farms to wild stock.

53. *Conversion of natural habitats:* The construction and operational phases of the project cycle of an aquaculture facility may require conversion of the natural environment including, for example, the removal of mangroves for excavation of ponds, or alteration of the natural hydrology of lagoons, bays, rivers, or wetlands. Operational phase issues may also include alteration of aquatic habitats and substrates.

54. *Conversion of agricultural land – salinization:* If new land areas are not available for aquaculture, an alternative is to convert former agricultural land. If the selected production is based on brackish water, this may pose a risk of salinization of surrounding agricultural land.

55. Introduction of alien, selectively bred, or genetically engineered species: Introductions can result in interactions with the wild, including escapes from farms, or open systems. As such, introductions can disturb the existing ecological balance; cause loss of species biodiversity; cause loss of genetic diversity of the wild populations; reduce fitness of wild population through breeding with genetically altered escapees; and result in the transmission or spread of fish diseases.

56. *Impacts of harvesting on ecosystem functions:* The practice of capturing females, eggs, fry, juveniles, or even fingerlings from the wild for the purpose of stocking aquaculture systems may threaten ecosystem biodiversity. Fry and larvae may be gathered from fresh or brackish water using very fine-meshed nets resulting in considerable by-catch, as well as the removal of large number of larvae, fry, and juveniles from the food chain.

Contamination of Aquatic Systems

57. Inland aquaculture activities, particularly pond-based systems, may affect aquatic systems due to construction and operation activities, primarily the mobilization of soils and sediments during construction and through the release of effluents during operation. Fish cage culture can also be a major contributor to marine pollution in areas of high-density use.

58. *Soil erosion and sedimentation:* Earth excavation and moving activities conducted during construction of some types of aquaculture projects may result in soil erosion and the subsequent sedimentation of nearby water bodies. Sedimentation of aquatic resources may contribute to eutrophication and overall degradation of water quality.

59. *Wastewater discharges:* The effluent released from aquaculture systems typically contains a high organic and nutrient load, suspended solids, and may also contain chemical residues including feed supplements and antibiotics. The possible impacts include contamination of groundwater and surface water from release of effluents or communication to receiving water from unconfined process and storage tanks (such as ponds and lagoons). Impacts on aquatic systems include creation of eutrophic zones within receiving waters, increased fluctuation of dissolved oxygen levels, creation of visible plumes, and accumulation of nutrients within the receiving waters.

Occupational Health and Safety

60. Occupational health and safety hazards related to the daily operations of the aquaculture sector can be grouped into three categories physical hazards, exposure to chemicals, and exposure to water borne disease.

61. *Physical hazards:* A number of hazards are connected with the daily working routines in aquaculture, including heavy lifts, electric shock, and drowning. A number of activities involving heavy lifts are carried out during daily operations (e.g. refilling automatic feeders in the ponds and grading the fish). Electrical devices typically used in aquaculture include manifold and cover water pumps, paddlewheels, and lighting installations. The risk of electrical shock is therefore present during all operations in which the workers are in contact with the water. The risk of drowning is present in almost all aquaculture operations and, especially, in cage aquaculture at sea.

62. *Exposure to chemicals:* A variety of chemicals may be used in the operation of an aquaculture facility to treat and / or control disease organisms or to facilitate production (e.g. lime, diluted chlorine, or salt). Fertilizers are also generally caustic materials, and care should be taken in their application.

63. *Water-borne Disease:* Workers may be directly or indirectly exposed to water-borne diseases due to frequent contact with water (ponds) and the close proximity of living quarters to surface water bodies. The potential for transmission of water-borne disease should be addressed as part of the occupational health and safety program including specific additional medical screening for the labor force and implementation of preventive measures (e.g. mosquito nets in living quarters).

Community Health and Safety

64. Community health and safety hazards arising from aquaculture operations include salinization of neighboring agricultural land, effects on water resources, food safety impacts and management, and physical hazards.

Management of Potential Environmental Impacts

65. To address the identified environmental risks and impacts, the following measures are recommended:

- Screening of all the PforR activities and sub-projects will be conducted in accordance with exclusionary principles and excluded activities. Relevant assessment of environmental risks and impacts will be conducted, and mitigation measures for managing environmental risks and impacts during construction and operation will be put in place.
- The mitigation hierarchy will be applied in addressing and managing environmental risks and impacts during technical design, construction, and operation. More details on the measures to manage environmental risks during technical design and operation are included in Annex 2.
- The project will utilize environmental management policies, legal frameworks, and good international industry practices, where necessary, for managing environmental risks and impacts.
- Adequate capacity at all levels within implementing institutions will be ensured to manage environmental risks, and sufficient capacity at mandated institutions will be maintained to monitor compliance with national legislation and mitigating measures stipulated in this ESSA.
- A manual specifically for the PforR will be prepared to guide the process and implementation of environmental risk management activities.

3.4.2 Likely Social Effects

66. The activity types supported by the PforR are categorized as physical and non-physical activities under the three -sub-sectors of rice-based activities, livestock activities, and inland aquaculture activities. The physical and non-physical activities from which likely social effects can be determined are reiterated as follows.

Physical activities cover, firstly, the expansion and improvement of available agri-fishery areas for increased production focusing on: a) the optimization of available or idle land and water bodies for agriculture production; b) construction and rehabilitation of irrigation facilities; and c) sustainable management of water resources. Secondly, physical activities will involve mechanization and the modernization of agri-fishery production systems that include: a) increased adoption of science-based and climate-resilient farming technologies, b) promotion of good agricultural practices (GAP), and c) harmonization of planning and the mapping of vital mechanization and infrastructure investments. Given the small to moderate scale of the investment activities, the nature of the investments which are not complex, and exclusion criteria which exclude the activities with high environmental and social risks, the likely impacts are expected to range from low to substantial. This assessment is also supported by the Bank financed project of similar nature and scale in the agricultural sector.

- Non-physical activities revolve around two aspects. The first is about the strong partnership of DA and other concerned government agencies with farmers, fisherfolk, private sector and other stakeholders around the: a) adoption of effective participatory and consultative processes in planning and budget preparation; b) improvements in the convergence strategies of government agencies and LGUs; c) strengthening of the national sectoral committees of the Philippine Council on Agriculture and Fisheries (PCAF),²⁰ and d) development or improvement of feedback mechanisms and participatory monitoring of project implementation. The second aspect is about research for development and extension to optimize sector potential. Ensuing sections attempt to identify the likely social effects of the enumerated PforR activities under this second aspect, which includes: a) an increase in investments in research, development, and extension; b) strengthening of the link between research and extension; c) enhancement in the capacity of farmers and fisherfolk, and as well as agricultural extension workers (AEWs) in adopting appropriate and modern technologies; and d) harmonization of DA'S research agencies and their projects.
- 67. From the above menu, the likely social effects of the Program are identified and discussed below.

Labor displacement

68. A 2021 study showed that the extensive use of mechanization, specifically for land preparation, planting, harvesting, threshing, and shelling, decreased the demand for manual labor in terms of personday per hectare requirement.²¹ Significant reports on the changes in labor arrangements in farm operations occurred from planting-harvesting to land preparation-harvesting. Agreements around payments also changed, i.e., from daily wage to informal contract as well as the mode of contracting labor, i.e., from hired to family labor. Shifts in the use of labor were also reported, as farm workers displaced by mechanization moved from on-farm to off-farm activities.

69. The site visits conducted by the E&S team in Regions II and III revealed additional dimensions of labor displacement that validate what is in the literature. Famers become attracted to direct seeding and mechanization due to labor shortages, high labor costs; the shift from "arawan" (daily wage for individuals) to "pakyaw" (informal contracting of a group of manual laborers where payment is based on how fast an operation is completed). The decreased demand for labor happened on-farm. In Region II, the shift to offfarm demand for labor was due to increased and diversified production that allowed farmers to get into processing of their produce, mostly engaged in by the womenfolk.

70. Labor displacement risks are assessed as low to moderate because of changing dynamics in the agricultural sector. Among seed growers interviewed in Ilagan City, Isabela, labor displacement from the use of transplanters is low. Transplanting practices by hand are still retained because of large-scale production of hybrid rice varieties although labor shortages make transplanting costs expensive. Moderate levels of displacement in other parts of Regions II and III are mitigated through training and technical assistance from the Agricultural Training Institute (ATI), PhilMech, and the local government units (LGUs).

Land acquisition

71. Large-scale land acquisition is excluded via the list of high-risk activities excluded from the PforR program. The Program though fits into the description of 'national government projects' where RA 10752 will apply (Sec. 3). Meanwhile, procedures on land donations in national government projects (2017 DRAM Sec. 2.13) have no equivalent to the Bank's E&S due diligence procedures for land donations.

72. The use of raw land for agricultural purposes has a positive effect of realizing productivity and profit from non-productive land, although new facilities/buildings may require land for permanent and temporary works. It is unlikely that construction and upgrading activities will necessitate large-scale land acquisition

²⁰ PCAF is an attached agency of DA, responsible for promoting and facilitating participatory processes in the agriculture and fisheries sector.

²¹ Rodulfo, V., Jr., Del Rosario, A., Larona, M. V., Salandanan, A., Bautista, M. G., & Querijero, N. (2021). Effects of the Extensive Use of Mechanization on Farm Labor Use and Patterns in Rice and Corn Production Systems in the Philippines. *Philippine Journal of Agricultural and Biosystems Engineering*, 17(2), 33–48. https://doi.org/10.48196/017.02.2021.03

entailing displacement effects. In the regions visited, lands acquired for enterprise development are lands titled to the FCA. FCAs interviewed own titled lands bought for the purpose of establishing rice mill and storage facilities and adopting integrated farming systems. In one case, the FCA entered a long-term lease on the land, the site of its rice processing facility, of a fellow member and official of their cooperative. Land and resettlement issues can be avoided using alternative technical designs. Land acquisition frameworks in the Philippines can be relied upon to address possible economic or physical displacement although these are foreseen to be nil to minimal. For as long as diversification in rice-based systems and land intensification will occur in existing landholdings and will not necessitate large-scale land acquisition.

Exclusion of indigenous peoples

73. The Census for Population and Housing (2020) reported IP population at 9.46 million, or approximately 8.7% of the national total. They are distributed across several regions in Luzon and Mindanao, but their largest concentration is in CAR, where they represent 1.24 million (69%) of CAR's total 1.79 million population. NCIP approximates about 1,531 ancestral domains within the country, covering nearly 26 million hectares (inclusive of ancestral waters) representing about 44% of all land available in the Philippines. Lands with Certificate of Ancestral Domain Titles (CADT) represent 20.5% of the total land area of the Philippines. Meanwhile, employment in the agricultural sector continues to dominate economic activities among IPs.²²

74. High-risk program activities that may adversely impact indigenous peoples' land and culture are excluded from the Program. However, due to the requirements set in IPRA, even IP community-initiated projects will still have to go through the Free and Prior Informed Consent (FPIC) process. The *Kabuhayan at Kaunlaran ng Kababayang Katutubo* (4K) Program is a locally-funded program targeting IP farmers and fisherfolks within their ADs purposely to develop their ADs to improve productivity and increasing their income in consideration of their customs, traditions, values, beliefs and interests. To jumpstart the collaboration with IP within ADs, a DA-NCIP Joint Special Order No. 01 Series of 2021 entitled "Creation of the Department of Agriculture (DA) – National Commission on Indigenous Peoples (NCIP) National Steering Committee (NSC) Agri-fisheries and Agribusiness Development" was forged for both agencies assist IPs develop their agri-fisheries and agribusiness within ADs. This enabling mechanism can be harnessed for PforR should ADs be subject to increase in rice area with improved varieties.

75. Under the Bank-assisted Mindanao Inclusive Agriculture Development Program (MIADP), due diligence is upheld to avoid the introduction of new technologies and practices that may influence the culture, traditions and practices of IPs. A practice by one of DA's attached corporations, PhilRice, is consistent with this Bank requirement. Inclusion of IP preferences for crop/seed varieties is documented under PhilRice with its gene banks protecting heirloom varieties including the IP-targeted 4Ks project.²³ In Region II, there was observed to be mainstreaming of the Ibanag and Itawis farmers with migrant farmers such that IP identification is overlooked. In this manner, IP-targeted support services become elusive. PforR activities will require efforts at meaningful consultations.

76. DA has largely been compliant with the FPIC process although strategies vary among the RFOs in engaging and generating the FPIC for regular activities or banner programs. The process takes place either through the DA unit directly involved with an activity/project or it is coursed through LGU partners in coordination with RFOs. In Region III, some IP areas are excluded from development initiatives due to the stringent requisites of FPIC and obtaining the Certificate of Precondition (CP).

77. While the risk is minimal to moderate, under the foregoing conditions, IP exclusion may arise under PforR.

²² International Bank for Reconstruction and Development / The World Bank (2024) No Data, No Story: Indigenous Peoples in the Philippines.

²³ The Kabuhayan at Kaunlaran ng Kababayang Katutubo (4K) Program aims to develop the Ancestral Domains of the ICCs/IPs in order to improve its productivity by developing sustainable agricultural enterprises and profitability by increasing their income in consideration with their customs, traditions, values, beliefs and interests.

Exclusion of vulnerable groups

78. The exclusion of vulnerable agricultural workers may be heightened by the Program without adequate risk screening, identification, and mitigation. Landless workers can be displaced from laborintensive activities replaced by mechanization. Displacement of unskilled agricultural workers is not covered by existing labor and social welfare policies. The dwindling of agricultural jobs or prevalence of seasonal employment is generally described as underemployment - a phenomenon high in agriculture.²⁴ For agricultural workers, underemployment including the loss of jobs due to mechanization is addressed by 'safety nets' in the form of training and livelihood assistance under the responsibility of ATI, PHilMech and LGUs (FGDs 2024).

Gender disparities between women and men could worsen in terms of wage rates, work hours and 79. working conditions. In a study²⁵ analyzing women empowerment metrics ²⁶, Filipino women are generally as empowered as men. However, 67% of both men and women are disempowered in agriculture. Sixty-five percent of households achieve gender parity, where women are either empowered or have an equal or higher empowerment score than the male decision-maker. Women's education and access to support services help achieve gender equality, but when women join community programs, it seems to have less benefit for them and can even give more power to their husbands, as they often go to meetings in place of their husbands, increasing their workload without improving their own situation. The primary sources of disempowerment for both genders are household respect and attitudes toward gender-based violence (GBV), followed by control over income and decision-making related to income²⁷. Other significant factors include excessive workload and lack of group membership, with some differences across value chains (VCs) and nodes within those chains. These are often the hardest areas to change due to their deep connection with sociocultural norms. According to a scoping review²⁸, women in low- and middle-income countries (LMIC) are key contributors to subsistence farming and the agricultural economy, but GBV hinders their ability to support their families and communities. Deep-rooted patriarchy and socio-cultural norms in many LMICs normalize violence and dismisses GBV, limiting women's decision-making power, skill development, and access to resources.

80. Intensified rice production may enhance the demand for labor. However, certain arrangements entered by certified seed growers with laborers in Region II could be onerous and lead to forced labor conditions. Demand for labor is high for seed producers tied to the protocols of the Bureau of Plant Industry (BPI) (e.g., seed quality standards higher from the transplanting of seeds by hand). Under these conditions, BPI protocols tend to disincentivize the use of rice transplanters. However, the manner of advancing cash payments to secure labor commitments/ arrangements by certified seed growers for future planting seasons can be onerous. Advanced payments can tie vulnerable farmers to cycles of indebtedness, leave no room for negotiating wage increases, or leave them without options to withdraw their services under poor working conditions. The incidence of child and forced labor can worsen in the absence, for one, of systematic detection and monitoring.

81. The formation and strengthening of FCAs, mandatory registration through the RSBSA and LGU extension services are significant factors to ensuring that landless and seasonal farm workers, especially women workers, are not excluded in the development process. There are some contexts, however, where women's exclusion in agriculture arises from structural conditions. In some FCAs like seed growers'

²⁴ https://www.pids.gov.ph/details/news/in-the-news/ph-farms-getting-empty-agriculture-job-loss-a-worrying-trend#:~:text=In%20terms%20of%20skilled%20agricultural,Dec%2008%2C%202022

²⁵ Malapit, H., Ragasa, C., Martinez, E. M., Rubin, D., Seymour, G., & Quisumbing, A. (2020). Empowerment in agricultural value chains: Mixed methods evidence from the Philippines. Journal of Rural Studies, 76, 240-253. Retrieved from: https://www.sciencedirect.com/science/article/pii/S0743016719311209

²⁶ Project-level Women's Empowerment in Agriculture Index for Market Inclusion (pro-WEAI+MI) which includes 3DE score and the Gender Parity Index (GPI)

²⁷ Malapit, et.al, 2020

²⁸ O'Mullan, C., Sinai, S., & Kaphle, S. (2024). A scoping review on the nature and impact of gender-based violence on women primary producers. BMC women's health, 24(1), 395. Retrieved from: https://link.springer.com/article/10.1186/s12905-024-03228-3

associations in Regions II, for example, where capitalistic and landed seed growers dominate, women make up only 1% of total members. The same in some FCAs in Region III consisting of largely male landowners that banded together to ward off the manipulative practices of rice traders and usurers. In other municipalities, though, women make up 30-40% of FCA membership and range from being farm workers to small and big landowners. Meanwhile, there are 'exclusive' FCAs which only open membership to landowners, regardless of male or female. This is so because of a business model that relies heavily on a steady stream of rice supplies, whether as sale or payment for credit, for its rice-processing operations. Nevertheless, there are FCAs already revising their by-laws to expand membership to migrant landless farmers, the youth and in some cases, irrigators' associations (IA) as a consolidation strategy. The risk of exclusion is considered low to moderate and could be borne out by an area's historical and socioeconomic context.

Social conflict

82. Excluding the inherent BARMM and insurgency conflict, social conflict is moderate to substantial. There are several scenarios where social conflict may arise. Conflict could be triggered by boundary disputes or even when community health and safety is threatened by pollution caused by harmful pesticides. Minor disputes among neighbors and family members could be triggered by overlapping land claims,²⁹ arbitrary land boundary indicators and absence of any supporting land document to certify occupancy. Most lands in the barangay are bought. However, the resulting land claimants may not hold any legal document to support their tenure; not even a "deed of absolute sale." Certifications from local barangay officials suffice in this case.

83. With the rehabilitation of rural infrastructure, there is potential for increasing access to ancestral domains and conservation sites, especially by non-IPs or those not belonging to the same IP group within a PforR-assisted site. This condition may result in resource use competition and threaten the tenure security of the local people. Natural resource conflicts do not only divide and disrupt communities but could also lead to violent confrontations.

Management of Potential Social Impacts

84. To address the identified social risks and impacts, the following measures are recommended:

- Screening as elaborated under environmental risk/impact management will be applied.
- Due diligence is necessary for activities that trigger any activity found in the exclusion list like those involving land acquisition, undue impact on indigenous peoples and vulnerable groups, and social conflict.
- Meaningful consultations will be conducted across project stages enhanced by process documentation of consultation activities and dissemination of information materials using the local language.
- Grievance redress mechanisms will have to be crafted addressing the Bank's minimum requirements.
- An E&S manual to be prepared to harmonize and guide the process and implementation of social risk management activities will be prepared and cascaded to RFOs and all participating institutions/agencies such as the LGUs.

²⁹ Building Food-Secure Communities Through Enhanced Tenure Security: Insights of indigenous peoples in Bukidnon, Philippines. Secure Access to Land and Resources (SALaR) Project. Asian NGO Coalition for Agrarian Reform and Rural Development (ANGOC) in partnership with Xavier Science Foundation, Inc. <u>https://gltn.net/wpcontent/uploads/2020/05/Reflection-paper-Building-Food-Secure-Communities.pdf</u>

4. ENVIRONMENTAL MANAGEMENT SYSTEMS ASSESSMENT

4.1 General Principles

85. The ESSA considers the extent to which the PSAT Program systems and the MBP program activities are consistent with the six E&S core principles and associated key planning elements. Three of the six core principles are associated with environmental management systems (EMSs).

- **Core Principle #1**: Program E&S management systems are designed to (i) promote E&S sustainability in the Program design; (ii) avoid, minimize, or mitigate adverse impacts, and (iii) promote informed decision-making relating to the Program's E&S effects.
- **Core Principle #2**: Program E&S management systems are designed to avoid, minimize, or mitigate adverse impacts on natural habitats and physical cultural resources resulting from the Program. Program activities that involve significant conversion or degradation of critical natural habitats or critical physical cultural heritage are not eligible for PforR financing. The program effects on cultural resources impacts are presented under the Social Management Systems Assessment.
- **Core Principle #3**: Program E&S management systems are designed to protect public and worker safety against the potential risks associated with the (i) construction and/or operation of facilities or other operational practices under the Program, (ii) exposure to toxic chemicals, hazardous wastes, and otherwise dangerous materials under the Program and (iii) reconstruction or rehabilitation of infrastructure located in areas prone to natural hazards. Further discussion on public and worker health and safety are presented under the Social Management Systems Assessment.

86. The EMSs assessment investigates the national policies, laws and regulations, and those that were instituted by the Department of Agriculture, that are applicable to the PSAT Program typical activities, from Planning and Screening Phase, Construction Phase, and Operation Phase of the Program. Specifically, the EMSs assessment delves into (i) the Ecological Environment and Biodiversity Protection System; (ii) Environmental Impact Assessment System; (iii) Water and Soil Conservation Management System; (iv) Agricultural Pollution Management System, including Climate Change Considerations, and the (v) Occupational Health and Safety Management System. The assessment of Environmental Systems Assessment in table format is presented in **Appendix 2**. Capacity assessment of the Department of Agriculture and its attached agencies is provided in table format under **Appendix 3** and **Appendix 4**.

87. The applicable EMSs governing the PforR activities are presented in **Table 4-1**.

Table 4-1: Environmental Management Systems Applicable to the PSAT Program-for-Results

Program Phase	Potential Impacts from Typical Activities	Core Environmental Principle under the PforR Bank Guidance	PSAT PforR EMSs	Responsible Authorities
Physical Activities				
Planning and Screening Phase	 Site identification and selection may trigger encroachment in natural habitats, critical habitats, key biodiversity areas, and declared protected areas in the Philippines 	Core Principle #2 – Protection of natural habitats and physical cultural resources by excluding activities within critical and natural habitats	- Ecological Environment and Biodiversity Protection System	 Department of Environment and Natural Resources (DENR) Environmental Management Bureau (EMB) Biodiversity Management Bureau (BMB)
Construction Phase	 Removal of vegetation or tree cutting thereby reducing green spaces Environmental impacts associated with solid waste generation. Nuisances caused by use of heavy machinery and vehicles such as dust, noise, emissions, and potential spills of hydrocarbons and used oils Possible use of borrow materials from nearby quarries causing soil erosion, and water quality pollution Potential issues associated with health and safety of workers and nearby communities (occupational health and safety) Potential exposure to natural hazards such as typhoon events, volcanic eruption, earthquake and tsunamis, and extreme weather events such as drought and heavy 	Core Principle #1 – E&S sustainability through avoidance or minimization of impacts within the project footprint Core Principle #2 – Protection of natural habitats and physical cultural resources by excluding activities within critical and natural habitats Core Principle #3 – Protection of public and workers health and safety through construction phase, including proper management of waste, hazardous and toxic materials, and restoration of sites exposed to natural hazards.	 EIA Management System Water and Soil Conservation Management System Agricultural Pollution Management System Public and Occupational Health and Safety Management System 	 DENR EMB Provincial and Municipal Environment and Natural Resources Office (PENRO/MENRO) Under the Department of Agriculture (DA) Fertilizer and Pesticide Authority (FPA) Bureau of Soil and Water Management (BSWM)
Program Phase	Potential Impacts from Typical	Core Environmental Principle under	PSAT PforR EMSs	Responsible Authorities
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	Activities	the PforR Bank Guidance		
	rain (El Niño and La Niña			
Operation Phase	 Pollution caused by poorly maintained facilities Excessive use of fertilizers and pesticides in crops and plantation potentially resulting in toxicity hazard to human and animals, groundwater and surface water pollution Depletion of soil nutrients due to intensified cropping frequency and overfertilization Accelerated deforestation soil erosion and sedimentation caused by uncontrolled cultivation of fragile and marginal upland areas Methane emissions from irrigated rice plantation Environmental pollution caused by improper management of solid waste and wastewater generated from livestock farming, slaughtering and meat processing Occupational and community health and safety hazards and risks from operating crop plantation, livestock and inland aquaculture farms 	 Core Principle #1 – E&S sustainability through avoidance or minimization of impacts within the project footprint Core Principle #2 – Protection of natural habitats and physical cultural resources by excluding activities within critical and natural habitats Core Principle #3 – Protection of public and workers health and safety through construction phase, including proper management of waste, hazardous and toxic materials, and restoration of sites exposed to natural hazards. 	 EIA Management System Water and Soil Conservation Management System Agricultural Pollution Management System Public and Occupational Health and Safety Management System 	 DENR EMB Provincial and Municipal Environment and Natural Resources Office (PENRO/MENRO) Department of Agriculture (DA) Fertilizer and Pesticide Authority (FPA) Bureau of Soil and Water Management (BSWM)

Program Phase	Potential Impacts from Typical Activities	Core Environmental Principle under the PforR Bank Guidance	PSAT PforR EMSs	Responsible Authorities
Non-Physical Activit	les			
Policy Formulation	Formulation of policy per se does not have direct environmental risks and impacts, but the implementation of the policy may induce positive benefits to environmental protection	 Core Principle #1 – E&S sustainability through avoidance or minimization of impacts in design and provisions of the policy Core Principle #2 – Protection of natural habitats and physical cultural resources by excluding activities within critical and natural habitats Core Principle #3 – Protection of public and workers health and safety through construction phase, including proper management of waste, hazardous and toxic materials, and restoration of sites exposed to natural hazards. 	 Ecological Environment and Biodiversity Protection System Water and Soil Conservation Management System Agricultural Pollution Management System Public and Occupational Health and Safety Management System 	Department of Agriculture and Attached Agencies
Associated or	Not covered by the PforR but E&S due	N/A	N/A	N/A
Linked Facilities or	diligence may be undertaken if the			
Activities	associated facility impacts the delivery of the Program activity			

88. The Philippines is at the forefront of passing national environmental laws and policies, environmental impact assessment, pollution prevention, natural resource management, and biodiversity conservation, including climate change and disaster risk reduction and management. The Program activities are required to comply with the applicable national requirements on environmental protection and pollution prevention, and all the other applicable administrative orders, policies, and regulations issued by the Department of Environment and Natural Resources (DENR) and the Environmental Management Bureau (EMB), and other national agencies.

89. The sections below provide a review of the applicable legal framework, implementation mechanism, institutional organization, and performance of the borrower in relation to the core E&S principles and Bank ESSA Guidance Analytical Framework (Annex A) key environmental and social management systems planning elements.

4.2 EIA Management System

4.2.1 Applicable Legal Framework

Core Principle 1: Element 1 (i): Operate within an adequate legal and regulatory framework to guide environmental and social impact assessments at the program level.

90. The Philippines have established adequate legal and regulatory framework, policies, and procedures to undertake environmental and social impact assessment of relevant to the program activities.

1987 Philippine Constitution

91. The **Philippine Constitution of 1987** mandates environmental protection, conservation, and proper use of natural resources, encouraging equitable access to land and prioritizing sustainable development. Article II Section 16 of the Constitution underscores the State's duty to protect and advance the right of the people to a balanced and healthful ecology in accord with the rhythm and harmony of nature.

Philippine Environment Policy

92. To manage the effects of population growth, urbanization, industrialization, rapid natural resources utilization, and increasing technological advances, the Philippine Government signed the **Environmental Policy** on June 6, 1977, which aims to address the environmental effects of any project development and to maintain environmental quality that is conducive to the life, dignity, and well-being of the Filipino people.

Environmental Impact Assessment Requirements of the Philippines

93. Following the Philippine Environmental Policy, the Philippine Environmental Impact Statement System (PEISS) was established under Presidential Decree 1586 and signed on June 11, 1978. The PEISS and its implementing rules and regulations, declared under the DENR Administrative Order No. 30 issued in 2003, sets out the environmental and social impact assessment requirements of the Program activities in the Philippines. Environmentally critical projects (ECPs) to be established in both environmentally critical areas (ECAs) and non-environmentally critical areas (non-ECAs), classified under Group 1 Projects, are required to submit an Environmental Impact Statement (EIS) to the DENR to secure approval of the Environmental Compliance Certificate (ECC). ECPs are projects that result in adverse environmental impacts such as heavy industries, resource extractive industries, and major infrastructure projects. ECAs are areas located within government-declared national parks, watershed reserves, wildlife preserves, and sanctuaries, tourist spots; areas that constitute habitats of endangered and threatened indigenous Philippine flora and fauna; areas with unique historical, archaeological, or scientific significance, and are traditionally occupied by cultural communities or tribes; areas frequently visited by natural calamities, geological hazards, floods, typhoons, volcanic activity; areas classified as prime agricultural land and recharge aquifers, water bodies, mangrove areas, and coral reefs. The PforR will not support activities that are categorized as ECPs within ECAs. Non-environmentally critical projects (non-ECPs) to be built in non-ECAs, or projects that are classified under Group 2, must prepare an Initial Environmental Examination Report or Checklist (IEER/IEEC) to secure an ECC. Submission of IEER and IEECs is made online, and the approval process is streamlined at the respective regional offices of the EMB who has jurisdiction on the location of the proposed project. Non-environmentally critical projects (NECPs) in non-environmentally critical areas (NECAs) are not required to secure an ECC. A Certificate of Non-Coverage (CNC) may be issued by the authorized Regional EMB of the DENR. The category of projects is defined according to the threshold limits defined in the Revised Procedural Manual of the PEISS.

Assessment: The DENR PEISS provides the legal and regulatory framework for assessing project-specific environmental and social impact assessment, and not on a Program level. The requirements of the PEISS were streamlined through IEE reports or checklists, which may not necessarily align with the World Bank level of expected E&S assessment methodologies.

4.2.2 Implementation Mechanism and Procedures

Core Principle 1: Element 1 (ii): Early screening of potential impacts; **Element 1 (iii):** Consideration of strategic, technical, and site alternatives (including the "no action" alternative); **Element 1 (iv)** Explicit assessment of potential induced, cumulative, and transboundary impacts.

Philippine EIS System Requirements of the PSAT PforR Activities

94. The PSAT Program activities of the DA will be evaluated and assessed under the PEISS. The project scope and site-specific activities must first be defined before an evaluation of the applicability of the PEISS could be made. The typical Program activities and the applicability of the PEISS are described in **Table 4-2** of this ESSA. The Revised Procedural Manual and Screening Guidelines of the PEISS provide specific project screening thresholds to determine likely impacts, i.e. total number of hectares of plantation and plant production capacity, that will define the respective category and type of environmental impact assessment report and permitting requirements.

PforR Activities	Sub-Sector	PEISS Category II – EIS - ECC	PEISS Category II – IEE - ECC	PEISS Category II – PDR - CNC
Rice-based farming	Crops	Plantation area to be developed ≥ 1,000 ha	Plantation area to be developed \geq 100 ha but < 1,000 ha	Plantation area to be developed < 100 ha
Rice mill	Crops	N/A	Milling rate > 1 ton/hour (IEE Checklist)	Milling rate < 1 ton/hour
High value crop production	Crops	Coconut ≥ 25,000 MT monthly production rate	Coconut < 25,000 MT monthly production rate	N/A
Plant post- harvest processing	Crops	N/A	N/A	Food preservation (i.e. drying, freezing, and other methods aside from canning - regardless of capacity
Fruit and vegetable processing	Crops	Fruit and vegetable processing ≥ 500 kg	Fruit and vegetable processing < 500 kg	N/A
Livestock production (pigs/ goats/ cattle/carabao)	Livestock	Pigs/ Goats/ Cattle/ Carabaos ≥ 5,000 heads	Pigs/ Goats/ Cattle/ Carabaos ≥ 100 heads but < 5,000 heads (IEE checklist)	Pigs/ Goats/ Cattle/ Carabaos < 100 heads
Livestock production (poultry / birds)	Livestock	Poultry / Birds ≥ 100,000 heads	Poultry / Birds ≥ 10,000 heads but < 100,000 heads	Poultry / Birds < 100 heads
Animal products processing	Livestock	Dairyproductsprocessing \geq 100,000 L(liquid) or \geq 100,000 kg(solid)	Dairy products processing < 100,000 L (liquid) or < 100,000 kg (solid)	N/A

Table 4-2: Philippine EIS System Requirements of PforR Activities

PforR Activities	Sub-Sector	PEISS Category II – EIS - ECC	PEISS Category II – IEE - ECC	PEISS Category II – PDR - CNC
Inland aquaculture	Aquaculture	N/A	Total water spread area to be utilized ≥ 1 ha but < 25 ha (IEE checklist)	Total water spread area to be utilized < 1 ha
Fish products processing / canning	Aquaculture	Daily production rate ≥ 10,000 kg	Daily production rate ≥ 500 kg but < 10,000 kg	Daily production rate < 500 kg

Assessment: The IEE checklist pro-forma document does not include an analysis of project alternatives, nor does it require the project implementing unit to describe the "no project" alternative. In addition, the assessment of cumulative impacts and transboundary impacts for regional or cross-boundary projects are not reflected in the IEE proforma document prescribed by the DENR Environmental Management Bureau Regional Offices.

4.2.3 Institutional Organization and Performance

Core Principle 1: Element 1 (v): Identification of measures to mitigate adverse environmental or social impacts that cannot be otherwise avoided or minimized; **Element 1 (vi):** Clear articulation of institutional responsibilities and resources to support the implementation of plans.

95. Preparation of EIA documentation (any of the EIS, IEE Report, IEE Checklist or the PDR) is the responsibility of the Project owner, the implementing unit, or the end-user of the facility. In the case of the PforR, the majority of the projects will be implemented by the Farmers Cooperatives and Associations (FCAs), who in turn will be mandated to secure the necessary permits from the regulatory agencies, including the ECC from the Regional EMB Offices. For projects that are managed by the Central Office of the DA and depending on the threshold level of the project being proposed, the DA Central Office will facilitate the preparation of the EIA documentation and apply to the ECC from the DENR Central Office.

96. The DA Regional Field Offices (RFOs) provide training and support to the FCAs in preparing the relevant EIA report and satisfying the requirements to secure a positive decision to the ECC application.

97. The knowledge and experience of FCAs and project end-users, and the beneficiaries of the programs and projects provided by the Department of Agriculture and its RFOs, in conducting EIA and preparing relevant EIS is relatively limited. In most cases, the ability of the FCAs to prepare a well-informed environmental and social baseline and impact assessment is limited due to either the lack of awareness of environmental regulatory requirements or the lack of understanding of technical aspects of environmental impact assessment. The FCAs rely on the assistance of the DA and its field offices to meet such EIA and ECC regulatory requirements of the DENR. Some facilities were given penalties by the DENR EMB for operating without an approved ECC.

Assessment: Program activities implemented by the DA and its attached agencies, which are financed either under the General Appropriations Act (GAA), or those that are financed by international financing institutions (IFIs) including the World Bank and other international donor agencies, are required to comply with the requirements of the Philippine EIS System. Program activities proposed in specific areas across the country will be screened according to the procedural requirements under the Revised Guidelines for Coverage Screening and Standardized Requirements (EMB Memorandum Circular 005 issued in July 2014). All development projects are therefore subject to evaluation of potential environmental impacts and will be required to secure either an ECC or CNC under the PEISS.

Whilst the EIA system of the Philippines is robust, the capacity of the borrower's program beneficiaries (farmers and fisherfolk associations and cooperatives) who are expected to satisfy the requirements is not at par with the expectations of the Bank.

4.3 Ecological Environment and Biodiversity Protection Management System

4.3.1 Applicable Legal Framework

Core Principle 2: Element 2 (i): Identify and screen for adverse effects on potentially important biodiversity and cultural resource areas and provide adequate measures to avoid, minimize, or mitigate adverse effects.

98. The **Philippine Biodiversity Strategy and Action Plan (2015-2028)** serves as the country's framework for conserving biodiversity to improve human well-being, thereby contributing to the attainment of the Philippine Development Plan (PDP) goals.

Biodiversity Protection and Wildlife Conservation

99. The Philippine Islands is a host of the greatest concentrations of wildlife species in the world, with at least 20,000 species that are endemic to the country.³⁰ Biodiversity conservation in the Philippines is upheld through two landmark laws, **Republic Act No. 7586 or the National Integrated Protected Areas System Act of 1992** and the **Republic Act No. 11038** or the **Expanded National Integrated Protected Areas System (E-NIPAS) Act of 2018**. The NIPAS and E-NIPAS declares portions of land and water that have unique physical and biological significance as protected areas. These areas are regulated and managed to enhance biological diversity and are protected against destructive human exploitation. Protection of these areas are made through innovative approaches, and the legislation provides for the framework for a decentralized, community-based reserve management strategies.

100. **Republic Act 9147 or the Wildlife Resources Conservation and Protection Act** was approved into law on July 30, 2001 to achieve the following objectives: (a) conserve and protect wildlife species and their habitats to promote ecological balance and enhance biological diversity, (b) regulate the collection and trade of wildlife, (c) pursue, with due regard to the national interest, the Philippine commitment to international conventions, protection of wildlife and their habitats, and (d) initiate or support scientific studies on conservation of biological diversity. Chapter III, Article 1 Section 13 – Introduction of Exotic Wildlife – states that no exotic species shall be introduced into the country unless clearance from the Secretary of the Department of Environment and Natural Resources (DENR) or the authorized representative is first obtained. In no case shall exotic species be introduced into protected areas and identified critical habitats. The country also developed and is implementing the National Invasive Species Strategy and Action Plan for 2016 – 2026 (NISSAP) to address the problem of invasive alien species. With the NISSAP, relevant government agencies, in collaboration with scientific experts and community members, shall be guided towards achieving a coordinated effort to set specific policies, priority projects, and programs to arrest biological invasions.

101. Under the **Philippine Fisheries Code** under the **Republic Act No. 8550** approved on February 25,1998, and amended under the Republic Act 10654 (February 27, 2015), the State shall ensure the attainment of the fishery sector: (a) conservation, protection, and sustained management of the country's fishery and aquatic resources, (b) poverty alleviation and the provision of supplementary livelihood among municipal fisherfolk, (c) improvement of productivity of aquaculture within ecological limits, (d) optional utilization of offshore and deep-sea resources, and (e) upgrading of post-harvest technology.

Agriculture and Fisheries Modernization

102. The **Republic Act No. 8435** established the **Agriculture and Fisheries Modernization Act (AFMA)** which aims to respond to the demand for food security, poverty alleviation and social equity, income enhancement and profitability, global competitiveness, and sustainability among farm workers and fishing communities.

Forestry Code

103. The **Revised Forestry Code of 1975** under the **Presidential Decree No. 705** lays down the basic principles of forest management and conservation, makes provision for proper classification, management and utilization of public domain lands to maximize their productivity, and meet the demands of the

³⁰ Conservation International Philippines, website: Protecting biodiversity in the Philippines

country's increasing population. The Revised Forestry Code of the Philippines also covers management of industrial tree plantations, tree farms, and agro-forestry farms, forest protection of swamplands and mangrove forests.

Assessment: The legal and regulatory framework of the Philippines with respect to biodiversity protection and preservation of critical habitats are aligned with the World Bank requirements.

4.3.2 Implementation Mechanism and Procedures

Core Principle 2: Element 2 (ii): Supports and promotes the conservation, maintenance, and rehabilitation of natural habitats; avoids the significant conversion or degradation of critical natural habitats, and if avoiding the significant conversion of natural habitats is not technically feasible, includes measures to mitigate or offset impacts or program activities.

Protected Area Development and Management

104. This program covers the conservation of biodiversity within and adjacent to protected areas, according to the requirements of the NIPAS Act of 1992, expanded in 2018. The NIPAS and E-NIPAS Act mandates the protection of a total of 247 protected areas composed of about 7.8 million hectares of biodiversity protection areas, of which 113 are legislated, 13 are proclaimed, and 121 remaining initial components). Each protected area is covered by a Management Plan promoting the adoption and implementation of innovative management techniques including, if necessary, the concept of zoning, buffer zone management for multiple use and protection, habitat conservation and rehabilitation, diversity management, community organizing, socio-economic and scientific research, site-specific policy development, pest management, and fire control.

Protection and Conservation of Wildlife

105. This program deals with the conservation and protection of wildlife and/or maintenance, restoration, and enhancement of their habitats in accordance with the Wildlife Resources Conservation and Protection Act of 2001. Priority activities under this program are the following: (i) Sustainable wildlife resource use; (ii) management of invasive alien species (IAS); and (iii) Enforcement of wildlife laws, rules and regulations which include the operations/mobilization of Wildlife Traffic Monitoring Units (WTMUs); deputation and mobilization of Wildlife Enforcement Officers (WEOs); operations and maintenance of Wildlife Rescue Centers (WRCs); establishment and management of Critical Habitats; and conservation of threatened wildlife species such as, but not limited to, the marine turtle, dugong (Dugong dugon), tamaraw (*Bubalus mindorensis*), Philippine eagle (*Pithecophaga jefferyi*), freshwater and saltwater crocodiles (*Crocodylus mindorensis; Crocodylus porosus*), tarsier (*Carlito syrichta*), Philippine cockatoo (*Cacatua haematuropygia*), and Visayan spotted deer (*Rusa alfredi*).

Prohibited Acts in Protected Areas

106. The following activities are prohibited in protected areas:

- a) Hunting, destroying, disturbing, or mere possession of any plants or animals or products derived therefrom without a permit from the Management Board;
- b) Dumping of any waste products detriment to the protected area, or to the plants and animals or inhabitants therein;
- c) Use of any motorized equipment without a permit from the Management Board;
- d) Mutilating, defacing or destroying objects of natural beauty, or objects of interest to cultural communities (of scenic value);
- e) Damaging and leaving roads and trails in a damaged condition;
- f) Squatting, mineral locating, or otherwise occupying any land;
- g) Constructing or maintaining any kind of structure, fence or enclosures, conducting any business enterprise without a permit;
- h) Leaving in exposed or unsanitary conditions refuse or debris, or depositing in ground or in bodies of water; and

i) Altering, removing destroying or defacing boundary marks or signs.

Palayamanan and Palayamanan Plus

107. The DA, through the Philippine Rice Institute, developed and established the *Palayamanan*³¹ (expanded to *Palayamanan Plus*), a farming system that aims to improve rice production and food security. The system aims to improve the sustainability of farm practices, productivity, and profitability of rice farms, and in turn result in reduced environmental and health risks to rice farming activities. The program allows the expansion of the farmers' ability to generate income from other livelihood sources within the *Palayamanan* agricultural land. Program activities supported under *Palayamanan* support ecological balance, use of available resources within agricultural land plots, and enable the reuse and recycling of resources for compost and organic fertilizers.

4.3.3 Institutional Organization and Performance

108. The mandate to implement the laws on ecological environment and biodiversity protection is with the DENR and its line bureaus, the Environmental Management Bureau (EMB) and the Biodiversity Management Bureau (BMB). The Protected Area Management Board (PAMB) regulates the protection and utilization of areas within legislated protected areas.

109. The Department of Agriculture (DA) and the Bureau of Fisheries and Aquatic Resources (BFAR) have the mandate to implement the provisions of the Agriculture and Fisheries Modernization Act and the Fisheries Code. DA attached agencies, such as the PhilRice and BSWM, are involved in strengthening agriculture farming activities by developing suitable farm practices which are adaptable to local climate and soil and water conditions.

Assessment: The PforR activities will exclude utilization of areas within critical and natural habitats. However, rice farm areas that are situated within areas that have been declared protected areas under the NIPAS and E-NIPAS will be governed by the requirements of the law, whereby the farmers are required to coordinate its activities with the Protected Area Management Board (PAMB) and secure the necessary Special Use in Protected Area (SAPA) and to contribute to the annual development to uphold the protection of ecosystem services through the Integrated Protected Area Fund, according to the E-NIPAS Act.

Ecological balance and food security in existing land areas allocated for farming will be achieved through sustainable farming techniques and practices developed by DA agencies (e.g. *Palayamanan*), thereby not encroaching into delineated areas for forest and biodiversity protection.

4.4 Water and Soil Conservation Management System

4.4.1 Applicable Legal Framework

National Regulatory Requirements on Water Resources Management

110. The Water Code of the Philippines governs the ownership, allocation, utilization, control, conservation, and the overall administration of all waters and water resources in the Philippines through the National Water Resources Board. Water permit will be secured for establishment of water wells or any activities that will require extraction of surface and ground water resources for specific purposes permitted under the law.

³¹ The first Palayamanan was conceptualized and established by PhilRice in 2010. Source: Introducing Palayamanan in Rainfed Ecosystems Using the CPAR Approach: A Framework Analysis by Agnes C. Rola and Merlyne M. Paunlagui, Working Paper No. 2018-02, <u>https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/cspps_working_paper_2018-02.pdf</u> (accessed on January 27, 2025)

Protection of Areas for Agriculture and Agro-Industrial Utilization

111. The Bureau of Soils and Water Management (BSWM) takes the lead in identifying and delineating the Network of Protected Areas for Agriculture and Agro-Industrial Development (NPAAAD), an initiative supported under the **Republic Act 8435**, or the Agriculture and Fisheries Modernization Act (AFMA). The NPAAAD was started in 1988. It defines prime agricultural land areas where the type of soil, topography, and agro-climate are suitable for agriculture and fishery development. Among the criteria considered are:

- a) All irrigated areas;
- b) All irrigable land areas already covered by irrigation projects, and those with firm funding commitment;
- c) All alluvial plains highly suitable for agriculture, whether irrigated or not;
- d) Agro-industrial croplands presently planted to industrial crops that support the viability of existing agricultural infrastructure and existing agro-based enterprises;
- e) Highland areas located at elevation of 500 meters or higher, that are currently utilized or are those that have the potential for growing semi-temperate and high value crops
- f) All agricultural land areas that are ecologically fragile; and
- g) All fishery areas identified in the Fisheries Code.

4.4.2 Implementation Mechanism and Procedures

112. The **Strategic Agriculture and Fisheries Development Zone (SAFDZ)** refers to strategically located and accessible areas located within the NPAAAD-delineated areas, identified by the BSWM, and the Local Government Units, to serve as areas that will showcase modern crops and livestock farming, and fishing technologies. SAFDZ are prime agricultural land areas that are actively used for agricultural and fishery production and/or whose support facilities are available and strategically located to warrant full modernization of agriculture. The NPAAAD and SAFDZ maps were launched in the digital versions in 2022. Both the NPAAAD and SAFDZ areas serve as critical inputs into local and national land use planning and policymaking for the formulation of strategies for sustainable agriculture and fishery development.

4.4.3 Institutional Organization and Performance

113. Under the AFMA, the DA is tasked with promoting sustainable agricultural and fisheries development, ensuring food security, and rationalizing land use in agricultural areas. Agriculture development must adhere to best practices such as the Good Agricultural Practices (GAP) and the Food Safety Act, access DA extension services and training support, and comply with land use planning protocols intended to protect prime agricultural land.

114. The **National Land Use Policy (NLUP) being enforced into an Act (NLUA, pending legislation)** aims to protect the conversion of prime agricultural land. The NLUA defines the respective authorities of the DENR, the DA, and the Local Government Unit (LGUs) in land use classification, planning, and utilization.

115. The **Department of Agrarian Reform** is the has the exclusive authority to approve or disapprove applications for conversion of agricultural land for residential, commercial, industrial, and other land uses as may be provided by law.

Assessment: The Bureau of Soils and Water Management (BSWM) monitors the quality of soil and water that support agricultural activities. One of its primary purposes is to establish the Network of Protected Areas for Agriculture and Agro-Industrial Development (NPAAAD). The designation of areas for agriculture purposes is consistent with the Good International Industry Practices (GIIP) on agricultural crop production, and consistent with the General EHS guidelines of the World Bank Group.

Furthermore, the FCAs are provided with training on balanced and optimal utilization of fertilizers to avoid overfertilization and conserve soil quality of the next cropping season.

4.5 Agricultural Pollution Management System

4.5.1 Applicable Legal Framework

National Regulatory Requirements on Pollution Prevention

Core Principle 3: Element 3 (ii): Promotes the use of recognized good practice in the production, management, storage, transport, and disposal of hazardous materials generated through program construction or operations; and promotes the use of integrated pest management practices to manage or reduce pests or disease vectors; and provides training for workers involved in the production, procurement, storage, transport, use, and disposal of hazardous chemicals in accordance with international guidelines and conventions.

116. The Pollution Control Law under the Republic Act (RA) No. 3931 or the National Pollution Control Decree, signed on June 18, 1964, and revised on August 18, 1976 through the Presidential Decree (PD) No. 984, declares the national policy to prevent, abate and control pollution of water, air, and land for more effective utilization of the Philippine's resources for domestic, agricultural, industrial, and other legitimate purposes. A National Pollution Control Commission was created, composed of a Water Pollution Control Division, an Air Pollution Control Division, a Research Development Division, a Legal Division, and other such divisions that may be approved in the General Appropriation Act (GAA). The functions of the Commission are now assumed by the Department of Environment and Natural Resources (DENR). A Pollution Control Adjudication Board (PCAB) was created under the Office of the Secretary of the DENR, composed of the DENR Secretary as the Chairperson, and two other Undersecretaries who may be designated by the Secretary, the Director of the Environmental Management Bureau, and three others to be designated by the Secretary as members. The PCAB assumes the powers and functions of the National Pollution Control Commission, with respect to the adjudication of pollution cases under RA 3931 and PD 984. The Environmental Management Bureau serves as the Secretariat of the PCAB and may be delegated to the respective regional officers of the Department, in accordance with the rules and regulations promulgated by the Board. The PCAB adjudicates pollution cases and makes decisions on fines, penalties, and renewal or denial of licenses and permits issued by the DENR.

117. The **Philippine Sanitation Code, declared under Presidential Decree No. 856**, approved on December 23, 1975, sets the sanitary standards for drinking water, food, and other establishments, including public markets, slaughterhouses, and food processing and service stations. The Sanitation Code regulates pollution caused by certain substances, including biological pollutants. It also sets out the requirements for the collection of sewage, operation of sewerage works and sewage treatment plants to treat wastewater, and the construction of septic tanks and safe disposal of effluent.

118. Air emissions standards, regulations, and control are mandated under the Republic Act No. 8749 or the Philippine Clean Air Act of 1999, signed on June 23, 1999. This law aims to maintain clean air that meets the National Air Quality Guideline values for criteria pollutants throughout the Philippines, to minimize the possible impacts associated with industrial activities. The Act provides mandatory requirements and air emissions standards for vehicles, ozone-depleting substances (ODS), persistent organic pollutants (POPs), organic compounds chemical and biological degradation (including but not limited to dioxin, furan, Polychlorinated Biphenyls (PCBs), organochlorine pesticides, such as aldrin, dieldrin, DDT, hexachlorobenzene, lindane, toxaphene and chlordane) and other toxic or poisonous substances potentially damaging human and animal health and the ecosystem. Air pollution emitting devices, such as diesel generator sets, and mobile and stationary air emission sources from industrial activities, are required to undergo emissions testing and pass the standard testing parameters for particulate matters and criteria pollutants such as sulphur dioxide, nitrogen dioxide, photochemical oxidants, ozone, carbon monoxide, ammonia, carbon disulphide, chlorine, formaldehyde, hydrogen chloride, lead, hydrogen sulphide, lead, phenol, heavy metals, etc. A permit-to-operate must be secured from the DENR before operating the air emitting device or equipment.

119. Solid waste and hazardous waste management is regulated under the **Republic Act No. 9003, or the Ecological Solid Waste Management Act of the Philippines** approved on January 26, 2001, and the **Republic Act No. 6969 or the Act to Control Toxic Substances and Hazardous and Nuclear Wastes** approved

on August 18, 2009. Under the RA 9003, the Local Government Unit has the responsibility to collect non-recyclable materials and special wastes, while the Barangay units are tasked to collect and segregate the biodegradable, compostable, and reusable waste.

Use of Fertilizers and Pesticides

120. The **Fertilizer and Pesticides Authority (FPA), under the Department of Agriculture,** was established in 1977 under the **Presidential Decree 1144**, to replace the Fertilizer and Industry Authority (FIA), as a response to regulation of the use of fertilizers and pesticides in agriculture production in the Philippines. The FPA has four strategic thrusts: (i) fertilizer and pesticide regulation, (ii) education or product stewardship, (iii) harmonization with the international standards on labelling, and (iv) good governance. The prices and quality of fertilizer and pesticide production and utilization. It monitors safe handling, use, application, and compliance with industrial health and safety in manufacturing, and formulation plants. The FPA has the authority to impose penalties and sanctions for violation of the set of rules and standards on quality and safety. The FPA has institutionalized the pesticide product stewardship program wherein end-users, manufacturers, sellers, and buyers adopt the "cradle-to-grave" pesticide management. The entity that has applied for registration of the pesticides is primarily responsible for the conduct of stewardship programs for their products, including training of handlers and the public on safe and judicious use of pesticides, including dissemination of information materials.

121. In 2020, the FPA released the **Pesticide Regulatory Policies and Implementing Guidelines**, also known as the **FPA Green Book**. The Green Book provides comprehensive guidelines and procedures for registering pesticides in the country. In addition, the **Department of Agriculture Order No. 09-2020** also provides the policies and requirements on cost efficient, effective, healthy, ecologically sound, and smart crop pest management measures. Functions included in the order are on plant pest surveillance, monitoring and forecasting, plant pest diagnostics, plant pest management, biological control agents mass production, training, biosecurity and quarantine measures, applied and adaptive crop pest management research and public advocacy on crop pest management.

National Integrated Pest Management through the KASAKALIKASAN

122. The **Memorandum Order (MO) No. 126** issued on May 3, 1993, established the *Kasaganaan ng Sakahan at Kalikasan* (KASAKALIKASAN) under the Department of Agriculture. The KASAKALIKASAN sets out the National Integrated Pest Management which defines the standards and approach to integrated pest management (IPM) in growing rice, cord, and vegetables in the Philippines. The DA is mandated to carry out programs of activities on IPM in close collaboration with farmer organizations, non-government organizations (NGOs), the Local Government Units (LGUs), and other policymakers of the national government. The MO No. 126 orders the Provincial Governors and the Municipal Mayors to create IPM training teams composed of IPM-trained extension workers and agricultural technicians whose sole responsibility shall be to train farmers through season-long Farmer Field Schools (FFS). The Executive Committee, composed of the respective heads of the DILG, DENR, DOH, DAR, FPA, and NAGC, with representatives from the NGO, farmers organization, and the regional coordinator of FAO Intercountry Programme for Integrated Pest Control in Rice in South and Southeast Asia, creates the set of policy and general operating guidelines of the Program, and appoints human resources and provides funds to support the provincial and municipal-based IPM programs.

Assessment: The DA through the FPA regulates the safe use of fertilizers and pesticides through integrated pest management procedures, whereas, the DENR provides the legal standards for pollution prevention and control of contamination to water bodies, air quality, and pollution from uncontrolled disposal of waste and hazardous materials.

Animal Husbandry Practices

123. The Livestock and Poultry Feed Act under the Republic Act 1556 governs the use of animal feeds in the Philippines. The Act stipulates the specify requirements on the use of feeds, registration, quality control, labelling, classification, prohibitions, and penalties associated with violations.³²

124. The Food Safety Act of 2013 under the Republic Act 10611 protects and promotes the peoples' right to health. The Act states provisions on protecting consumers from trade malpractices and from substandard or hazardous products. The policy maintains a "farm-to-fork" food safety regulatory system that ensures a high level of food safety, promotes trade, and advances the global competitiveness of Philippine foods and food products.³³

125. Furthermore, manure management systems are practiced at the farm level, by incorporating livestock and poultry manure in the soil or field application. Other practices on farm waste management in animal husbandry include biogas production and composting/vermicomposting.

126. Republic Act 10631 – Philippine Animal Welfare Act of 2013. An Act amending certain sections of Republic Act No. 8485, otherwise known as "The Animal Welfare Act of 1998". This animal welfare law strengthens the Animal Welfare Act of 1998 by providing stricter penalties for animal cruelty. It includes higher fines and longer imprisonment terms for offenders. It is the purpose of this Act to protect and promote the welfare of all terrestrial, aquatic and marine animals in the Philippines by supervising and regulating the establishment and operations of all facilities utilized for breeding, maintaining, keeping, treating or training of all animals either as objects of trade or as household pets. For purposes of this Act, animal welfare pertains to the physical and psychological well-being of animals. It includes, but not limited to, the avoidance of abuse, maltreatment, cruelty and exploitation of animals by humans by maintaining appropriate standards of accommodation, feeding and general care, the prevention and treatment of disease and the assurance of freedom from fear, distress, harassment, and unnecessary discomfort and pain, and allowing animals to express normal behavior.

Assessment: Livestock and animal husbandry pollution control regulations, management requirements, and farm practices are in place and are aligned with the World Bank requirements and good international industry practices. The "Palayamanan" pilot sites in Region 2 Isabela and the technology site operated by PhilRice demonstrate the ability of the farmers to raise livestock animals alongside rice production, wherein the animal wastes are reused and processed into compost and fertilizers through the application of *Trichoderma* or *African night crawler worms*. This legislation around animal welfare and animal husbandry in the Philippines is aligned with Bank requirements/GIIP."

Core Principle 3: Element 3 (iii): Includes measures to avoid, minimize, or mitigate community, individual, and worker risks when program activities are located within areas prone to natural hazards such as floods, hurricanes, earthquakes, or other severe weather or climate events.

Climate Change and Adaptation Measures in the Agri-Fisheries Sector

127. **Republic Act No. 9275** or the **Climate Change Act** approved on October 23, 2009, adopts the Philippine Agenda 21 Framework which espouses sustainable development, to fulfil human needs while maintaining the quality of the natural environment for current and future generations. The Framework follows the Precautionary Principle, to guide in making decisions on climate risk management. The Climate Change Commission was created as an independent and autonomous body, attached to the Office of the President, that has a policy-making mandate to coordinate, monitor, and evaluate programs and action plans of the Government, relating to climate change. The Commission is composed on an Advisory Board, where the Department of Agriculture sits as one of the members. In support the National Climate Change

 ³² Calub, A.D., R.B. Saludes, and E.V.P. Tabing. 2016. "An Overview of Agricultural Pollution in the Philippines: The Livestock Sector." Prepared for the World Bank. Washington, D.C., available here: https://documents1.worldbank.org/curated/en/640711516770288512/pdf/122930-WP-P153343-PUBLIC-Philippines-Livestock.pdf (accessed on February 16, 2025).
 ³³ Ibid.

Action Plan (2011-228), which prioritizes food security, water sufficiency, ecological and environmental stability, human security, climate-smart industries and services, sustainable energy, and knowledge and capacity development, the DA through its Memorandum Circular No. 4 series of 2020, titled "Institutionalization of Climate Resilient Agriculture" has established the Climate Resilient Agriculture Office (CRAO). This MC tasks the CRAO to provide strategic direction and oversight in mobilizing DA's resources and capacities towards achieving its climate resilient agriculture agenda. Another MC issued in 2021 designated CRAO as the Secretariat of Key Strategy 9 Climate Change Adaptation and Mitigation Measures under the OneDA Reform Agenda. Among the tasks of the CRAO under this MC is to utilize the Climate Risk Vulnerability Assessment Maps in planning identifying target areas and beneficiaries of the program, scaling up of the Climate Risk Adaptation options, practices, and technologies, research for development, and strengthening the LGUs' capacities in using climate resiliency decision support tools. The CRAO piloted the Adaptation and Mitigation Initiative in Agriculture (AMIA) flagship program, with a vision to establish a climate-resilient Philippine agriculture with empowered and prosperous farmers and fisherfolk, in line with the objectives of the MBP program of the government. DA CRAO remains committed to promoting the mainstreaming of climate change in agri-fishery plans, programs, and projects, while building resilient farming and fishing communities. CRAO provides policy support and extends operational interventions enhance climate change resilience of AMIA villages.

128. The World Bank Team visited the **AMIAnan Farmers Entrepreneur Agriculture Cooperative (AFEAC)** AMIA Village site in the Barangay Sta Victoria, Ilagan City in Isabela on January 7, 2025, to understand the AMIA Program components, operational activities, roles and responsibilities of the Farmers' Cooperative to achieve the objectives of the MBP climate resiliency agenda.

Sustainable Modern Agriculture and Food Security

129. The **Sagip Saka Act under the Republic Act No. 11321** has declared the policy to "achieve sustainable modern agriculture and food security by helping the agricultural and fishing communities reach their full potential, by increasing farmers' and fishermen's incomes and bridging gaps through public-private partnerships, to improve the quality of life.

Assessment: The national and DA regulatory framework for managing the effects of the consequences of climate change and natural hazards are in line with the Bank's requirements.

4.5.2 Implementation Mechanism and Procedures

Core Principle 3: Element 3 (ii): Promotes the use of recognized good practice in the production, management, storage, transport, and disposal of hazardous materials generated through program construction or operations; and promotes the use of integrated pest management practices to manage or reduce pests or disease vectors; and provides training for workers involved in the production, procurement, storage, transport, use, and disposal of hazardous chemicals in accordance with international guidelines and conventions.

130. All fertilizer products – organic or inorganic – raw materials and ingredients for fertilizer products, either produced locally or imported from abroad, should be registered with the FPA. Information requirements for registration of fertilizer products are production specification, supported by chemical analysis, mode of action, product type, and the result of efficacy trials conducted by an FPA-accredited and independent researcher. Fertilizer handlers such as importers, distributors, exporters, manufacturers, bulk blenders, and processors must register their products with the FPA. The FPA also requires that all pesticide products be registered to generate relevant information on the safe use of pesticides. The FPA issues product labels containing precautions on safe use, including instructions in case of poisoning. FPA also requires the registration of biorational pesticides that include biochemical and microbial pest control agents, which are naturally occurring or must be structurally identical to naturally occurring chemicals if synthesized.

4.5.3 Institutional Organization and Performance

131. The FPA conducts training on the safe and judicious use of fertilizers and pesticides nationwide. The agency disseminates information on the proper and effective application of these products through IEC materials, media platforms, dialogues, symposia, training, and seminars. Furthermore, the FPA operates laboratories to support research and testing of fertilizer and pesticide products.

132. The private sector plays an important role in disseminating information on the safe and optimal use of fertilizers and pesticides. Private manufacturers of chemicals, such as Bayer and the like, visit FCAs and participate in forums organized by the DA RFOs to promote their products. The FCAs are provided with information about proper use and recommended proportions of chemicals utilization in their respective farm areas.

133. The PhilRice develops information brochures and conducts training on Integrated Pest Management (IPM) in rice production. The Agriculture Training Institute (ATI) has the mandate to design capacity-building programs for farm extension workers on the safe application of pesticides and optimal use of fertilizers in crop production.

Assessment: The FPA's role in monitoring and institutionalizing the safe use of fertilizers and pesticides is in line with the Bank's requirements and in line with the GIIP for crop production.

However, the farmers and FCAs are ultimately responsible for ensuring such practices on safe and optimal use of fertilizers and pesticides are adhered to in the field. The monitoring by the DA, on whether the fertilizers and pesticides are used according to standard requirements of the manufacturer, could be improved through field audits and routine inspections.

Also, monitoring of water quality downstream of irrigated farm areas (after pesticides and fertilizers are applied), and in food processing facilities (such as post-harvest processing equipment generating wastewater) is not a common practice; therefore, wastewater quality is not measured before the effluent is discharged into the receiving canal or water body.

4.6 Occupational Health and Safety Management System

Core Principle 3: Element 3 (i). Promote community, individual, and worker safety through the safe design, construction, operation, and maintenance of physical infrastructure, or in carrying out activities that may be dependent on such infrastructure with safety measures, inspections, or remedial works incorporated as needed.

4.6.1 Applicable Legal Framework

Labor Code of the Philippines

134. The Labor Code of the Philippines (PD 442) established in 1974 promotes protection for government and private sector employees. The Labor Code applies to agricultural and non-agricultural workers. The Code was updated through several subsequent amendments, including **RA 11058 (2017)** An Act Strengthening Compliance with Occupational Health and Safety Standards and Providing Penalties for Violations Thereof; **RA 10911 (2016)** An Act Prohibiting Discrimination Against Any Individual in Employment on Account of Age and Providing Penalties Therefor; **RA 9481 (2007)** An Act Strengthening the Workers' Constitutional Right to Self-Organization, Amending for the Purpose of Presidential Decree (PD) No. 442, as Amended, Otherwise Known as the Labor Code of The Philippines; **RA 9231 (2003)** Special Protection of Children Against Child Abuse, Exploitation, and Discrimination Act; and **RA 6727 (1988)** Wage Rationalization Act.

135. For the public sector, the Executive Order (EO) 292, s. 1987 or Administrative Code of 1987 and Civil Service rules and regulations are applicable. Other laws enacted are related to the labor and working conditions: **RA 11313 (2018)** Safe Spaces Act; **RA 11210 (2018)** 105-Day Expanded Maternity Leave Law; **RA 11199 (2018)** Social Security Act of 2018; **RA 10364 (2012)** Expanded Anti-Trafficking in Persons Act of 2012; **RA 9710 (2008)** The Magna Carta of Women; **RA 7277**, as amended by **RA 9442 (2006)** Magna Carta

for Disabled Persons, and for Other Purposes; **RA 8972 (2000)** Solo Parents' Welfare Act of 2000; and **RA 8371 (1997)** IPRA of 1997.

136. Specific provisions on occupational health and safety are provided in the Labor Code and DOLE Department Orders. Under DOLE Department Order (DO) 174-2017, the contractor/subcontractor is required to inform the employee of the terms and conditions of employment in writing on or before the first day of employment. The **DO 198 series 2018** requires information dissemination of OHS for both the private and public sectors. Under the DOLE DO 198 series 2018, employers are required to inform all workers about all types of hazards in the workplace and have access to training, education, and orientation on chemical safety, electrical safety, ergonomics, and other hazards and risks. Training and information materials are made readily available and accessible to workers. The **CSC-DOH-DOLE Joint MC No. 1 series 2020** establishes the Occupational Health and Safety standards for the public sector.

Disaster Risk Reduction and Emergency Preparedness

137. The Department of Interior and Local Government (DILG) has issued several memorandum circulars and guidelines in mainstreaming climate change adaptation and disaster risk reduction measures at the Local Government Unit (LGU) level. Geohazard maps were generated for cities and municipalities, to provide information to communities on areas that are susceptible to natural hazards and risks. The LGUs are considered the first responders in every disaster in accordance with the Disaster Risk Reduction and Management Act of 2010. In terms of emergency preparedness and response, the LGUs take the lead in preparing for, responding to, and recovering from the effects of any disaster. At the DA level, the Disaster Risk Reduction (DRRM) Services provide information on various disaster risk reduction and management efforts in the agricultural and fisheries sectors.

4.6.2 Implementation Mechanism and Procedures

138. The implementation mechanism for enforcing the occupational health and safety OHS) standards in the public sector is described under the **CSC-DOH-DOLE Joint MC No. 1 (2020)**.³⁴ The lead agencies for implementing the Joint MC Guidelines are the **Civil Service Commission (CSC)**, the **Department of Labor and Employment (DOLE)**, and the **Department of Health (DOH)**. The CSC formulates policies in support of OHS for the public sector and integrates OHS topics in the Learning and Development Programs for government officials and employees. The DOH provides technical assistance and human resource support in the periodic and special inspection and investigation of POHS-related accidents, as well as develops a tool kit to guide in implementing the OHS program across government operations. The DOLE provides relevant OHS standards for the government sector and develops the plan to implement OHS training programs for government agencies through the Occupational Safety and Health Center (OSHC).

139. The Local Government Units (LGUs) and the DRRM Services of the DA provide relevant tools and information, and training in disaster preparedness and response to extreme weather conditions (e.g. El Niño and La Niña) to the farmers, farmer groups, the FCAs. The DA created a Strategic Plan of Action for Disaster Risk Reduction in Philippine Agriculture and Fisheries (2015-2025), with a two-part operations manual.

4.6.3 Institutional Organization and Performance

140. The **Agricultural Training Institute (ATI)** provides training on standard food safety training courses. Accordingly, the ATI has coordinated with the OSHC to incorporate relevant OHS standards in the training courses for agriculture extension workers.

³⁴ Joint Memorandum Circular No. 1, series 2020. Occupational Safety and Health (OSH) Standards for the Public Sector:

https://www.csc.gov.ph/phocadownload/userupload/irmo/government%20issuances/JMC%20No.%201%20s.%2020 20.pdf (accessed on February 14, 2025).

141. In addition, training modules developed by the Technical Education and Skills Development Authority (TESDA) on Agricultural Crops Production NC II cover the safe use of tools, equipment, and materials.³⁵

142. When the Bank visited the farmer's cooperative in Region 2 Isabela in January 2025, observations of poor implementation of the use of appropriate personal protective equipment (PPE) were noted. Housekeeping at the operational facilities of the FCAs could be improved, and the use of PPEs at the workplace needs to be strictly monitored and implemented to avoid the occurrence of any potential accidents or incidents.

143. The DA taps the services of the Disaster Risk Reduction and Management (DRRM) to provide information on various disaster risk reduction and management efforts in the agricultural and fisheries sector. Its operation is guided by a Strategic Plan of Action for Disaster Risk Reduction in Philippine Agriculture and Fisheries 2015 to 2025, and a two-part operations manual on disaster risk reduction and management. Brochures on preparedness in the event of El Niño and La Niña are distributed to stakeholders and published on DA's website for public access.³⁶

Assessment: Implementation of regulatory requirements on occupational health and safety standards are in place. The Government rules, regulations, and guidelines on OHS comply with the Bank's requirements. However, observations at FCA operations at the rice drying and milling stations located in Region 2 in Isabela province appear to be non-compliant with the OHS standards of the government.

Furthermore, the DA is aligned with the national policy on disaster risk reduction and management and preparedness in the event of natural calamities. The strategic plan will require revisiting and updating for the next ten years.

5. SOCIAL MANAGEMENT SYSTEMS ASSESSMENT

144. A set of principles and elements is provided in the Bank's PforR ESSA Guidance for systematically assessing the Philippines' E&S systems. This chapter is structured in a way that the country's E&S management systems are analyzed per Bank PforR core principles and elements. Referencing Bank Guidance, the following are assessed for gaps and material consistency: relevant social management regulations, management mechanisms as reflected in mandated institutions, and system implementation performance based on the types and levels of social risks and impacts. Recommendations are stipulated in action plan for the identified gaps. For social aspects risk management, the guidance covers three specific Principles (in addition to Principles 1,2 and 3 relating primarily to environmental issues outlined in Section 4 above. These social core principles are as follows:

145. **Core principle 4: Involuntary resettlement management system.** Program E&S systems manage land acquisition and loss of access to natural resources in a way that avoids or minimizes displacement and assists affected people in improving, or at the minimum restoring, their livelihoods and living standards. This principle has the following key elements:

- (i) Avoid or minimize land acquisition and related adverse impacts
- (ii) Identifying and addressing economic and social impacts arising from land acquisition or loss of access to natural resources
- (iii) Provide compensation sufficient to purchase replacement assets of equivalent value and to meet any necessary transitional expenses, paid before taking land or restricting access
- (iv) Provide supplemental livelihood improvement or restoration measures if taking of land causes loss of income- generating opportunity (e.g., loss of crop production or employment)

³⁵ Practice Occupational Health and Safety Procedures, Training Regulations for Agricultural Crops Production NC II: <u>https://www.csc.gov.ph/phocadownload/userupload/irmo/government%20issuances/JMC%20No.%201%20s.%2020</u> <u>20.pdf</u> (accessed on February 14, 2025).

³⁶ Disaster Risk Reduction and Management Division of the Department of Agriculture, <u>https://www.da.gov.ph/disaster-risk-reduction-and-management-drrm-information/</u> (accessed February 14, 2025).

- (v) Restore or replace public infrastructure and community services that may be adversely affected by the Program
- (vi) Information disclosure, public participation and informed decision-making

146. **Core principle 5: Management System for indigenous peoples and vulnerable groups.** Program E&S systems give due consideration to the cultural appropriateness of, and equitable access to, program benefits, giving special attention to the rights and interests of indigenous peoples and vulnerable groups. Key elements are:

- (i) Undertake prior informed consultations if the indigenous peoples are potentially affected (positively or negatively) free of charge, to determine whether there is broad community support for the PforR Program activities.
- (ii) Ensure that indigenous peoples can participate in devising opportunities to benefit from exploitation of customary resources and indigenous knowledge, the latter to include the consent of indigenous peoples.
- (iii) Give attention to groups vulnerable to hardship or discrimination, including, as relevant, the poor, the disabled, women and children, the elderly, indigenous people, racial groups, or other marginalized groups; and if necessary, take special measures promote equitable access to PforR Program benefits, and if necessary, take special measures to promote equitable access to PforR Program benefits.

147. **Core principle 6: Social conflict management systems**. Program E&S systems avoid exacerbating social conflict, especially in fragile states, post-conflict areas, or areas subject to territorial disputes, with only one key element: Consider conflict risks, including distributional equity and cultural sensitivities.

148. Social risks and impacts of PforR activities as enumerated in Chapter 3 are referred to in this assessment.

5.1 Correlation Analysis with World Bank's Core Principles

149. **Table 5-1** provides the stocktaking between the Philippines laws, policies, and regulations and mandated agencies as these pertain to social management systems as against the PforR core principles and corresponding elements. It can be gleaned from the table that there are corresponding laws or enabling mechanisms for each core element and a designated institution tasked to oversee compliance with the laws.

150. The assessment of Social Systems Assessment in table format is presented in **Appendix 2**. Capacity assessment of the Department of Agriculture and its attached agencies is provided in table format under **Appendix 3** and **Appendix 4**.

Social impacts	Bank policy principle	Philippines social impacts and risks management system (details provided in succeeding sections)			
and risks		Relevant social laws and regulations	Social management agencies		
Principle #3: Pro facilities or othe	ogram E&S management system er operational practices under t	ns are designed to protect public and worker safety against the pote the program; (b) exposure to toxic chemicals, hazardous wastes, an	ntial risks associated with (a) the construction or operation of d otherwise dangerous materials under the program; and (c)		
reconstruction o	reconstruction or rehabilitation of infrastructure located in areas prone to natural hazards.				
displacement	community, individual, and worker health, safety, and security through the safe	 rules for hiring and firing of private employees; conditions of work including maximum work hours and overtime: 	 with the enforcement of the provisions of the Labor Code. Civil Service Commission (CSC) - tasked with overseeing the integrity of government actions and processes 		
	design, construction, operation, and maintenance of program activities; or, in carrying out activities that may be dependent on existing infrastructure, incorporate safety measures, inspections, or remedial work as appropriate.	 employee benefits and guidelines in the organization; membership in labor unions and collective bargaining; conditions for security of tenure and validity of job displacement 			
Exposure to hazards and harm (safety and food quality).	Include adequate measures to avoid, minimize, or mitigate community, individual, and worker risks when the PforR activities are in areas prone to natural hazards such as floods, hurricanes, earthquakes, or other severe weather or affected by climate events.	 RA 11058 reinforced the existing OSHS, enhancing worker protection by providing protection from all possible dangers in the workplace. CSC-DOH-DOLE Joint MC No. 1, s. 2020 provides OHS guidelines for the public sector aimed at protecting all government employees from the dangers of injury, sickness or death in the workplace RA 10121 otherwise known as the "Philippine Disaster Risk Reduction and Management (DRRM) Act of 2010" signed into law to strengthen the Philippine disaster risk reduction and management system. 	 CSC - Formulate or enhance policy in support of OSH for the public sector; Attend to administrative cases arising from non- compliance with OSH. Department of Health (DOH) - Establish system / mechanism to provide health services and health service providers to government employees. DOLE - Provide relevant OSH Standards for the government sector. NDRRMC - National Council empowered with policy- making, coordination, integration, supervision, monitoring and evaluation functions for the protection and welfare of the people during disasters or emergencies. 		
Principle #4: Pro improving, or at	Principle #4: Program E&S systems manage land acquisition and loss of access to natural resources in a way that avoids or minimizes displacement and assists affected people in improving, or at the minimum restoring, their livelihoods and living standards.				

Table 5-1: Correlation between the Philippines Social Management Systems and World Bank Policy

Social impacts	Bank policy principle	Philippines social impacts and risks management system (details provided in succeeding sections)	
and risks		Relevant social laws and regulations	Social management agencies
Land acquisition that leads to physical and economic displacement ³⁷	Avoid or minimize land acquisition and related adverse impacts. Identifying and addressing economic and social impacts arising from land acquisition or loss of access to natural resources	RA 10752 - An Act Facilitating the Acquisition of Right-Of-Way Site Or Location For National Government Infrastructure Projects also known as The Right-of-Way Act ; provides for the conduct of due diligence on the possible physical and/or economic displacement of persons caused by land acquisition.	 Implementing Agency secures an ECC or CNC from the EMB-DENR National Commission on Indigenous Peoples (NCIP) – safeguards the rights and well-being of IPs/ICCs through the FPIC process.
	Provide compensation sufficient to purchase replacement assets of equivalent value and to meet any necessary transitional expenses, paid before taking land or restricting access.	 RA 10752 – sets guidelines for <i>Rules on Negotiated Sale;</i> ROW site or location for a national government infrastructure project, may be acquired under the following rules: current market value of the land, replacement cost of structures and improvements therein; and current market value of crops and trees therein. The DRAM provides Compensation/ Entitlements Package for PAPs that include: (i) Rehabilitation Assistance, if applicable; (ii) Financial Assistance, if applicable; (iii) Free Transportation; and (iv) Transitional Allowance, if applicable. 	 An independent property appraiser (IPA) conducts the valuation studies; as accredited by: Bangko Sentral ng Pilipinas (BSP) or a professional association of appraisers recognized by BSP. Implementing Agency procures IPA and pays the PAPs of compensation and other entitlements.
	Provide supplemental livelihood improvement or restoration measures if taking of land causes loss of income- generating opportunity (e.g., loss of crop production or employment).	 The DRAM (Section 2.22) incorporates the cost of livelihood restoration and improvement, and other activities under the resettlement action plan in coordination with concerned government agencies. Urban Development and Housing Act of 1992 states that "To generate employment and income opportunities for the resettled families, the resettlement project shall act as a conduit for the families to avail of manpower training and livelihood program through sustained networking and resource syndication activities." 	DepartmentofHumanSettlementsandUrbanDevelopment(DHSUD)istheexecutivedepartment ofgovernment responsibleforthemanagementofhousingand related development in the Philippines.The below agencies are attached to DHSUD for policy andprogram coordination:•Home Development Mutual Fund (HDMF/Pag-IBIG Fund)•Human Settlement Adjudication Commission (HSAC)•National Housing Authority (NHA)•National Home Mortgage Finance Corporation (NHMFC)•Social Housing Finance Corporation (SHFC)
	Restore or replace public infrastructure and community services that	DRAM provides clearance of public improvements along the ROW (Sec. 2.25) covering private structures, public or community infrastructure etc.	DPWH and/or associated agencies

³⁷ Noting however, that the program excludes projects/ activities that result to land acquisition and/or resettlement of a scale or nature that will have significant adverse impacts on affected people, or the use of forced evictions.

Social impacts	Bank policy principle	Philippines social impacts and risks management system (details provided in succeeding sections)	
and risks		Relevant social laws and regulations	Social management agencies
	may be adversely affected		
	by the Program.		
	Information disclosure,	DRAM provides guidance on information disclosure	The Implementing Agency, with the DENR, NCIP, LGUs and
	public participation and	UDHA, Sec. 28 - ROW clearance to abide by protocols for proper	others involved with land acquisition adheres to the tenets
	informed decision-making	and humane relocation and resettlement that include advanced	of public participation and informed decision-making.
		disclosure of eviction or demolition dates.	
Principle #5: Pro	ogram E&S systems give due co	nsideration to the cultural appropriateness of, and equitable access t	to, Program benefits, giving special attention to the rights and
interests of indi	genous people and vulnerable g	groups.	
Exclusion	Undertake prior informed	Indigenous Peoples Rights Act (IPRA) of 1997 underscores self-	NCIP - protects and promotes the interest and well-being of
(IP) ³⁸	consultations if the	governance and empowerment of indigenous cultural	ICCs/IPs with due regard to their beliefs, customs, traditions
	indigenous peoples are	communities and indigenous peoples (ICCs/IPs); the conduct of	and institutions, and to the recognition of their ancestral
	potentially affected	FPIC.	domains as well as their rights thereto.
	(positively or negatively)	• NCIP's AO No. 3., Series of 2012 provides the procedures for	
	free of charge, to determine	FPIC in line with the principle of self-determination.	
	whether there is broad	• The Department of Agriculture and the NCIP (DA-NCIP) entered	
	community support for the	into a Joint Special Order No. 01, series of 2020, creating a	
	PforR Program activities.	National Steering Committee (NSC) for agri-fisheries and	
		agribusiness development in the ancestral domain land areas of	
	Ensure that indigenous	the ICCs/IPs to establish the mechanism to preserve the IP	
	peoples can participate in	culture in the "convergence area".	
	devising opportunities to		
	sustemary resources and		
	indigenous knowledge the		
	latter to include the consent		
	of indigenous peoples		
- Exclusion	Social considerations: Give	• An Act Expanding RA 9208 Entitled "An Act to Institute Policies	• Inter-Agency Council Against Trafficking - To formulate
(other	attention to groups	to Eliminate Trafficking in Persons Especially Women and	and monitor a comprehensive and integrated program to
(other	vulnerable to hardship or	Children	prevent and suppress the trafficking in persons
	discrimination, including, as	• RA 7610 - Special Protection of Children Against Abuse.	• DOLE for the private sector and CSC for the public sector
	relevant, the poor, the	Exploitation and Discrimination Act	to conduct yearly spontaneous inspections to ensure

³⁸ To an extent, excluded should activities (a) have adverse impacts on land and natural resources subject to traditional ownership or under customary use or occupation; (b) cause relocation of indigenous peoples from land and natural resources that are subject to traditional ownership or under customary use or occupation; or (c) have significant impacts on cultural heritage that is material to the identity and/or cultural, ceremonial, or spiritual aspects of the affected communities, including indigenous groups.

Social impacts	Bank policy principle	Philippines social impacts and risks management system (details provided in succeeding sections)		
and risks		Relevant social laws and regulations	Social management agencies	
vulnerable groups) ³⁹ - Forced labor - Child labor - GBV SEA/SH	disabled, women and children, the elderly, indigenous peoples, racial groups, or other marginalized groups; and if necessary, take special measures promote equitable access to PforR Program benefits, and if necessary, take special measures to promote equitable access to PforR Program benefits.	 RA 9231 - An Act Providing for the Elimination of the Worst Forms of Child Labor and Affording Stronger Protection for the Working Child, amending for this Purpose RA 7610, as Amended, Otherwise Known as the "Special Protection Of Children Against Child Abuse, Exploitation And Discrimination Act" RA 9710 or the Magna Carta of Women mandates government agencies to adopt gender mainstreaming as a strategy to promote women's human rights and eliminate gender discrimination in their systems, structures, policies, programs, processes, and procedures. RA 11313 An Act Defining Gender-Based Sexual Harassment in Streets, Public Spaces, Online, Workplaces, and Educational or Training Institutions, Providing Protective Measures and Prescribing Penalties Therefor Otherwise known as The Safe Spaces Act. Expanded the definition of sexual harassment to include acts committed in public spaces and online platforms, offenses committed by peers and subordinates, as well as transphobic and homophobic slurs. RA 7192, or the Women in Development and Nation Building Act directs government units to integrate Gender and Development (GAD) perspective in development planning processes and various stages of the project cycle and to allocate five percent (5%) to thirty percent (30%) GAD budget for their GAD plans and activities. RA 9262: the Anti-Violence Against Women and their Children Act of 2004; law the seeks to address the prevalence of violence against women and their children (VAWC) by their intimate partners like their husband or ex-husband, live-in partner or former live-in partner, boyfriend/girlfriend or ex- boyfriend/ex-girlfriend, dating partner or former dating partner. RA 7877: The Anti-Sexual Harassment Act of 1995; It defines the 	 compliance of employers and employees with their obligations under pertinent Acts in column 4. National Commission on the Role of Filipino Women (NCRFW) ensures all gender mainstreaming programs are consistent with the standards of pertinent Acts. National Council for the Welfare of Disabled Persons (NCWDP) oversees implementation of the ACT. National Commission of Senior Citizens (NCSC) is tasked to serve and implement services for the elderly. Office for Senior Citizens Affairs (OSCA) –to assist senior citizens in filing complaints or charges against any person, natural or juridical; establishment, institution, or agency refusing to comply with the privileges under the Act. DSWD - to coordinate with concerned agencies the implementation of the comprehensive package of social protection services for solo parents and their families. Solo Parent Office (SPO) is established in every province and city and a Solo Parent Division (SPD) under the Municipal Social Welfare and Development Office in every municipality. 	

³⁹ Noting that the following are excluded from the project: (i) Activities that involve the use of forced or child labor; and (ii) Marginalization of, discrimination against, or conflict within or among, social groups (defined by race and ethnicity, among others).

Social impacts	Bank policy principle	Philippines social impacts and risks management system (details provided in succeeding sections)		
and risks		Relevant social laws and regulations	Social management agencies	
		 standard procedure for the administrative investigation, prosecution and resolution of sexual harassment cases in the public sector. RA 7277 Magna Carta for Disabled Persons, as amended by RA 9442; A person with disability shall not be discriminated on the basis of disability with regard to all matters concerning all forms of employment, including conditions of recruitment, hiring and employment, continuance of employment, career advancement, and safe and healthy working conditions. RA 7432, otherwise known as the "Senior Citizens Act," as amended by RA 9257 "Expanded Senior Citizens Act of 2003" were enacted to grant benefits and special privileges to the elderly in response to the State's constitutional mandate. RA 8972, Solo Parents' Welfare Act of 2000 provides benefits and privileges to solo parents and their children. 		
Principle #6: Pro	l ogram E&S systems avoid exace	rbating social conflict, especially in fragile states, post-conflict areas,	or areas subject to territorial disputes.	
- Social conflict ⁴⁰	Consider conflict risks, including distributional equity and cultural sensitivities.	 RA 9285 of 2003 - An Act to Institutionalize The Use Of An Alternative Dispute Resolution System In The Philippines And To Establish The Office For Alternative Dispute Resolution And For Other Purposes. RA 12022 (2024) An Act Defining the Crimes Of Agricultural Economic Sabotage, Prescribing Penalties Therefor, Vesting Jurisdiction Over Such Offenses With The Court Of Tax Appeals, Providing Mechanisms For Its Implementation And Enforcement, Repealing For The Purpose Republic Act No. 10845 Or The "Anti-Smuggling Act Of 2016" - a measure that imposes stiffer penalties against smugglers and hoarders of agricultural food products including cartels. RA 6713 - An Act Establishing a Code Of Conduct And Ethical Standards For Public Officials And Employees, To Uphold The Time-Honored Principle Of Public Office Being A Public Trust, Granting Incentives And Rewards For Exemplary Service 	 Office for Alternative Dispute Resolution. As an attached agency to the Department of Justice (DOJ) promotes, develops and expands the use of ADR in the private and public sectors. Anti-Agricultural Economic Sabotage Council Key functions are to ensure the proper and effective implementation of the provisions of the Act and coordinate the preparation of appropriate and effective measures to prevent and suppress the prohibited acts defined in the Act. Office of the Presidential Adviser on the Peace, Reconciliation and Unity (OPAPRU) is mandated to manage, direct, integrate, and supervise the implementation of the Comprehensive Peace Process by promoting and reinforcing reconciliation and unity among 	

⁴⁰ Intensified rice production may enhance the demand for labor. Advanced payments can tie vulnerable farmers to cycles of indebtedness, leave no room for negotiating wage increases, and leave them without options to withdraw their services under poor working conditions.

Social impacts	Bank policy principle	Philippines social impacts and risks management system (details provided in succeeding sections)	
and risks		Relevant social laws and regulations	Social management agencies
		Enumerating Prohibited Acts And Transactions And Providing	the Filipino people. Lodged with the Office of the
		Penalties For Violations Thereof And For Other Purposes – also	President.
		known as the "Code of Conduct and Ethical Standards for Public	• Commission on Human Rights (CHR) – mandated to
		Officials and Employees."	investigate, provide appropriate legal measures, and
		• RA 11188 - An Act Providing for the Special Protection of	monitor on its own or on complaint by any party, all forms
		Children in Situations of Armed Conflict and Providing Penalties	of human rights violations involving civil and political
		for Violations Thereof; also known as the "Special Protection of	rights.
		Children in Situations of Armed Conflict Act".	• Ombudsman shall prescribe such regulations as may be
		• RA 9372 of 2007 - An Act to Secure the State and Protect Our	necessary to carry out the purpose of pertinent reporting
		People from lerrorism - also known as the "Human Security Act	and disclosure requirements.
		of 2007.	• CSC is responsible over the civil service tasked with
		Commission on Human Pights as Provided for in the 1987	processes
		Constitution Providing Guidelines for the Operation Thereof	• Courts of Law - Settle actual controversies involving rights
		and for Other Purposes	which are legally demandable and enforceable and to
		• RA 6975 the role of the PNP is to "enforce all laws and	determine whether or not there has been a grave abuse of
		ordinances relative to the protection of lives and properties" and	discretion amounting to lack of excess of jurisdiction on
		to "maintain peace and order and take all necessary steps to	the part of any branch or instrumentality of the
		ensure public safety"; "to exercise the power to make arrest,	Government. Below are the regular courts in the
		search and seizure in accordance with the Constitution and	Philippines:
		pertinent laws"; and to "perform such other duties and exercise	○ Supreme Court
		all other functions as may be provided by law."	 Court of Appeals
			\circ Court of Tax Appeals
			 Regional Trial Courts
			 Metropolitan Trial Courts
			 Municipal Trial Courts in Cities
			 Municipal Trial Courts
			 Municipal Circuit Trial Courts
			• Philippines National Police (PNP) – to ensure
			implementation of RA 6975.
			• Barangay Tanods, also known as barangay police officers
			or BPSUS (barangay peace and safety officers) is the lowest
			level of law enforcement in the Philippines but do not form
			part of the PNP structure

5.2 Assessment of Social Regulations and Policies

151. The legal framework of the Philippines has tiers. National laws are promulgated for a development agenda that transcend project design. Implementing Rules and Regulations (IRR) are issued to elaborate on the national laws. Department Orders and Memoranda Circular translate laws into procedural statements by the mandated agency. The laws cited in this chapter are limited to those that address social risk management systems, specific to each of the PforR ESSA core principles and elements.

5.2.1 Core Principle #1: Sustainable Social Risks Management System

152. Core Principle #1 as fully stated is: "Environmental and social management procedures and processes are designed to (a) promote environmental and social sustainability in Program design; (b) avoid, minimize, or mitigate against adverse impacts; and (c) promote informed decision-making relating to a program's environmental and social effects."

153. There are two elements under Core Principle #1, generally addressed in the environmental assessment section. Element 2 (vi) is further elaborated in this section.

Element 2 (vi): Responsiveness and accountability through stakeholder consultation, timely dissemination of program information, and responsive grievance redress mechanisms.

154. Below are key operating principles of the PEISS as outlined in DENR DAO No. 2003-30 that cover social concerns specific to social/public participation, disclosure and information dissemination:

- (i) Project proponents are responsible for determining and disclosing all relevant information necessary for a methodical assessment of the environmental impacts of their projects.
- (ii) The review of the Environmental Impact Statement (EIS) by EMB is also guided by social acceptability based on informed public participation.
- (iii) Effective regulatory review of the EIS depends largely on timely, full, and accurate disclosure of relevant information by project proponents and other stakeholders in the EIA process.
- (iv) The social acceptability of a project is a result of meaningful public participation, which shall be assessed as part of the Environmental Compliance Certificate (ECC) application, based on concerns related to the project's environmental impacts.

155. Still within the PEISS that uphold social processes and procedures is DAO 15 s2017 (Guidelines on Public Participation). It emphasizes that common good shall be promoted through public participation in the implementation n of the PEISS, employing these basic principles:

- (i) Public participation should be initiated early and sustained at the various stages of the EIA process;
- (ii) Public participation should be well planned and should involve the stakeholders in the assessment, management and monitoring of environmental impacts; and
- (iii) Timely public disclosure of all necessary relevant information especially to the stakeholders who shall be made to understand and appreciate the specific purpose and context of their participation for each stage of the process.

156. As regards grievance redress mechanisms (GRM), the PEISS provides guidelines on specific types of grievances within the EIA process:

- (i) Where a body/organization is not included as a stakeholder and wishes to challenge, a letter is sent to the EMB stating the reason for inclusion not later than the EIS submission for procedural screening.
- (ii) Complaint about non-consideration of legitimate concerns about the assessment, management, and monitoring of the environmental impacts of a proposed project must be sent to the EMB stating concerns not later than seven days before a scheduled public hearing.

- (iii) Complaint regarding the Multi-Partite Monitoring Team's (MMT) failure to report actual adverse impacts during project implementation must be mentioned in a letter addressed to the EMB-Regional Office (copy furnished EMB-Central Office) the soonest to enable investigation.
- (iv) Complaint on non-compliance with the EMB guidelines must be mentioned in letter addressed to the EMB/DENR office sent during/after the specific stage of the process where procedures or requirements were allegedly not complied, with the specific provision and violation indicated.

Assessment: Provisions for stakeholder participation, information dissemination and grievance redress are well captured in the PEISS. However, the grievance mechanism applied within the PEISS lacks the Bank's minimum requirements as follows: (i) Grievance uptake; (ii) Grievance log/registry; (iii) Disclosure mechanism on grievance procedures; (iv) Transparency about grievance procedure, governing structure, and decision makers; and (v) Appeals process.

5.2.2 Core Principle #2: Cultural Heritage Management System

157. Three elements of Core Principle #2 (*Program E&S management systems are designed to avoid, minimize, or mitigate* adverse impacts *on natural habitats and physical cultural resources resulting from the program*) are stipulated of which social facets of Element 5 are considered for social system management assessment.

Element 5: Consider potential adverse effects on physical cultural property and provide adequate measures to avoid, minimize, or mitigate such effects.

158. Philippine laws and regulations on physical cultural property are contained in RA 10066 The Philippine Cultural Heritage Act with the main objectives of protecting, preserving, conserving, and promoting the nation's cultural heritage cover both the tangible and intangible, its property and histories, and ethnicity of local communities. Declared heritage zones are deemed culturally sensitive areas thus covered under the PEISS. Project impacts on cultural heritage have to be established, analyzed by applying the lenses of being direct, indirect, and cumulative project-specific risks and impacts. An Archeological Impact Assessment is required for both declared heritage zones and archeological sites. During construction-related activities, the discovery of archeological sites result to the stoppage of earth-moving activities and the site is reported to the National Museum (NM) for technical assessment.

Per IPRA, indigenous cultural heritage like sacred sites and burial sites are 'excluded areas from development'.

Assessment: PforR exclusion list covers high-risk impacts on tangible cultural heritage, including physical activities adversely impacting intangible cultural heritage. Heirloom rice varieties of indigenous peoples and local folk are not within the scope of PforR activities. The national government undertakes the preservation of these varieties through PhilRice and local seed banks. Should construction activities inadvertently impact cultural heritage, chance finds procedures must be in place in accordance with the Bank's minimum requirements.

5.2.3 Core Principle #3: Public and Worker Safety Management System

159. Only Element 6 of Core Principle #3 is subject to social management risk and impact assessment out of the three elements. Core Principle #3 specifically pertains to *Program E&S management systems are designed to protect public and worker safety against the potential risks associated with (a) the construction or operation of facilities or other operational practices under the program; (b) exposure to toxic chemicals, hazardous wastes, and otherwise dangerous materials under the program; and (c) reconstruction or rehabilitation of infrastructure located in areas prone to natural hazards.*

Element 6: Promote adequate community, individual, and worker health, safety, and security through the safe design, construction, operation, and maintenance of program activities; or, in carrying out activities that may be dependent on existing infrastructure, incorporate safety measures, inspections, or remedial work as appropriate.

160. The Labor Code of the Philippines (PD 442) promotes protection for government and private sector employees, the scope inclusive of agricultural and non-agricultural workers. The lead agency for implementing rules and regulations on public sector employment is the Civil Service Commission (CSC) whilst for the private sector is the Department of Labor and Employment (DOLE). Strengthening of compliance to occupational health and safety (OHS) is governed by RA 11058 (An Act Strengthening Compliance with Occupational Safety and Health (OSH) Standards and Providing Penalties for Violations Thereof Occupational health and safety (OHS). For OHS in the public sector, Joint Memorandum Circular 1 2020 is jointly implemented by the CSC with DOLE and the Department of Health (DOH).

161. Laws and regulations to mitigate labor displacement are present in both government and the private sector (e.g., retrenchment and redundancy) with employers required to institute labor saving devices and act in good faith.

Assessment: Philippine framework on worker safety complies with Bank requirements.

5.2.4 Core Principle #4: Involuntary Resettlement Management System

162. Core Principle #4 provides for program E&S systems to manage land acquisition and loss of access to natural resources in a way that avoids or minimizes displacement and assists affected people in improving, or at the minimum restoring, their livelihoods and living standards. Only Element 9 is found under this core principle but has six parameters.

Element 9 (i): Avoid or minimize land acquisition and related adverse impacts.

163. Under RA 10752 (An Act Facilitating the Acquisition of Right-Of-Way Site or Location for National Government Infrastructure Projects also known as The Right-of-Way Act), acquisition of private property for public purposes shall not proceed without providing just compensation for landowners. The avoidance and minimization of adverse impacts is also built into the provisions on Ecological and Environmental Concerns (Sec. 8). It reads, 'In cases involving the acquisition of right-of-way site or location for any national government infrastructure project, the implementing agency shall consider the ecological and environmental impact of the project. Before any national government project could be undertaken, the implementing agency shall consider environmental laws, land-use ordinances, and all pertinent provisions of RA 7160 (Local Government Code).'

164. RA 10752 is further articulated in full by the Department of Public Works and Highways (DPWH) in its 2017 Right-of-Way Acquisition Manual (DRAM)

Assessment: Large-scale land acquisition belongs to the list of high-risk activities excluded from the PforR program. The Program fits into the description of 'national government projects' where RA 10752 will apply (Sec. 3). Procedures on land donations (2017 DRAM Sec. 2.13) has no E&S due diligence procedures compared to the Bank.

Element 9 (ii): Identifying and addressing economic and social impacts arising from land acquisition or loss of access to natural resources:

165. RA 10752 provides for the conduct of due diligence on the possible physical and/or economic displacement of persons caused by land acquisition. Further, informal settlers are provided the choice of compensation for affected structures or replacement housing. The rights of informal settler families (ISF) are respected but the government primarily offers relocation assistance without explicit provisions for livelihood support for sovereign projects. ISFs who are homeless and underprivileged as defined in R.A. 7279 are eligible to become beneficiaries of government "socialized housing"⁴¹ programs if they satisfy the rest of the criteria set in the same Act (Please refer to Section 4.2.3). Renters and sharers within the informal settlement structures are also eligible to avail of said housing programs if they satisfy such criteria. However, there is variance in addressing informal settlers who do not meet eligibility criteria and those who are

⁴¹ "Socialized housing" refers to housing programs and projects covering houses and lots or homelots only undertaken by the government or the private sector for the underprivileged and homeless citizens which shall include sites and services development, long-term financing, liberalized terms on interest payments, and such other benefits.

considered new squatters.⁴² Compliance of affected settlers to the cut-off date is upheld. Ineligible informal settlers are not qualified to avail of rights and entitlements under RA 7279,⁴³ yet subject of relocation under RA 10752. While RA 7279 specifically applies to underprivileged and homeless individuals in urban areas, RA 10752 covers relocation of informal settlers without distinction. RA 7279 takes precedence leading to reduced entitlements for squatters compared to ESF requirements.

Assessment: Philippine policy generally meets Bank requirements on addressing displacement and recognizing the rights of informal settlers though there are variances between how ISFs are treated based on eligibility nuances. These are high-risk activities considered excluded in PforR activities.

Element 9 (iii): Provide compensation sufficient to purchase replacement assets of equivalent value and to meet any necessary transitional expenses, paid before taking land or restricting access.

166. Philippine laws stipulate compensation at replacement cost, which also covers transaction expenses. Under the rules of negotiated sale, the compensation price offered to landowners is the sum of three elements: (i) current market value of the land; (ii) replacement cost of structures and improvements therein; and (iii) current market value of crops and trees therein (RA 10752, Sec. 5). Based on the eligibility classification of project-affected households and the kind of losses or damages incurred during displacement, the compensation price will cover all 3 elements or only 1-2 elements. There are, however, some limitations when compared to Bank policies on land acquisition:

- Not all informal settlers are entitled to compensation or benefits; they must meet eligibility criteria, including proof of occupation prior to the "cut-off" date.
- Compensation is disbursed in two installments. The first installment is paid upon execution of the deed of sale, allowing entry to the property. The second installment is disbursed once the transfer of title to the Republic of the Philippines is complete or when the land has been fully cleared of structures, crops, and trees, as certified by the Project's IA.
- If the government opts to utilize a 60-meter Right of Way (ROW) strip reserved for public use on land acquired under CA 141, the owner is compensated for damages to improvements on the land at replacement cost. For expropriated lands, the market value is based on the current property zonal value, with the landowner liable for capital gains.

Assessment: PforR activities will not likely involve the acquisition of and payment of compensation for private lands. Enterprise development projects are likely proposed in lands already owned by and titled to the name of the FCAs.

Element 9 (iv): Provide supplemental livelihood improvement or restoration measures if taking of land causes loss of income-generating opportunity (e.g., loss of crop production or employment).

167. The DRAM specifies payment of compensation for loss of income and livelihood. Compensation for income losses is not provided for in any national legislation except for agricultural tenants, lessees, and free patent holders. Income restoration measures for agricultural lessees, tenants, and sharecroppers are provided as follows: (i) for agricultural lessee, entitled to disturbance compensation equivalent to five times the average gross harvests on his/her landholding during the last five preceding calendar years as per RA 6389; and for agricultural tenants and sharecroppers may be provided with a) financial assistance equivalent to the average gross harvest for the last three years and not less than PhP15,000 per hectare (E.O. 1035); b) rehabilitation assistance in the form of skills training and other development activities through programs of other government agencies in consultation with eligible PAPs.

168. Transitional allowance is mentioned to be provided under "Other Entitlements" but is based on eligibility of PAPs. Computation is provided based on the category of project-affected peoples (PAP) and impact. Adequacy of necessary support based on time to restore income-earning capacity to be determined. Transitional allowance is provided to PAPs as applicable: (i) severely affected PAPs or house

⁴² "New squatter families" refers to individual groups who occupy land without the express consent of the landowner after March 28, 1992. Their structures shall be dismantled, and appropriate charges will be filed against them. (Sec. 1 (4.0) 1993 DILG-HUDCC IRR Governing Summary Eviction)

⁴³ RA 7279 Urban Development and Housing Act of 1992; amended section 12 through RA 9397

tenants of affected main structures who will have to find a new place are entitled to the equivalent of one month rent of a similar structure within the same area; and (ii) shop owners, to cover for computed income loss, are entitled to the computed income loss during demolition and reconstruction of their shop but not to exceed a one-month period.

Assessment: PforR activities are not expected to lead to resettlement programs with livelihood restoration activities.

Element 9 (v): Restore or replace public infrastructure and community services that may be adversely affected by the Program.

169. Clearance of public improvements along the ROW is provided for under the 2017 DRAM (Sec. 2.25). Like private structures, public or community infrastructure can only be cleared after fully acquired.

Assessment: PforR activities are largely in-situ or place-based. These will not entail any adverse physical impact on any public or community infrastructure.

Element 9 (vi): Information disclosure, public participation and informed decision-making

170. Preparations for public participation rest with information, education and communication (IEC) initiatives in compliance with the DENR DAO 2017-15 to orient stakeholders about the proposed project, gather feedback, prepare communities, and set a schedule for upcoming project-related community activities. Within the EIA system, transparency extends to the disclosure of entitlements for PAPs. The Entitlement Matrix, based on the provisions of RA 10752, is disclosed with PAPs. This matrix outlines the benefits and entitlements that project-affected families (PAFs) are eligible to receive as compensation for their displacement or loss. By providing clear information on entitlements, PAFs can understand their rights and advocate for fair compensation, enhancing transparency and accountability in the resettlement process.

171. Information disclosure specifically covers the following: (i) affected lands through a public posting of the list of affected lots in conspicuous places within the city/municipality and the vicinity of the implementing agency; (ii) appraised value of lands, structures and improvements; and (iii) final resettlement plan (2017 DRAM, Sec. 2.5). ROW clearance is also required to abide by eight protocols for proper and humane relocation and resettlement (UDHA, Sec. 28). The protocols include advanced disclosure of eviction or demolition dates (at least 30 days before) and adequate consultations with project-affected households and the communities receiving them (i.e., host communities of resettlement sites).

Assessment: Considerations for information disclosure and public participation is anchored on information dissemination under the PEISS and RA 10752. However, resettlement is a high-risk activity excluded from the Program.

5.2.5 Core Principle #5: Management System for Indigenous Peoples and Vulnerable Groups

172. The three elements under Core Principle #5 are related to the social regulation system of the PforR Program. The principle states that: Program E&S systems give due consideration to the cultural appropriateness of, and equitable access to, Program benefits, giving special attention to the rights and interests of indigenous people and vulnerable groups. Elements 10 and 11 on indigenous peoples are treated jointly below, distinct from Element 12 on vulnerable groups.

Element 10: Undertake meaningful consultations if the indigenous peoples are potentially affected (positively or negatively), to determine whether there is broad community support for the PforR Program activities.

Element 11: Ensure that indigenous peoples can participate in devising opportunities to benefit from exploitation of customary resources and indigenous knowledge, the latter to include the consent of indigenous peoples.

173. The Indigenous Peoples Rights Act (IPRA) of 1997 underscores self-governance and empowerment of indigenous cultural communities and indigenous peoples (ICCs/IPs) as regards their rights and responsibilities on their ancestral lands/domains. ICCs/IPs exercise their right to social justice, human rights,

and cultural integrity, among others. Specifically, the IP groups have the right to "develop, control and use land areas and territories traditionally occupied, owned, or used by their ancestors; to manage and conserve natural resources within the territories and uphold the responsibilities for future generations; to benefit and share the profits from allocation and utilization of the natural resources found therein; the right to negotiate the terms and conditions for the exploration of natural resources in the areas for the purpose of ensuring ecological, environmental protection and the conservation measures, pursuant to national and customary laws; the right to an informed and intelligent participation in the formulation and implementation of any project, government or private, that will affect or impact upon the ancestral domains and to receive just and fair compensation for any damages which they may sustain as a result of the project; and the right to effective measures by the government to prevent any interference with, alienation and encroachment upon these rights".

174. IPRA provides that engagement approach should involve (i) IP representative bodies and organizations (e.g., councils of elders, village councils, or chieftains) and, where appropriate, other community members; (ii) allow sufficient time for Indigenous Peoples' decision-making processes; and (iii) allow for Indigenous Peoples' effective participation in the design of project activities or mitigation measures, where applicable. Mechanisms of the FPIC in line with the principle of self-determination is provided in NCIP's AO No. 3., Series of 2012.

175. FPIC must be determined using methods appropriate to the social and cultural values of the affected Indigenous Peoples' Communities, *recognizing the primacy* of customs, traditions, practices, and socio- political structures of the ICCs/IPs concerned. Internal decision-making procedures are usually collaborative though members of the community may contest decisions. The consultation process should be attentive to such dynamics and give enough time for internal decision-making processes to achieve findings that are deemed valid by most of the people concerned.

176. As earlier stated, (para 74) DA and NCIP have a Joint Special Order No. 01 (series of 2021) that uphold the tenets under IPRA. One of the tasks declared in the Special Order is the development of linkages and partnerships with the private sector, civil society organizations, and IP groups in ancestral domains for collaborative projects while establishing the mechanism to preserve the IP culture in the "convergence area". DA has largely been compliant with the FPIC process, but strategies vary as regards engaging with IPs and generating the FPIC - either through the DA unit directly involved with an activity/project or coursed through LGU partners.

Assessment: High-risk program activities that may adversely impact indigenous peoples' land and culture are excluded from the Program. However, due to the requirements of IPRA, even IP community-initiated projects will still have to go through the FPIC process. The FPIC under IPRA specifically NCIP AO 3 of 3012 is in line with the Bank requirements for PforR.

Element 12: Give attention to groups vulnerable to hardship or discrimination, including, as relevant, the poor, the disabled, women and children, the elderly, ethnic minorities, racial groups, or other marginalized groups; and if necessary, take special measures to promote equitable access to PforR Program benefits.

177. Policies for the protection of vulnerable workers are articulated in the following (See above Table 5-1 for details): (i) RA 9208 (Anti-Trafficking); (ii) RA 9231, DOLE DO 65-04 (Child Labor); and (iii)RA 10364 (Forced Labor). Among prohibited acts under RA 10364 is debt bondage or the pledging labor or services as security or payment of a debt or even may commit services of women and children to honor the debt. If not avoided or mitigated, debt bondage may result to child labor and forced labor, which *refers to the extraction of work or services from any person by means of enticement, violence, intimidation or threat, use of, force or coercion, including deprivation of freedom, abuse of authority or moral ascendancy, debt-bondage or deception including any work or service extracted from any person under the menace of penalty.*

178. Additionally, laws against discrimination and exclusion exist for women (RA 7192 and 9710) and indigenous peoples (RA 8371). Laws on sexual harassment, exploitation, harassment, and violence against women are operational. There are also policies dedicated to the welfare and recognition of specific groups: (i) RA 7432 (Senior Citizens Act) and RA 9257 (Expanded Senior Citizens Act of 2003); (ii) RA 7277 (Magna Carta for Persons with Disabilities, as amended by RA 9442); and (iii) RA 8972 (Solo Parents Act)

179. RA 7607 (Magna Carta of Small Farmers) recognizes the right of small farmers and farmworkers, as well as cooperatives and independent farmers' organizations, to participate in the planning, organization, management and implementation of agricultural programs and projects. The Act, along with other labor and social welfare policies and laws, is silent on the protection of unskilled agricultural workers displaced by the loss of agricultural jobs due to mechanization, changes in land use, or internal conflict.

Assessment: The exclusion of vulnerable agricultural workers may be heightened by the Program without adequate risk screening, identification, and mitigation. The incidence of child, forced labor, gender-based violence, sexual harassment and exploitation can worsen in the absence, for one, of systematic detection and monitoring.

5.2.6 Core Principle #6: Social Conflict Management System

180. Program E&S systems avoid exacerbating social conflict, especially in fragile states, post-conflict areas, or areas subject to territorial disputes.

Element 13 Consider conflict risks, including distributional equity and cultural sensitivities.

- 181. Key Philippine provisions on social conflict are as below.
 - (i) RA 9285 of 2003 An Act to Institutionalize The Use Of An Alternative Dispute Resolution System In The Philippines And To Establish The Office For Alternative Dispute Resolution And For Other Purposes. "Alternative Dispute Resolution System" means any process of procedure used to resolve a dispute or controversy, other than by adjudication of a presiding judge of a court or an officer of a government agency, as defined in this Act, in which a neutral third party participates to assist in the resolution of issues, which includes arbitration, mediation, conciliation, early neutral evaluation, mini-trial, or any combination thereof.
 - (ii) RA 12022 (2024) An Act Defining The Crimes Of Agricultural Economic Sabotage, Prescribing Penalties Therefor, Vesting Jurisdiction Over Such Offenses With The Court Of Tax Appeals, Providing Mechanisms For Its Implementation And Enforcement, Repealing For The Purpose Republic Act No. 10845 Or The "Anti-Smuggling Act Of 2016" - the Anti-Agricultural Economic Sabotage Act (AGES) treats smuggling and hoarding of agricultural food products as economic sabotage when the value of goods exceed P10 million. Creating cartels and financing smugglers and hoarders will also be considered economic sabotage. Agricultural products covered by AGES are rice, corn, beef, and other ruminants, pork, poultry, garlic, onions, carrots, other vegetables, fruit, fish, salt, and other aquatic products in their raw state.
 - (iii) RA 6713 An Act Establishing a Code Of Conduct And Ethical Standards For Public Officials And Employees, To Uphold The Time-Honored Principle Of Public Office Being A Public Trust, Granting Incentives And Rewards For Exemplary Service, Enumerating Prohibited Acts And Transactions And Providing Penalties For Violations Thereof And For Other Purposes also known as the "Code of Conduct and Ethical Standards for Public Officials and Employees." Conflict of interest arises when a public official or employee is a member of a board, an officer, or a substantial stockholder of a private corporation or owner or has a substantial interest in a business, and the interest of such corporation or business, or his rights or duties therein, may be opposed to or affected by the faithful performance of official duty.
 - (iv) RA 11188 An Act Providing for the Special Protection of Children in Situations of Armed Conflict and Providing Penalties for Violations Thereof; also known as the "Special Protection of Children in Situations of Armed Conflict Act". It is the policy of the State to provide special protection to children in situations of armed conflict from all forms of abuse, violence, neglect, cruelty, discrimination and other conditions prejudicial to their development, taking into consideration their gender, cultural, ethnic and religious background. Armed conflict refers to armed confrontations occurring between government forces and one or more armed groups, or between such groups arising in the Philippine territory. These shall include activities which may lead to, or are undertaken in preparation of armed confrontation or armed violence that put children's lives at risk and their rights violated.

(v) RA 9372 of 2007 - An Act to Secure the State and Protect Our People from Terrorism - also known as the "Human Security Act of 2007. It is declared a policy of the State to protect life, liberty, and property from acts of terrorism, to condemn terrorism as inimical and dangerous to the national security of the country and to the welfare of the people, and to make terrorism a crime against the Filipino people, against humanity, and against the law of nations.

Assessment: Program activities will not likely take place in high-risk areas with latent or active social conflict. BARMM, a safety and security hotspot, is not within the Program scope. Nevertheless, for a nationwide Program running for five years, constant monitoring by DA of the security situation in certain hotspots may be necessary, as well as joint agreements with police force/military that define rules of engagement to minimize use of excessive force.

5.3 Assessment of Social Management Mechanisms and Capacity

182. As shown in **Table 5-1**, there are agencies that provide the mechanisms in addressing social risks and impact management.

5.3.1 Public and Worker Safety Agencies

183. The lead agency that implements labor laws for the private sector is the DOLE, while rules and regulations on public sector employment are implemented primarily by the Civil Service Commission (CSC).

184. The **Department of Labor and Employment (DOLE)** is tasked with formulating policies, implementing programs and services, and acting as the policy-coordinating arm of the Executive Branch in labor and employment matters. It plays a crucial role in enforcing the provisions of the Labor Code. DOLE is responsible for providing relevant Occupational Safety and Health (OSH) standards for the government sector. It offers knowledge and information services, including data on OSH standards, programs, and enforcement activities. The department recommends mechanisms to harmonize various OSH promotion campaigns in collaboration with partner agencies. DOLE plans, develops, and implements OSH training programs for government agencies, formulates compensation guidelines for work-related injuries and illnesses in cooperation with relevant agencies, and provides technical assistance and human resource support in cases of OSH-related accidents.

185. The **Civil Service Commission (CSC)** is responsible for overseeing the integrity of government actions and processes, specifically managing policies, plans, and programs that affect all civil service employees through its 16 regional offices nationwide. It plays a key role in formulating or enhancing policies to support Occupational Safety and Health (OSH) within the public sector. The CSC works to integrate OSH topics into the Learning and Development Programs for government officials and employees. The CSC also investigates and makes decisions on administrative cases related to non-compliance with OSH rules or programs.

186. The **Department of Health (DOH)** is tasked with establishing a system to provide health services and healthcare providers to government employees. It aims to implement surveillance and monitoring of occupational health injuries, diseases, and deaths within the public sector. The DOH will also develop occupational health service and benefit packages for government workers and provide technical assistance and human resource support for inspecting and investigating OSH-related accidents when needed. The department plans to create a toolkit as a guide for agencies and offer guidance on implementing preventive and promotive workplace health programs.

187. The **National Disaster Risk Reduction and Management Council (NDRRMC)** is the National Council that is empowered with policymaking, coordination, integration, supervision, monitoring and evaluation functions for the protection and welfare of the people during disasters or emergencies. It advises the President on the status of disaster preparedness, prevention, mitigation, response and rehabilitation operations being undertaken by the government and the private sector. It also serves as the top coordinator of all disaster management and the highest allocator of resources in the Philippines. As such, all government agencies and LGUs that are allocated with DRRM funds submit their monthly statements on the utilization of the DRRM funds and make an accounting in accordance with existing accounting and auditing rules to

the NDRRMC. All departments, bureaus, offices and agencies of the government are authorized to use a portion of their appropriations to implement projects designed to address DRRM activities in accordance with the guidelines issued by the NDRRMC in coordination with the Department of Budget and Management (DBM).

Assessment: For PforR concerns on occupational health and safety of workers, public health and safety, management of work safety, Philippine provisions are consistent with Bank requirements.

5.3.2 Agencies Mandated with Land Acquisition Activities

Impact assessment and land acquisition

188. In compliance with RA 10752 IRR, the Implementing Agency must secure the necessary Environmental Compliance Certificate (ECC) or Certificate of Non-Coverage (CNC) from the **Department of Environment and Natural Resources (DENR)** during the feasibility study and engineering design phase, except for Public-Private Partnership (PPP) projects. For ancestral domains, additional requirements under RA 8371 and its IRR must be fulfilled through the **National Commission on Indigenous Peoples (NCIP)**. The Implementing Agency (IA) is responsible for assessing the ecological and environmental impacts of the project. In terms of land valuation, an **independent property appraiser (IPA)**, accredited by the **Bangko Sentral ng Pilipinas (BSP)** or a professional association recognized by BSP, conducts the valuation studies. The **Department of Human Settlements and Urban Development (DHSUD)** oversees housing and related development, working in coordination with agencies like **the Home Development Mutual Fund (HDMF/Pag-IBIG Fund)**, the **National Housing Authority (NHA)**, **National Home Mortgage Finance Corporation (NHMFC)**, and **Social Housing Finance Corporation (SHFC)** involved in policy and program coordination. The IA, together with these agencies, ensures public participation and informed decisionmaking throughout the land acquisition process.

189. For community structures affected by land acquisition, reconstruction of the structure by contract or administration is allowed depending on the agreements reached with the LGU or community. The roles and responsibilities of the parties are formalized under an Agreement to Demolish, Remove and Reconstruct Improvements (ADRRI).

190. The Implementing Agencies, with the above agencies like the DENR, NCIP, LGUs and others involved with land acquisition adheres to the tenets of public participation and informed decision-making.

Livelihood restoration

191. Livelihood restoration programs for project-affected households are costed in the ROW budget or appropriations prepared by implementing agencies (2017 DRAM, Sec. 2.22). Under the Urban Development and Housing Act (UDHA), the entities managing resettlement sites (e.g., LGU, National Housing Authority (NHA) or the Socialized Housing and Finance Corporation (SHFC)) play an important function in facilitating support for livelihood programs through networking and resource pooling activities.

Assessment: The above identified entities that exist by virtue of legal mandates are sufficient to address the requisites of the core principle on land acquisition, noting this is high-risk and included in the exclusion list.

5.3.3 Indigenous Peoples and Vulnerable Group Protection Agencies

192. Below are agencies associated with managing social risks and impacts within the country.

Indigenous Peoples

193. The mandate of the **National Commission on Indigenous Peoples (NCIP)** is to protect and promote the interest and well-being of the Indigenous Cultural Communities (ICCs)/ Indigenous Peoples (IPs) with due regard to their beliefs, customs, traditions and institutions, and to the recognition of their ancestral domains as well as their rights thereto. To accomplish its mandate, the NCIP through IPRA, has the following powers, jurisdiction and function: (i) To serve as the primary government agency through which ICCs/IPs can seek government assistance and as the medium, through which such assistance may be extended; (ii)

To review and assess the condition of ICCs/IPs including existing laws and policies pertinent thereto and to propose relevant laws and policies to address role in national development; (iii) To formulate and implement policies, plans, programs and projects for the economic, social and cultural development of the ICCs/IPs and to monitor the implementation thereof; (iv) To request and engage the services and support of experts from other agencies of government employ private experts and consultants as may be required in the pursuit of its objectives; (v) To issue certificate of ancestral land/domain title; and (vi) Subject to existing laws, to enter into contracts, agreements, or arrangement, with government or private agencies or entities as may be necessary to attain the objectives of this Act, and subject to the approval of the President, to obtain loans from government lending institutions and other lending institutions to finance its programs. Through the 2012 Revised Guidelines on the Exercise of Free and Prior Informed Consent (FPIC) and Related Processes, the NCIP is tasked to ensure genuine exercise by ICCs/IPs of their right to Free and Prior Informed Consent (FPIC), whenever applicable.

Vulnerable Groups

(i) Inter-Agency Council Against Trafficking. There is hereby established an Inter-Agency Council Against Trafficking, to be composed of the Secretary of the Department of Justice as Chairperson and the Secretary of the Department of Social Welfare and Development as Co-Chairperson. The Department of Justice shall establish the necessary Secretariat for the Council.

Any person who has personal knowledge of the commission of any offense under this Act, the trafficked person, the parents, spouse, siblings, children or legal guardian may file a complaint for trafficking. A criminal action arising from violation of this Act shall be filed where the offense was committed, or where any of its elements occurred, or where the trafficked person resides at the time of the commission of the offense: *Provided*, That the court where the criminal action is first filed shall acquire jurisdiction to the exclusion of other courts.

The Council shall have the following powers and functions, to name a few:

- Formulate a comprehensive and integrated program to prevent and suppress the trafficking in persons;
- Promulgate rules and regulations as may be necessary for the effective implementation of this Act;
- Monitor and oversee the strict implementation of this Act;
- Coordinate the programs and projects of the various member agencies to effectively address the issues and problems attendant to trafficking in persons;
- Coordinate the conduct of massive information dissemination and campaign on the existence of the law and the various issues and problems attendant to trafficking through the LGUs, concerned agencies, and NGOs;
- Direct other agencies to immediately respond to the problems brought to their attention and report to the Council on action taken;
- Assist in filing of cases against individuals, agencies, institutions or establishments that violate the provisions of this Act;
- Formulate a program for the reintegration of trafficked persons in cooperation with DOLE, DSWD, Technical Education and Skills Development Authority (TESDA), Commission on Higher Education (CHED), LGUs and NGOs;
- Develop the mechanism to ensure the timely, coordinated, and effective response to cases of trafficking in persons.
- (ii) The **Department of Labor and Employment**: Requires that the following are strictly complied with:
 - The employer shall ensure the protection, health, safety, morals and normal development of the child;

- The employer shall institute measures to prevent the child's exploitation or discrimination considering the system and level of remuneration, and the duration and arrangement of working time; and
- The employer shall formulate and implement, subject to the approval and supervision of competent authorities, a continuing program for training and skills acquisition of the child.
- In the above-exceptional cases where any such child may be employed, the employer shall first secure, before engaging such child, a work permit from the Department of Labor and Employment which shall ensure observance of the above requirements.
- (iii) The National Commission on the Role of Filipino Women (NCRFW) assesses its gender mainstreaming program for consistency with the standards under the Act, modify the program accordingly to ensure that it will be an effective strategy for implementing the Act and attaining its objectives. All departments, including their attached agencies, offices, bureaus, state universities and colleges, government-owned and –controlled corporations, local government units, and other government instrumentalities have adopted gender mainstreaming as a strategy to promote women's human rights and eliminate gender discrimination, violence against women, sexual harassment, abuse, and exploitation in their systems, structures, policies, programs, processes, and procedures.
- (iv) The National Council for the Welfare of Disabled Persons (NCWDP), housed under the Department of Social Welfare and Development (DSWD), is the key agency overseeing the implementation of the ACT. The NCWDP is the national government agency mandated to formulate policies and coordinate the activities of all agencies, whether public or private, concerning disability issues and concerns. As such, the NCWDP is the lead agency tasked to steer the course of program development for persons with disabilities and the delivery of services to the sector.
- (v) The National Commission of Senior Citizens (NCSC) is tasked to serve and implement services for the elderly. It shall assure the full implementation of laws, government programs for senior citizens, formulate policies for the promotion and protection of the rights of the elderly, among others. It also mandates the DSWD to transfer the functions and programs of for the poor, vulnerable, and disadvantaged senior citizens to the commission.
- (vi) The Office for Senior Citizens Affairs (OSCA) refers to office established in cities and municipalities under the Office of the Mayor headed by a senior citizen. Among its functions is to assist senior citizens in filing complaints or charges against any person, natural or juridical; establishment, institution, or agency refusing to comply with the privileges under the Act before the Department of Justice or the provincial, city or municipal trial courts.
- (vii) The **DSWD** shall coordinate with the concerned agencies the implementation of the comprehensive package of social protection services for solo parents and their families. The package shall initially include (As amended by R.A. 11861): (a) livelihood development services, (b) counseling services, (c) parent effectiveness services, (d) critical incidence stress debriefing, and (e) targeted interventions for individuals in need of protection.

A **Solo Parent Office (SPO)** is established in every province and city and a **Solo Parent Division (SPD)** under the **Municipal Social Welfare and Development Office** in every municipality.

Assessment: The above identified agencies are compliant with the requirements of the core principle on indigenous peoples and vulnerable groups while cognizant of the fact that activities impinging on these groups are deemed high-risk and included in the exclusion list.

5.3.4 Social Conflict Management Agencies

(i) **Office for Alternative Dispute Resolution**. As an attached agency to the Department of Justice (DOJ) which shall have a Secretariat to be headed by an Executive Director. The Executive Director shall be appointed by the President of the Philippines. The objectives of the Office are:

- a. To promote, develop and expand the use of ADR in the private and public sectors; and
- b. To assist the government to monitor, study and evaluate the use by the public and the private sector of ADR, and recommend to Congress needful statutory changes to develop, strengthen and improve ADR practices in accordance with world standards.
- (ii) Anti-Agricultural Economic Sabotage Council chaired by the President or the delegated permanent representative with the following members: DA, DOJ, DOF, DILG, DOTR, DTI, Anti-Money Laundering Council (AMLC), and the Philippine Competition Commission. The Council shall ensure the proper and effective implementation of the provisions of the Act. It has the power to deputize other law enforcement agencies to further assist the Enforcement Group comprised by the National Bureau of Investigation (NBI), Philippine National Police (PNP), Philippine Coast Guard (PCG), and the DOF. All violations referred to shall be under the exclusive jurisdiction of the Court of Tax Appeals.
- (iii) The Office of the Presidential Adviser on the Peace, Reconciliation and Unity (OPAPRU) is mandated to manage, direct, integrate, and supervise the implementation of the Comprehensive Peace Process through promoting and reinforcing reconciliation and unity among the Filipino people. Lodged with the Office of the President.
- (iv) EO 163 Declaring the Effectivity of the Creation of the Commission on Human Rights as Provided for in the 1987 Constitution, Providing Guidelines for the Operation Thereof, and for Other Purposes. Section 3. The Commission of Human Rights shall have the following powers and functions:
 - a. Investigate, on its own or on complaint by any party, all forms of human rights violations involving civil and political rights;
 - b. Adopt its operational guidelines and rules of procedure, and citation for contempt for violations thereof in accordance with the Rules of Court.
 - c. Provide appropriate legal measures for the protection of human rights of all persons within the Philippines, as well as Filipinos residing abroad, and provide for preventive measures and legal aid services to the under-privileged whose human rights have been violated or need protection;
 - d. Monitor the Philippine Government's compliance with international treaty obligations on human rights;
 - e. Grant immunity from prosecution to any person whose testimony or whose possession of documents or other evidence is necessary or convenient to determine the truth in any investigation conducted by it or under its authority.
- (v) The **Ombudsman** shall prescribe such regulations as may be necessary to carry out the purpose of pertinent reporting and disclosure requirements.
- (vi) The **Civil Service Commission** (**CSC**) is responsible over the civil service tasked with overseeing the integrity of government actions and processes.
- (vii) Courts of Law Judicial power rests with the Supreme Court and the lower courts, as established by law (Art. VIII, sec. 1 of the 1987 Constitution). Its duty is to settle actual controversies involving rights which are legally demandable and enforceable (Art. VIII Sec. 1 (2)). The other types of courts in the Philippines are:
 - Court of Appeals the second highest tribunal in the country; exercises appellate jurisdiction
 - Court of Tax Appeals specialized tax court
 - Sandiganbayan a special graft court
 - Regional Trial Courts Second Level Courts, which were established among the thirteen Judicial regions

First Level Courts are:

- Metropolitan Trial Courts
- Municipal Trial Courts in Cities
- Municipal Trial Courts

- Municipal Circuit Trial Courts
- (viii) **Philippines National Police (PNP)** Act No.6975, Section 24 describes the role of the PNP which is to "enforce all laws and ordinances relative to the protection of lives and properties" and to "maintain peace and order and take all necessary steps to ensure public safety"; "to exercise the power to make arrest, search and seizure in accordance with the Constitution and pertinent laws"; and to "perform such other duties and exercise all other functions as may be provided by law."
- (ix) Barangay Tanods, also known as barangay police officers or BPSOs (barangay peace and safety officers) are the lowest level of law enforcement in the Philippines, and while their function includes maintaining law and order, they do not form part of the PNP structure although they do cooperate with the PNP. Tanod brigades are made up of volunteers appointed by the barangay council, and serve as the implementing mechanism for the local peace and order councils of the barangay (Source: https://dignity.dk/wp-content/uploads/publication-series-18.pt2.

Assessment: Similar to land acquisition and indigenous peoples and vulnerable groups, conflict areas and situations will be avoided under PforR. However, for lesser degrees of social conflict, institutional arrangements are in place from national to subnational levels with clearly defined responsibilities.

5.4 Assessment of Measures to Address Social Effects

194. The assessment of social effects of implementation is mainly based on the information generated from the field visits, consultations through focus group discussions with DA units implementing social management measures to understanding their social risk management process and results of previous similar typical activities. During the field visits to Regions II and III from 06-10 January 2025, FGDs were conducted with key stakeholders in sample municipalities and barangays with DA officials, accompanied by LGU representatives. FCAs, in particular were consulted. Probing questions were prepared focusing on the implementation of policies that align with the World Bank's principles in order to assess if the objectives set out in the core principles and key elements can be satisfied.

195. The DA directed the E&S Team to two regions (Region II and Region III) that are well-performing compared to other regions. Further, Bank-assisted PRDP is active within the two regions and was used to reference capacities of the region to undertake PforR activities applying the core principles.

5.4.1 Core Principle #1: Sustainable social risks management system

Element 2(vi): Responsiveness and accountability through stakeholder consultation, timely dissemination of program information, and responsive grievance redress mechanisms.

196. Based on the field visit to Regions II and III, it was established that the RFOs have robust approaches and implementation to Participatory Rural Appraisal (PRA) and that adoption of research-based solutions are accordingly at acceptable levels with ATI as the key player in collaboration with the LGUs. Region II is vocal about the strong partnership forged with LGUs in that budget deficits are covered by the LGU, citing in particular, the province of Isabela.

197. LGUs are engaged especially in dissemination of information and farm inputs in collaboration with the MAO, MPDO, private sector and civil society. The Agri-Fishery Councils (AFC) is well represented by the private sector, and it is this venue all stakeholders can discuss issues with DA. The convene quarterly.

198. The modality for GRM is the 8888 Hotline which is the Citizen's Complaint Center to receive complaints and grievances on acts of red tape and corruption as well as other communication channels which may include short message service (SMS)/Text access and website. This platform is enabled by EO 5, s2016.

199. For the DA Operations Division or through the Agricultural Program Coordinating Officer (APCO), there is no organized, systematic approach in place. Complaints received are raised to concerned divisions. APCO is present in every province and their field offices validate and report complaints and issues for the regions to address. Otherwise, complaints are normally received through the 8888 hotline. There is a tracker where tracing of actions taken is through the Document Tracking System (DTS). A limitation is that
only written complaints are assessed versus service standards based on its Citizen's Charter. Some RFOs are in the process of ISO 9001 certification which requires them to develop GRM.

5.4.2 Core Principle #2: Cultural Heritage Management System

Element 5: Consider potential adverse effects on physical cultural property and provide adequate measures to avoid, minimize, or mitigate such effects.

200. Implementation of cultural heritage was largely discussed with PhilRice where they have partnership with the RFO of CAR on heirloom rice and referencing the rice terraces as an internationally known cultural heritage site. Collection of rice cultivars are sensitively made within IP communities. Activities in areas where cultural heritage sites are unknown is deferred to LGUs and they only go into areas cleared by the LGUs.

5.4.3 Core Principle #3: Public and Worker Safety Management System

Element 6: Promote adequate community, individual, and worker health, safety, and security through the safe design, construction, operation, and maintenance of Program activities; or, in carrying out activities that may be dependent on existing infrastructure, incorporate safety measures, inspections, or remedial works as appropriate.

201. Compliance to this element of Core principle #3 is accordingly tied to DA's overall compliance with OHS.

5.4.4 Core Principle #4: Involuntary Resettlement Management System

Element 9: (i) Avoid or minimize land acquisition and related adverse impacts; (ii) Identifying and addressing economic and social impacts arising from land acquisition or loss of access to natural resources; (iii) Provide compensation sufficient to purchase replacement assets of equivalent value and to meet any necessary transitional expenses, paid before taking land or restricting access; (iv) Provide supplemental livelihood improvement or restoration measures if taking of land causes loss of income- generating opportunity (e.g., loss of crop production or employment); (v) Restore or replace public infrastructure and community services that may be adversely affected by the Program; and (vi) Information disclosure, public participation and informed decision-making.

202. Based on FGDs with the different line agencies of the DA and consultations during the field visit, it was established that overall compliance to this Core Principle rests with the LGUs as their counterpart to projects partnered with the DA. Direct engagement with the LGU and implementation of activities under these elements of the Core Principle is through the RFOs.

203. During preparation phase when consultations were carried out with farming communities, Region III in particular admitted to encouraging land donation up front.

5.4.5 Core Principle #5: Management System for Indigenous Peoples and Vulnerable Groups

Element 10: Undertake meaningful consultations if the indigenous peoples are potentially affected (positively or negatively), to determine whether there is broad community support for the PforR Program activities.

Element 11: Ensure that indigenous peoples can participate in devising opportunities to benefit from exploitation of customary resources and indigenous knowledge, the latter to include the consent of indigenous peoples.

204. The DA has two local projects that directly deals with indigenous peoples and vulnerable groups: the 4Ks program and the AMIA. Similar to land acquisition, compliance to FPIC requirements per IPRA through the NCIP rests with LGUs and going through the route of community-initiated projects and not the high risk or resource extractive category under NCIP.

205. PhilRice has a gene bank system care of the Genetic Resource Division. They admit that not all collection went through the FPIC process especially those pre-IPRA (1997). They just recently started

engaging with NCIP for FPIC and have initiated material transfer agreements with those using seeds in the gene bank associated with IP communities. Even the passport data required about the cultivar goes through accomplishment of a consent form from the IP community and NCIP. They also more recently forged a MOA with NCIP and the IP community as a result of going through the FPIC process in Sarangani Province.

206. PhilRice asserts the consultation process when engaging with indigenous peoples on their varietal preferences, considering those that will not hurt the ancestral domain and their culture and traditions. Consultation is coordinated through the chieftains and to be sure, all tribe members are invited (*'pinapatawag lahat'*).

Element 12: Give attention to groups vulnerable to hardship or discrimination, including, as relevant, the poor, the disabled, women and children, the elderly, ethnic minorities, racial groups, or other marginalized groups; and if necessary, take special measures to promote equitable access to PforR Program benefits.

207. Exclusion of vulnerable groups to DA programs is avoided by the following project offices/units as follows:

- (i) F2C2 encourages non-members to join farmers' cooperatives and associations (FCA) through decentralized farmer registration systems at the LGU level.
- (ii) Variety planning for crops especially those preferred by farmers is made through a) regional and national workshops every two years, b) Palay-Sikatan Techno-demos that incorporate participatory variety selection, c) surveys conducted with farmers, seed growers associations, and LGUs as to their preferred varieties, and d) gender-sensitive introduction of model rice varieties adapted for women (an example of which is a certain rice variety that can be harvested by women standing up, instead of being in a crouched position).
- (iii) Inclusiveness of the development process is ensured, for instance, in PhilRice where there is strong participation of the Gender and Development Division in the design of technologies and equipment, e.g., brown rice mill designed for women. PhilRice's Technology Development Department designed farm equipment suited for indigenous peoples, e.g., micro-tillers for hilly areas. The Bureau of Agriculture and Fisheries Engineering (BAFE) has developed standards for machinery and equipment design fit for the height and reach measurements of Filipinos.
- (iv) PhilMech's process for assisting FCAs involves: a) selection of beneficiaries, namely FCAs, in collaboration with the LGU; b) validation and needs assessment before the preparation of bids for suppliers; and c) consolidation of bids for mass procurement of machineries and equipment, e.g., tractors, hand tractors, transplanters, reapers, dryers and rice mills. Measures for labor displacement are handled by the LGUs such as support for off-farm activities such as the setting up of fabrication centers for operation and maintenance (O&M) where displaced farmers can be trained in machinery servicing.
- (v) By virtue of Proclamation No. 1172, series of 2006, the advocacy campaign is observed every November 25 to December 12 with the Philippine Commission on Women (PCW) as the lead agency and in observance of the UN-led 16 Days of Activism against Gender-Based Violence every November 25 to December 10. PCAF's Gender and Development (GAD) Committee regularly promotes a series of activities to improve employees' well-being and work productivity.

5.4.6 Core Principle #6: Social Conflict Management System

Element 13 Consider conflict risks, including distributional equity and cultural sensitivities.

208. There has been no experience cited with respect to social conflict. But during discussions, it could be gleaned that conflict is reverted to the concerned LGU.

5.5 Capacity Assessment for PforR Social Risk and Impact Management

209. Capacities for social risk and impact management is referred to SPCMAD specifically the social institutional mainstreaming of PRDP. In Region III, an Institutional Development Unit (IDU) was established to mainstream best practices of PRDP and for adoption in its regular programs. Priority activities slated for immediate implementation are (i) social preparation, (ii) geo-tagging and geo-referencing of projects, and (iii) conduct of O&M audit system (OMAS). DA staff have been trained in OMAS thru PRDP.

210. Constraints faced by the Region III-RFO in mainstreaming are: (i) IDU has only one staff under Contract of Service (COS), hired only in December 2024. While there are organic/ regular staff assisting in the activities, they are burdened due to other duties/tasks assigned to them; (ii) IDU has a 5-year development plan but is constrained by lack of funds; (iii) IDU is different from the Institutional Development Section (IDS) which is organic to the RFO. IDU and IDS are not harmonized, *signifying the tendency of the bureaucracy to compartmentalize institutionalization of PRDP.*

211. Perceived barriers to the institutionalization of E&S compliance at the RFO level were enumerated by FGD participants from September 2024 to January 2025:

- (i) Resistance of clients to what is 'new' ('*nasanay sa dating gawi*' or used to the status quo). Farmers are resistant to requirements as they are accustomed to dole-outs and that Bank requirements are hard for them. There are, however, efforts to introduce preparation of FS, business plans as part of cluster development plan preparation and orientation on safeguards.
- (ii) Lack of regular staff: there exist low ratio of people assigned to regular projects
- (iii) Lack of a dedicated E&S Safeguards Unit. Different line agencies and project management offices have different processes and procedures for each banner program based on different agency guidelines. It was strongly suggested that a harmonized Manual of E&S safeguards be considered under the PforR.

Additionally, an online survey administered by the E&S team (see Annex 4) yielded observations from about 18 staff from DA-Central and RFOs on the status and challenges in E&S risk management on its regular activities. A summary provided below shows systemic organizational and institutional issues:

- Strong partnerships with different stakeholders needed in implementing innovation strategies, evaluating project impacts and ensuring implementation of preventive, mitigating, and enhancement measures to protect the environment and the community's welfare
- Coordination and personal follow-ups with the LGUs and concerned offices or agencies is essential
- Delays encountered in LGU compliance on SES documentary requirements: land acquisition documents (deed of donation, proof of ownership), gratuitous Special Use Permit (GSUP) or Special Land Use Permit (SLUP), NCIP Certification Pre-Condition (CP) and Certificate of Non-Overlap (CNO)
- Overlapping mandates with other government agencies
- Limited organizational capacity and resources, i.e., Bureau budgets, hinder the scope of implementing plans and programs.
- Not many staff are trained on E&S and there is no system for educating new hires on E&S requirements
- Political interference in the effective implementation of interventions
- Conflicts that hinder implementation: (i) internal conflict (i.e., employees' conflict); and (ii) organizational conflict among beneficiaries that resulted in non-operational status and non-sustainability of the project.

5.6 Assessment of Consistency of Social Management Systems with the Core Principles

212. The country's legal framework is materially consistent with the requisites of PforR ESSA. Dedicated and functioning agencies exist. At implementation within DA reveals some gaps especially along the lines of three Core Principles: (i) #1 Sustainable Social Risks Management System, (ii) #4 Land Acquisition, and (iii) #5 Indigenous Peoples and Vulnerable Groups.

213. Social management systems overlap with environmental and are fluid across the six core principles. The PEISS is also the governing framework in social impact assessment (SIA) where the identification, assessment and management of adverse social risks and impacts are guided by a diverse range of national legislation and sector policies. With respect to Program activities, the social policy and legal framework traverses labor and working conditions for agricultural workers, the preservation and protection of cultural heritage; land and right-of-way acquisition and involuntary resettlement; protection for vulnerable workers and members of agricultural communities from exclusion, discrimination and prohibitive practices namely child labor and forced labor; and the prevention and resolution of social conflict. Key findings of the assessment echo that for Environment, and are as follows:

- (i) Enabling mechanisms are present to generally address the core principles although some gaps between national and Bank requirements may undermine the PforR. These regulations and policies transcend national and department central office levels to the subnational. A case in point is with Core Principle 4 on land acquisition, specifically in providing compensation sufficient to purchase replacement assets of equivalent value prior to taking land or restricting access. The national law provides for 50% downpayment for land and 70% for other assets like structures and access can be restricted. The Bank requirement, however, is 100% payment of compensation before any form of land take can commence. Another is land donation, being the first option preferred by some FGD participants in RFO-Region III. In practice, the RFO lacked a due diligence process for projects involving land donations in accordance with best practice or with the Bank's minimum requirements. This key finding informs the E&S action of adding a Program conditionality that Program activities be implemented only lands that FCAs own or have other forms of secure tenure, e.g., long-term lease, usufruct.
- (ii) While social risk and impact management agencies are available to execute policy and institutional arrangements, on-ground implementation is unclear and weak largely due to lack of capacities and human resources to fulfill the tasks at hand. This is a crucial finding common with the Environmental assessment. The DA only has SPCMAD responsible for E&S risk management for foreign-assisted projects. Line bureaus like the BSWM and the Bureau of Plant Industry (BPI) and other attached agencies largely rely on the RFOs to link with LGUs as cooperating partners. For instance, to comply with social risk management like securing the Free and Prior Informed Consent (FPIC) for areas within ancestral domains. In another example, PhilRice was able to directly process the FPIC requirements for its project in Sarangani. Otherwise, it had to rely on the RFOs for other such undertakings like the heirloom rice for the Cordillera Administrative Region (CAR), where the RFO is comprised mostly of IPs from the region. Targeted programs like the Adaptation and Mitigation Initiative in Agriculture (AMIA) and the Kabuhayan at Kaunlaran ng Kababayang Katutubo (4Ks) can comply with social and risk management requirements, perhaps due to the focused and relatively narrower scale of influence. For other regular activities and other banner programs, the RFOs deal directly with FCAs and must perform handholding functions when FCAs are required to apply for an ECC, conduct E&S due diligence and submit the requisite feasibility studies, detailed design, and EIA. As reported in the two RFOs visited, the lack of regular staff, especially in-house E&S specialists; high staff turnover, and high staff workload in DA are aggravating factors to building E&S capacity from the ground up.
- (iii) Implementation of social measures will entail thorough screening to ensure exclusionary principles and the ESSA's list of excluded activities are observed. Screening is most crucial for Core Principles 4 (Land Acquisition) and 5 (Special Attention to IPs and Vulnerable Groups) where compliance borders between risk avoidance and exclusion. A thorough screening process is important because Program activities can induce indirect effects that have adverse social implications. One such example is the cash advance payments made by seed producers in Region III to secure labor arrangements to cope with labor shortages in the area. Such activities may result in debt bondage or patron-client relations that characterize forced labor.

6. STAKEHOLDER ENGAGEMENT

6.1 Stakeholder Engagement Objectives

214. Stakeholder engagement for the PforR Program will be undertaken with these objectives: (i) to increase awareness of the PforR and the Bank's support of the MBP Program; (ii) to increase knowledge and understanding of the ESSA report – its scope, approach and findings; and (iii) to build up awareness and support on the E&S actions in the Program Action Plan.

6.2 Stakeholder Engagement Activities

215. The Bank Team organized an orientation meeting with the DA divisions and counterpart implementing agencies in September 2024. From October 2024 to January 2025, the team conducted interviews, review meetings with the DA and site visits. On October 4, 2024, the E&S team participated in the consultation workshop conducted by DA with the private sector. From November 12 to December 2, 2024, the E&S team held focus group discussions (FGDs) with 11 DA divisions/ offices/programs, 3 bureaus, 3 attached agencies, and 1 attached corporation. The FGD agenda covered E&S system implementation and performance, practices, and capacity constraints. In January 2025, site visits were conducted, covering two regional field offices (RFOs) located in Regions II (Tuguegarao City, Cagayan) and Region III (San Fernando, Pampanga), the Philippine Rice Research Institute (PhilRice in Munoz, Nueva Ecija), and six farmer cooperatives and associations (FCAs) scoped by the RFOs. The FCAs belonged to Levels 1 to 3, based on DA's categorization of FCAs under the Farmers and Fisherfolk Clustering and Consolidation (F2C2) program. FCA meetings were participated by the local government unit (LGU) representatives as well as FCA partners from the private sector and civil society. The FGDs and site visits involved extensive coordination and assistance provided by DA through the SPCMAD and the PforR Technical Working Group (TWG) under the Office of Special Concerns and for Official Development Assistance (ODA). Table 6-1 presents a summary of engagement activities held from September 2024 to January 2025. The draft ESSA is scheduled to be disclosed in March 2025.

Date	Discussion Topics	Participants
September 9- 20, 2024	Identification Mission by the World Bank Team	 Department of Agriculture (DA) Department Secretary Undersecretary for Special Concerns and Official Development Assistance (SCODA) National Economic and Development Authority (NEDA) Department of Budget and Management (DBM) Department of Finance (DOF)
September to October 2024	Follow-up meetings	 Office of Undersecretary for Rice Industry Development Office of Undersecretary for Finance Office of Undersecretary and Assistant Secretary for SCODA Office of Assistant Secretary for Policy and Regulations Office of Assistant Secretary for Logistics Office of Special Assistant for Export Development Office for Farm and Fisheries Clustering and Consolidation Program Bureau of Soils and Water Management Agriculture Training Institute (ATI) Agribusiness and Marketing Assistance Service (AMAS)

Table 6-1: Engagement Activities held at Program Identification and Program Preparation

Date	Discussion Topics	Participants
		 Office of High Value Crops Development Program Philippine Rice Research Institute (PhilRice) Philippine Center for Postharvest Development and Mechanization (PhilMech)
October 4, 2025	 Consultation with agri-fishery industry leaders Feedback: There is a need for updating and streamlining of export regulations, given the increasing requirements being imposed by foreign importing countries, including the need for accredited laboratory facilities. Lack of DA's support for High-Value Crops (HVCs), seaweed, and other commodities for which the Philippines has a comparative advantage, especially the need to greatly increase the availability of genetically improved planting material/propagules. 	 Senior representatives from agriculture major commodities (e.g. rice, livestock, coconut, cacao, banana, seaweed, etc)
November to December 2024	Para sa Masaganang Bagong Pilipinas (MBP) Program Activities, Roles and responsibilities of respective DA agencies, line bureaus, and attached government operated and controlled corporations (GOCCs)	 SCODA; DA SPCMAD; Rice Industry Development Program; FPOPD; BAFE; BSWM; BPI; CRAO; PhilMech; ICTS; CRAO; PCAF; ATI; NFA; NIA; F2C2; RSBSA; AMAS; FPA; ACPC
January 6-10, 2025	DA Regional Offices MBP Program Activities, Palayamanan Program, AMIA Village, Rice-Based Farm Activities	 Philippine Rice Institute (PhilRice) DA Regional Field Offices Region II and Region III FCAs in Region II Solana West Farmers Cooperative (SOWESFACO) Cagayan Seed Producers Multipurpose Cooperative (CSPMPC) Amianan Farmers Entrepreneur Agriculture Cooperative (AFEAC) Baru a Langa ti Mannalon Agriculture Cooperative (BALMACO) Flow of Pariir Agriculture Cooperative (FOPAC), Saranay, Cabatuan FCA in Region III Calzadang Bayu Farmers Agri-Cooperative

In preparation for project appraisal, the stakeholder engagement activities will consist of draft ESSA disclosure and public consultation activities in February and March 2025. The proposed work plan of activities is shown in Table 6-2.

Table 6-2 Stakeholder Engagement Activities for Project Appraisal

Activities	Timeline
Disclosure of Draft ESSA locally and on the World Bank website	20 February 2025
Consultation on the draft ESSA with DA and RFOs (nationwide, online)	21 February 2025
Public consultation on Draft ESSA with FCAs, LGUs, NGOs/CSOs and	5-11 March 2025
other interest groups and other institutional stakeholders	
Disclosure of Final ESSA locally and on the World Bank website	15 April 2025

The public consultation on the draft ESSA is deemed nationwide. With advice and coordination with DA-Central, three major consultations will be organized, one each in Luzon (Baguio City or Clark), Visayas (Cebu or Iloilo) and Mindanao (Davao or General Santos City). The consultations will comprise stakeholders from within DA, the agricultural sector covering FCAs, LGUs, NGOs/CSOs and other interest groups and other institutional stakeholders. To ensure efficiency and prudent use of resources, public consultations generally conducted face-to-face will be supplemented by the use of online media platforms like Zoom or FB livestreaming.

6.3 Stakeholder Map of the PSAT Program

216. Based on the nature of the MBP, the stakeholders of the PforR can be identified based on: (i) the governance structure of DA and the execution of banner programs and regular activities within this structure; (ii) sector considerations, which cover consisting of LGUs exercising policymaking and decision-making authority on agricultural programs and the concerns of vulnerable groups under their jurisdiction, FCAs, private sector, and other interest groups; and (iii) shared institutional mandates involving other government agencies (**Table 6-3**).

Stakeholder	Composition ^{a/}	Specific Bodies or Entities to be Engaged			
Groups		(minimum)			
Governance - DA DA – Central Office	 Office of the Secretary Various Offices/ Divisions/ Services Banner Programs 	 Rice Industry Development National Rice Program High-Value Crops Development Program National Livestock Program Special Concerns & Official Development Assistance (ODA) Field Operations Services including the SPCMAD 			
Regional Field Offices (RFOs)	Nationwide except BARMM	 RFO Heads and Field Units Experimental Stations			
Bureaus	 Agricultural Training Institute (ATI) Bureau of Agricultural and Fisheries Engineering (BAFE) Bureau of Animal Industry (BAI) Bureau of Fisheries and Aquatic Resources (BFAR) Bureau of Plant Industry (BPI) Bureau of Soil and Water Management (BSWM) 				
Attached Agencies	 Fertilizer and Pesticide Authority (FPA), Philippine Center for Postharvest Development and Mechanization (PhilMech) Philippine Council for Agriculture and Fisheries (PCAF) 				
Attached Corporations	 National Food Authority (NFA) Philippine Rice Institute (PhilRice) 				
Sector Consideration	ons	1			
Local Government Units (LGUs)	Nationwide except BARMM (Program or site-specific)	 Regional Development Councils (RDC) Provincial/ Municipal Agricultural Offices 			

 Table 6-3: Stakeholder Map for PSAT as of January 2025

Stakeholder Groups	Composition ^{a/}	Specific Bodies or Entities to be Engaged (minimum)		
Farmers' Cooperatives and Associations (FCAs) and	Nationwide except BARMM (Program or site-specific)	 LGU Extension Services (LGU technicians) Sector Representatives (e.g., women, youth, PWDs, indigenous peoples) Farm Clusters under Farm and Fisheries Clustering Consolidation (F2C2) — Levels 1 to 3 		
Private Sector	Nationwide except BARMM (Program or site-specific)	Private Sector Partners of FCAs		
Interest Groups	Institutional or program-specific	 Ancestral Domains Management Offices (ADMOs)/ Indigenous political structures (IPS) Multi-Sector Development Councils Non-Government Organizations (NGOs) and other Civil Society Organizations (CSOs) 		
Institutional	Cooperative Development Authority (CDA)	Provincial and Municipal Officers		
Mandate (shared with DA)	Department of Environment and Natural Resources (DENR)	 Environmental Management Bureau (EMB) Biodiversity Management Bureau (BMB) Protected Area Management Boards (PAMB) 		
	National Commission on Indigenous Peoples (NCIP)	Regional OfficesProvincial Service Centers		
	National Irrigation Administration (NIA)	Irrigators' Associations (IAs)		

^{a/} The list of stakeholders is indicative at the stage of project preparation. Source: Consultations with DA and Site Visits

217. Using this stakeholder map, a menu of pre-identified stakeholder needs is provided based on the interactions with and perceptions gathered from some stakeholder groups during the data-gathering stage in the last quarter of 2024 and January 2025 (**Table 6-4**). The table shows, at the minimum, the nature of information disclosure and consultation agenda deemed relevant for Program stakeholders. Information disclosure and consultations under the Program will be undertaken in accordance with guidance on ESSA Disclosure and Consultations (2021 Bank Guidance PforR ESSA).

Table 6-4: Stakeholder Needs for PSAT as of January 2025

	Stakeholder Needs						
Stakeholder Groups	Orientation on PSAT	Role in Fulfilling RAs/DLIs	Participation in PAP Implementati on	Participation - E&S Actions	Progress of PSAT Implementa tion	Mechanisms for Feedback/ GRM	
DA	V					V	
Stakeholders							
DA – Central Office		V	V	V	V		
Regional field offices (RFOs)		V	V	V	V		
Bureaus		V	V	V	V		
Attached					V		
agencies							
Attached					V		
corporations							
Sector	v					v	
Stakeholders							
LGUs					V		
FCAs and		V	V	V	V		
farmers							
Private sector		V	V		V		
Interest groups					V		
Other Inst	V					V	
Stakeholders							
CDA					V		
DENR				V	V		
NCIP				V	V		
NIA		V			V		

Source: Consultations with DA and Site Visits

From Table 6-5, the indicative information disclosure, consultation during Program implementation, especially to support E&S actions, are laid out as follows.

Table 6-5 Stakeholder Engagement during Project Implementation

Information Disclosure and Consultations	Stakeholders	Methods (minimum)
Orientation on PSAT	All	Roadshows, meetings, various print, audio and social media
Roles in Fulfilling RAs/ DLIs	DA-Central, RFOs, Bureaus, FCAs, private sector, NIA	Meetings
Participation in PAP Implementation	DA-Central, RFOs, Bureaus, FCAs, private sector	Meetings
Participation in E&S Actions	DA-Central, RFOs, Bureaus, FCAs, DENR, NCIP	Meetings
Progress of PSAT Implementation (E&S Actions)	All	Meetings, regular reporting - RFOs
Grievance Redress Mechanisms	All	Roadshows, GRM briefer, info boards

Source: Bank E&S Team

Inclusive strategies to ensure the participation of disadvantaged and vulnerable groups and socialize the Program at the local level are as follows:

- (i) Dedicated meetings with vulnerable groups like IP groups, women's associations, youth groups and PWD organizations
- (ii) Use of translators during presentations and the translation of Program materials to local languages as may be deemed necessary
- (iii) Reporting on Program status and progress at the RFO level to utilize existing structures, e.g., regular joint meetings of RFO with Municipal Agricultural Offices (MAO), LGU technicians and other government agencies like CDA

Tapping of grievance mechanisms used by FCAs as default GRM, gaps of which can be supplemented by the Program GRM (see GRM discussion below).

6.4 Grievance Redress Mechanism of the PforR

218. On Grievance Redress Mechanisms (GRM), the Program will utilize the government hotline for citizen feedback, queries and complaints (**Dial 888**) and existing mechanisms present in DA's banner programs, RFOs, line agencies and FCAs. To ensure that Program-related concerns and complaints are properly dealt with, the Program will ensure that existing mechanisms can abide by Bank requirements. These would include ensuring the following at the level of banner programs and/ or the RFO, as applicable: (i) multiple channels of communicating and receiving grievances are used in existing GRMs; (ii) proper recording and documentation using a grievance registry or database is available and operational; (iii) publicly-advertised procedures or service standards set are adhered to; (iv) staff and/ or unit designated with handling and managing the GRM are functional; and (v) option to avail of an appeals process for unresolved grievances are provided for in the GRM.

7. PROGRAM ACTION PLAN TO ADDRESS ENVIRONMENTAL AND SOCIAL RISKS AND GAPS

219. The Bank and the Department of Agriculture (DA) are preparing a Technical Assistance for Sustainable Agricultural Transformation in the Philippines (TASAT) alongside the preparation of the Philippine Sustainable Agriculture Transformation (PSAT). Component 3 focuses on institutional strengthening to support the Agrifood Transformation agenda, which includes enhancing and mainstreaming environmental and social safeguards within the DA and its Regional Field Offices (RFOs). The activities will include:

- Conducting a dedicated assessment of the DA's integration of the Philippine Environmental Impact Statement System (PEISS) requirements across all levels of its operations, including the allocation of dedicated resources at the Central Office, Regional Offices, and Provincial and Municipal Agriculture Offices.
- Developing standard Environmental and Social (E&S) Screening Procedures for program subsectors. These procedures will include a checklist of E&S requirements and considerations to help identify the potential impacts of proposed program activities.
- Creating an E&S Manual (Environmental and Social Management System) to harmonize all E&S guidelines, processes, activities, and the decentralization of Grievance Redress Mechanisms tools adopted by allied offices and bureaus of the DA (e.g., Bureau of Soils and Water Management (BSWM), Bureau of Agricultural and Fisheries Engineering (BAFE)), banner programs, and regular activities.

220. The proposed Program Action Plan is presented in Table 7-1. These actions revolve around: (i) implementation of TASAT recommended E&S streamlining in DA, forms, and manual; (ii) appointment of E&S staff at the DA and Regional Field Offices for monitoring of implementation of the E&S actions (iii)

conducting of E&S screening; (iv) preparation and implementation of ESMP for moderate to substantial risk subprojects; (v) implementation of E&S capacity building activities; (vi) establishment of an additional condition that activities supported by PforR must be on lands under formal title or under secure tenure arrangements by concerned FCAs; (vii) formulation of protocols into the E&S Manual for conducting meaningful consultations with IPs, ensuring compliance with FPIC guidelines, and incorporating benefit sharing and monitoring; and (viii) mapping and integration of agricultural information databases to consider including data on child and forced labor hotspots in agriculture.

Table 7-1: Program Action Plan for Environmental and Social Effects

No.	Action Description	Timing	Responsible Party	Measure of Completion
1	 Implementation of TASAT recommended E&S streamlining in DA, forms, and manual: Follow recommendations of the assessment conducted under TASAT on DA's mainstreaming of E&S requirements across all levels of its operations, including organic ES structure/unit E&S staff, allocation of dedicated resources at the Central Office, Regional Offices, including the Provincial and Municipal Agriculture Office. Use the standard E&S Screening Procedures and EMP manual for Program subsectors developed under TASAT for E&S screening and preparation of ESMP. Follow the E&S Manual developed under TASAT (Environmental and Social Management System) to harmonize all E&S guidelines, processes, activities, and tools adopted by allied offices and bureaus of DA (e.g., BSWM, BAFE), banner programs and regular activities. 	Throughout PforR duration	DA OSEC, and all other agencies implementing the PforR activities	Appointment Letter of E&S Staff or Focal Person at all DA levels
2	Appoint E&S staff at the DA and Regional Field Offices for monitoring of implementation of the E&S actions.	1 month after the Program effectiveness	DA and Regional Filed Offices	E&S staff at the DA and Regional Field Offices for monitoring of implementation of the E&S actions appointed timely.
3	Conduct E&S screening to include adverse risks and impacts to community and worker safety, high-risk activities involving land acquisition; conditions excluding vulnerable agricultural workers or involving child and forced labor in Program sub-sectors (crop farming, livestock, and inland aquaculture; and security situation and hotspots where Program activities are concentrated or have a significant presence. Avoidance strategies of the Program can contain active list of security hotspots.	Throughout PforR duration	All agencies implementing the PforR activities	Accomplished E&S Screening to incorporate public and worker safety, land acquisition, conditions involving vulnerable agricultural workers, including potential child and forced labor, and security situation in sites of Program activities.
4	Prepare and implement ESMP for moderate to substantial risk projects. The ESMP will include efficient water resources management, integrated fertilizer and pesticides management, and effective resource management and pollution prevention measures,	Throughout PforR duration	All agencies implementing	Approved ESMPs for projects with substantial to moderate E&S risks and impacts.

No.	Action Description	Timing	Responsible Party	Measure of Completion
	worker and community safety, chance finds procedures for cultural property resources, clear description of management measures, performance monitoring indicators, and responsible entities with budget and resources.		the PforR activities	
5	 Implement E&S capacity building: Support E&S building capacity at DA and Regional Field Office Level In coordination with DENR, support of E&S capacity building of FCAs, farm extension workers, including women and vulnerable groups who are involved in rice, crop, livestock and animal husbandry, and aquaculture practices 	Throughout PforR duration	DA, RFOs, and DENR	E&S capacity building plans prepared, approved, and implemented
6	Establish an additional condition that activities supported by PforR must be on lands under formal title or under secure tenure arrangements by concerned FCAs.	Throughout PforR duration	DA OSEC	Issue a Memorandum Circular with instructions stating that land areas to be used for PforR activities must have a formal title or must first secure tenure arrangements before utilization of PforR funding.
7	Formulate protocols into the E&S Manual for conducting meaningful consultations with IPs, ensuring compliance with FPIC guidelines, and incorporating benefit sharing and monitoring	Quarter 1, Year 1	DA OSEC	Approved E&S Manual, with protocols on meaningful consultation with IPs, compliance with FPIC guidelines and benefit sharing and monitoring
8	Map and integrate agricultural information databases to consider including data on child and forced labor hotspots in agriculture.	Throughout PforR duration	All agencies implementing the PforR activities	Database on potential hotspots for child labor and forced labor is established.

^[1] These include: (i) complaint/grievance uptake, (ii) grievance log, (iii) disclosed grievance redress procedure, (iv) GRM transparency, and (v) appeals process.

ANNEXES

Annex 1 – Environmental and Social Risks Screening of Typical Activities and Proposed Mitigation Measures under each Results Area

Table A0-1: Risk Screening of the Typical Activities of PSAT Program

Tuning a stighting	Likely FR C offecto	Institutional capacity and complexity risks		Political and reputational	Overall
Typical activities	Likely E&S effects	E&S contextual risks		risks	ranking risk
RA1: Results Area 1: Enhan	ced production and incomes in rice-based farming				
1) Expand and improve	- Based on the experience with similar	- Agricultural non-point	- The convergence approach of government	- Political risks are	Substantial
available agri-fishery	investment under the Bank financed projects,	source pollution	has a positive impact in the organization	considered low to	
areas for increased	the construction and rehabilitation of small	caused by pesticides	and capacitation of FCAs. These FCAs range	moderate, with the	
production (1):	on-farm irrigation systems, including	and fertilizers, as well	from Level 1 (L1) operations (stand-alone	upcoming elections	
Optimize available/idle	irrigation canals and small water storage	as air pollution from	and nascent) to L2 (into enterprise	changing the roster of	
land and water bodies	ponds, are expected to have moderate	straw burning, will be	development, farm integration,	incumbent officials.	
for agriculture	adverse impacts on air, water, and soil during	reduced through the	consolidation and large-scale processing)	Despite this change, the	
production; Construct	the construction phase. Large-scale land	application and	and L3 (graduating with sustainable	Program is expected to	
and rehabilitate	acquisition is not expected in small-scale	extension of	operations). Formal relationships and	receive high political	
irrigation facilities;	water impounding projects (SWIPs) operated	agricultural	continuous engagement are established by	support as it supports	
Ensure sustainable	by the Bureau of Soils and Water	technologies aimed at	FCAs not only with DA and its bureaus or	long standing banner	
management of water	Management (BSWM). There are two	reducing and	allied agencies (e.g., ATI, PhilRice, BSWM,	programs of the DA	
resources.	irrigation-related issues needing close	improving the	BAFE, PhilMech, PAFC, RCPC, NIA).	(RCEF, NRP, HYVC). In	
2) Mechanize and	attention by the project.	efficiency of chemical	Agencies actively supporting farmers also	some regions, the LGUs	
modernize agri-fishery	- Sustainable water management will enhance	fertilizer and pesticide	includes the Cooperative Development	and private sector are	
production systems (2):	water resource use efficiency through better	use.	Authority (CDA), Land Bank of the	heavily invested in	
Increase adoption of	management and the adoption of more		Philippines (LBP) and TESDA (Farmers' Field	supporting the DA-RFO's	
science-based and	efficient technologies, such as drip irrigation	- The civil works	Schools) among others. The convergence	programs through	
climate-resilient	and other water-saving farm practices. This	activities will be	approach is also bringing FCAs much closer	research, funding	
farming technologies;	includes better management of pollutant	executed within the	to LGUs through its Office of the Provincial	assistance and	
Promote good	discharges into water bodies and improved	existing footprint of	Agriculturist (OPA), Municipal Agricultural	leveraging their own	
agricultural practices;	management of fertilizer and pesticide use.	designated farmland.	Office (MAO), and the LGU technicians who	agricultural programs.	
Harmonize planning	These activities, along with the adoption of	These activities will not	are the frontrunners in LGU extension	Under this set-up, RFOs	
and mapping out of	good agricultural practices, are expected to	affect environmentally	work. Farmers and fisherfolk are involved in	can fulfill their role as a	
vital mechanization	have positive environmental impacts.	sensitive areas, such as	participatory processes through Barangay	'catalyst' in agricultural	
and infrastructure	The provision of agricultural equipment and	important natural	Agricultural Fishery Councils (BAFC).	development.	
investments.	machinery, such as tractors, transplanters,	habitats that have not			
3) Strong partnership	combine harvesters, dryers, stripping	been disturbed by	- Large-scale irrigation systems operated by		
with farmers,	machines, and motorized bancas for rice,	human activities.	the National Irrigation Administration (NIA)		
fisherfolk, private	corn, abaca, and high-value crops, will ensure		pose a moderate to substantial institutional		
sector and other	that the implemented farming technologies	- Sustainable practices	risk. Primarily, close to 70% of rice-		
stakeholders (8): Adopt	are climate-resilient. This will help reduce the	and technologies will	producing areas under farm clusters are		
an effective	impact of climate change and other disasters.	be adopted toward	irrigated by NIA. NIA irrigation services		
participatory and	However, there is a moderate health risk	natural nutrient	require attention to the Program, as rice-		
consultative process in	associated with the operation of this	(organic fertilizer) use,	based farming systems dependent on		
the plan and budget	equipment and machinery.	agrobiodiversity	irrigation. More sustainable and effective		
preparation; Improve		management for food	irrigation services delivery is needed to		

Tunical activities	Likely ERS offects	E&S contaxtual ricks	Institutional capacity and complexity risks	Political and reputational	Overall
Typical activities	Likely E&S effects	EQS CONTEXTUAL LISKS		risks	ranking risk
convergence of	- Labor displacement is assessed low to	and nutrition security	realize long-term benefits and even out		
government agencies	moderate because of changing dynamics in	and improving local	self-help efforts and the costs assumed by		
and LGUs (e.g., ADP,	the agricultural sector. Generally, labor	economies, recycling	farmers to irrigate lands by themselves. It		
NCI-SRD, PAFES);	shortages are driving farmers towards direct	nutrients from bio-	has been reported that farms within the		
Strengthen PCAF	seeding and mechanization although in some	waste, managing	NIA service area in Regions II and III are not		
National Sectoral	areas, farm laborers are still in high demand	microclimate to	reached by irrigation due to system failures		
Committees;	because of specific industry needs. Among	improve soil health,	(e.g., breakdown of structure, no water		
Develop/improve	seed growers interviewed in Ilagan City,	more efficient use of	source). In some areas, the location of		
feedback mechanism	Isabela, labor displacement from the use of	fertilizers, and	farms at the tail-end of the system inhibits		
and participatory	transplanters is low. Transplanting practices	eliminating the use of	steady supply of irrigation water because of		
monitoring of project	by hand are still retained because of large-	chemical pesticides.	low water pressure. This situation leads		
implementation.	scale production of hybrid rice varieties	Risk is moderate.	farmers to spend on water pumps and		
4) Research for	although labor shortages make transplanting		solar-powered irrigation systems to draw		
Development and	costs expensive. Moderate levels of	- Extreme and unusual	water for agricultural needs. Increased		
Extension (R4D) to	displacement in other parts of Regions II and	weather events pose	costs and the lack of reliable irrigation		
optimize sector	III are mitigated through training and	moderate to	services could hurt competitiveness as the		
potential (10): Increase	technical assistance from the Agricultural	substantial risks	resources of farmers are diverted to		
investments in	Training Institute (ATI), PhilMech and the local	because of their	upkeep than investment.		
research,	government units (LGUs).	unpredictability and			
development, and		direct impact on farm	- FCAs capacity in fulfilling the national		
extension; Strengthen	- The application of fertilizers and pesticides	profitability. Examples	requirements for EIA and ECC application		
the link between	can cause water pollution and pose health	are the successive six	widely varies, depending on their		
research and	risks related to their application and storage.	typhoons that ravaged	respective awareness of the local		
extension; Boost	The promotion of climate-smart technologies	the Philippines in the	regulations and ability to fill out the forms		
capacity of farmers and	such as bio-fertilizers and biological control	4 th quarter of 2024 and	required by the DENR, and the assistance		
fisherfolk, and AEWs in	agents (BCAs) in crop protection (c/o Regional	affected major rice-	given to them by the DA. The limited ability		
adopting appropriate	Crop Protection Centers or RCPC) is expected	producing areas in	of the to fulfill national requirements of the		
and modern	to reduce exposure of farmers, agricultural	Luzon and Mindanao.	DENR presents challenge to regulatory		
technologies;	workers and communities to not only reduce		compliance. There is a need to equip the		
Harmonize the	pollution and harm to humans but also	- Although the risks of	farmers and members of the FCA with		
Department's research	enhance food quality and safety. For instance,	exclusion from the	necessary tools and knowledge through		
agencies and their	in food crops that alternate with rice like	Program is low to	training and handholding, or through		
projects.	mungbean and peanuts, the control of	moderate, there could	outsourcing of E&S experts to ensure they		
	aflatoxins below minimum tolerable levels	be some areas and	comply with the national E&S regulations		
	aims to ensure safety for humans. The	FCAs that may be	and Bank requirements.		
	production of 'pesticide-free' crops and	technically excluded			
	products is already being promoted in Region	because of systemic			
	II, for example. The Good Agricultural	conditions. These			
	Practices (GAP) certification system is also	pertain to FCAs, and			
	institutionalizing among farmers the adoption	production areas found			

Typical activition	Likely E&S offects	E&S contaxtual risks	Institutional capacity and complexity risks	Political and reputational	Overall
Typical activities	Likely EQS effects	EQS CONTEXTUAL LISKS		risks	ranking risk
	of organic farming, lesser and more judicious	in adverse ecosystems			
	use of organic pesticides. Risk is moderate to	(e.g., saline areas in			
	substantial.	coastal communities or			
		those under drought			
	- The formation and strengthening of FCAs,	conditions) which face			
	mandatory registration through the RSBSA	production risks and			
	and LGU extension services are significant	FCAs might take a long			
	factors to ensuring that landless and seasonal	time to become self-			
	farm workers are not excluded in the	sustaining.			
	development process. The risk of exclusion is				
	considered low to moderate and could be				
	borne out by an area's historical and				
	socioeconomic context. In some FCAs like				
	seed growers' associations in Regions II, for				
	example, where capitalistic and landed seed				
	growers dominate, women make up only 1%				
	of total members. The same in some FCAs in				
	Region III consisting of largely male				
	landowners that banded together to ward off				
	the manipulative practices of rice traders and				
	usurers. In other municipalities, women make				
	up 30-40% and range from being farm				
	Workers to small and big landowners.				
	and another the exclusive FCAs which				
	only open membership to landowners. This is				
	beavily on a steady stream of rice supplies				
	whether as sale or navment for credit for its				
	rice-processing operations Nevertheless				
	there are ECAs already revising their hy-laws				
	to expand membership to migrant landless				
	farmers, the youth and in some cases.				
	irrigators' associations (IA) as a consolidation				
	strategy.				
	- R&D capacity in a region is made up of				
	research institutes, experimental stations and				
	integrated laboratories, including farmers'				
	field schools, GAP-certified farms and model				
	farms for crop diversification and integration				

Typical activities	Likely E&S effects	E&S contextual risks	Institutional capacity and complexity risks	Political and reputational	Overall
	('Palayamanan' approach spearheaded by PhilRice). R&D is deemed to have positive E&S impacts with the 'solutions-oriented' approach and innovations undertaken to support the Rice Competitiveness Enhancement Fund (RCEF), National Rice Program (NRP), high-value crop production (HVCP), livestock and aquaculture production. These range from the production of climate-resilient and adaptive seed varieties including the maintenance of gene banks and local seed banks, to food safety programs, crop protection and animal health programs, commercialization of farm machineries and equipment, and intervention programs in adverse ecosystems and for 5 th - 6 th class municipalities.				
Result Area 2: Enhanced ef	ficiency and resilience of food value chains				
 5) Develop and improve postharvest systems and infrastructure (3): Intensify use of appropriate or location-specific technologies; Higher investments for agroprocessing facilities in strategic agriculture and fisheries development zone (SAFDZ) areas; Improve facilities operations and maintenance capacities of beneficiaries. 6) Develop efficient logistics systems for input and production output (4): Establish resilient transport 	The construction or upgrading of postharvest systems, FMRs, tramline systems, and livestock breeding and farming facilities will have short-term and limited environmental impacts, such as dust, noise, solid waste, wastewater, topsoil disturbance, and soil erosion. These impacts are predictable and can be mitigated through known technologies and measures. It is unlikely that construction and upgrading activities will necessitate large-scale land acquisition entailing displacement effects. FCAs interviewed in Regions II and III own titled lands bought for the purpose of establishing rice mill, storage and integrated farming systems. In one case, the FCA entered a long-term lease with a cooperative member for land hosting its rice-processing facility. Land and resettlement issues can be avoided using alternative technical designs. Land acquisition frameworks in the Philippines can be relied upon to address possible economic	 The activity sites are primarily located in rural and quasi-urban areas. These sites do not involve important natural habitats that have not been disturbed by human activities. The activities will not encroach on natural reserves and will help reduce pollution and greenhouse gas emissions, alleviating the ecological pressure caused by overgrazing in protected areas. A possible contextual risk is the exclusion of island municipalities 	The lack of financial capacity of the FCAs to make payment for electricity to run the equipment and mechanization tools granted by the DA and other Bank-financed projects (i.e. PRDP) presents a challenge to long-term sustainability of running such facilities. This institutional risk is considered substantial because power makes up a significant cost item of operating processing, cold storage and other types of post-harvest facilities. The FCAs do not receive subsidies to pay demand charges imposed by the electric cooperatives. Dialogue amongst FCAs and local electric cooperatives, including a petition letter to the DOE to waive the high electricity charges to local cooperatives has started in some areas, however a decision has not yet been made to address such a petition.	 Political risks could be moderate to substantial where there is political interference in the prioritization and siting of post-harvest facilities and infrastructure, including farm-to- market and access roads. Transparency and competitiveness can be promoted through public-private sector partnerships, results- based budgeting and citizen engagement. 	Substantial

Typical activities	Likely E&S effects	E&S contextual risks	Institutional capacity and complexity risks	Political and reputational risks	Overall ranking risk
Typical activitiesnetworksforagriculture inputs andproducts;Implementfoodmobilizationprograms,FMRprojects,tramlinesystems;Reducelogisticscostscostsandother barriers to flowof goods.7)Improve and expandlocal and internationalmarketmarketacsistanceservicesincludingentrepreneurship,marketmarketresearchnetworking;Intensifyproduct promotion toopendomesticopendomesticinternationalmarkets;Enticeproducerstoincrease the quantity,quality, and diversity ofgoods;Assigna permanent person tolead/manageagriculturalexportdevelopment.8)Strongpartnershipwithfarmers,fisherfolk,privatesectorandotherstakeholders (8): Adoptaneffectiveparticipatoryandconsultative process inthe planandbudget	 Likely E&S effects or physical displacement although these are foreseen to be nil to minimal. Operating the livestock breeding and farming facilities poses health and safety risks to workers and the community. For example, livestock and poultry manure treatment may produce wastewater and odor, affecting the environment and health of nearby residents. There are also risks of pathogens from sick and dead animals, biosafety risks from handling diseased animals, and pollution from disqualified or excessive application of organic fertilizers. Laboratories generate general and hazardous chemical and biological waste. The use of chemical fertilizers, pesticides, and irrigation in fodder production involves water consumption, soil degradation, and environmental impacts. These impacts are predictable and can be mitigated through known technologies and measures. Better management of artificial forage plantations will positively contribute to carbon sequestration. Social conflict is moderate to substantial. Intensified rice production may enhance the demand for labor. However, certain arrangements entered by certified seed growers with laborers could be onerous and lead to forced labor conditions. Demand for labor is high for seed producers tied to the protocols of the Bureau of Plant Industry (BPI) (e.g., seed quality standards higher from the transplanting of seeds by hand). Under these conditions, BPI protocols disincentivize the use of rice transplanters. However, the 	E&S contextual risks currently not serviced by maritime transport. Value chains and logistical systems supported would be largely land-based and where inter-island connectivity is already established. - Risk is moderate	 The FCAs who were interviewed by the Bank Team in Region 2 and Region 3 are connected to the market system. They have established Kadiwa centers where they sell their goods and products. The DA supports the linkage of the FCAs to farm markets through the Agribusiness and Marketing Assistance Division/Services (AMAS/AMAD). The supply of fertilizers and pesticides is made through private manufacturers and suppliers. Private suppliers of fertilizers and pesticides organize training to FCAs on proper application of the pesticide products and the optimal proportions of fertilizers to use on farm plots. A critical next step for L3 FCAs ('Big Brothers') is scaling up competitiveness through market expansion (larger domestic and international markets), business diversification (hosting 2 or more productive business lines), capability strengthening and alliance-building. Scaling-up is a test of the convergence approach. The risks are considered low to moderate, with FCAs in some regions probably moving faster ahead than others because business models and support systems are adequate and ready. A related concern is how far organizational and management capacity of FCAs will cope with increasing membership as well as enhanced competitiveness and business growth. Institutional interventions may have to be designed for L3 FCAs or farm clusters, despite them functioning as independent and self-sustaining units. 	risks	ranking risk
preparation; Improve	manner of advancing cash payments to				

Turnianal antimittion	Likely FR C offects	FQC contextual viela	Institutional capacity and complexity risks	Political and reputational	Overall
Typical activities	Likely E&S effects	E&S contextual risks		risks	ranking risk
convergence of	secure labor commitments/ arrangements by		- Occupational health and safety were		
government agencies	certified seed growers for future planting		observed to be a pressing challenge in farm		
and LGUs (e.g., ADP,	seasons can be onerous. Advanced payments		and post-harvest operations. Workers were		
NCI-SRD, PAFES);	can tie vulnerable farmers to cycles of		observed to not properly use PPEs.		
Strengthen PCAF	indebtedness, leave no room for negotiating		Although the FCAs claim to have received		
National Sectoral	wage increases, and leave them without		training from DA on safe use and operation		
Committees;	options to withdraw their services under poor		of the farm mechanical interventions and		
Develop/improve	working conditions.		fertilizer and pesticides inputs, the FCAs		
feedback mechanism	Conflict could be triggered when community		and their workers appear to have limited to		
and participatory	health and safety is threatened by pollution		no uptake on proper use of safety gears at		
monitoring of project	caused by harmful pesticides.		work the workplace. The FCAs explained		
implementation.	, .		that even if they provide the workers with		
	- The environmental issues associated with the		the appropriate safety gear, the workers		
	inland aquaculture sector primarily include		feel uncomfortable using them. There is a		
	threats to biodiversity, contamination of		need to strengthen institutional capacity to		
	aquatic systems, and hazardous materials,		conduct mandatory audits and ensure		
	occupational health and safety, and		corrective actions are implemented to		
	community health and safety. Social risks		achieve a safe working environment		
	associated with inland aquaculture are low to		according to DOLE regulations and DA good		
	moderate. Small-scale inland aquaculture and		agricultural practices.		
	the seafood processing industry, in general,				
	are beneficial to vulnerable groups. Women,				
	landless workers, small farmers and rural				
	youth depend on these activities for income				
	and employment as caretakers, laborers, cage				
	operators, processors, vendors and				
	technicians. Women are particularly				
	dominant in the seaweed cultivation,				
	harvesting and processing. Aquaculture is				
	also a supplemental source of protein for				
	poor households.				
	Risk is substantial.				
Result Area 3: Enhanced ins	titutional and policy environment`	1			
9) Proper balancing of	- Soft activities on policies, mechanism,	- The activities can be	- The DA and its attached agencies have their	- E&S due diligence and	Moderate
both the	technical standards will not involve any civil	implemented up to the	respective approaches to satisfying	safeguards functions are	
developmental; and	works and will not have direct negative	provincial level but will	national regulatory requirements on E&S.	Program specific and	
regulatory roles of the	environmental and social impacts and pose	not involve any form of	On this aspect, a streamlined E&S risk	their adoption by	
DA (6): Streamline	only minor health and safety risks to the	construction or civil	management system that will operate for	government officials	
regulatory processes;	people involved.	works.	regular programs and activities has yet to	could face low to	

	Likely E&S offects	E&S contoxtual risks	Institutional capacity and complexity risks	Political and reputational	Overall
Typical activities		EQ3 CONTEXTUAL HISKS		risks	ranking risk
Effectively communicate policies to stakeholders; Ensure transparency in regulation enforcement; Upgrade national and regional laboratories; Assist stakeholders to be compliant to regulatory documents/ease of doing business. 10)Science and information driven decision making through digitalization (7): Integrate and harmonize digital platforms towards the development of national network (NN) that will aid in policy decision-making for the agriculture and fisheries sector.	 Training and study tour activities may pose health and safety risks to the people involved. The next stage of development in digitalization requiring programmatic government support appears to be on 'big data' analytics on rice, crops, livestock, and aquaculture. Also important are comprehensive mapping systems to address, for instance, the intersecting impacts of climate change, the risks of pests and disease outbreaks and geographic inequalities in resource endowments and agricultural outputs. Knowledge products currently generated by PhilRice, for example, are informing regional programs of DA as well as local policies and plans (like local climate change action plans or LCCAPs) but more organized support is needed to scale-up influence in policymaking and informed decision-making. Risk is low. 	 The contextual risk is policy incoherence and duplication with the myriads of policies in the agricultural sector. Stocktaking and weeding out of outdated and regressive policies are necessary. Risk is moderate 	 be developed by DA. Some attached agencies of the DA, particularly PhilMech and the PhilRice (GOCCs) have been certified to International Standard Organization (ISO) 14001, an international organization that provides a framework for designing and implementing an Environmental Management System (EMS). The DA Central Office does not yet have an EMS and their compliance on E&S regulatory requirements is dealt with in the respective RFOs through the beneficiaries and end-users of the physical interventions given by the department. For Bankfinanced projects, the DA SPCMAD ensures compliance with the respective E&S standards of the funding agencies. E&S activities are typically managed by the Field Programs Operational Planning Division (FPOPD) at the central level or by M&E or Research Division at regional/provincial levels. These divisions assist FCAs in ECC applications but are not streamlined from the Special Projects Management and Coordination and Management Assistance Division (SPCMAD), which handles the Bank's E&S policies for donor-assisted projects. E&S functions, such as ECC applications, due diligence, assessment, and stakeholder engagement, are spread thinly over banner programs. Staff assigned to E&S roles may lack formal training and qualifications, posing an institutional risk due to the lack of regular staff for E&S activities. Establishing an E&S division within DA would require a dedicated assessment. The institutional risk, therefore, is moderate to substantial. 	 moderate risk. E&S risk management systems can support and enhance sustainability initiatives and improve internal processes. On the downside, though, adopting E&S standards could entail delays in the preparation stage, and encounter employee resistance, shortage of capable staff and costs in implementation. The political risks of resistance to policy changes or policy initiatives are considered low to moderate. Policy brokering is undertaken by research institutes, for instance, for knowledge products to feed into local and national government policies. Policy brokering is normally done by aligning proposed policies with specific local priorities and plans, such as those contained in local climate change adaptation plans (LCCAP). 	

Table A0-2: Mitigation Measures for Crops, Livestock, and Inland Aquaculture

and Impacts Crops Sector Activities Stress on water resources - Determine water needs by assessing the quantity and quality of water required for crop production. resources - Evaluate water resources by collaborating with institutions to ensure the project aligns with existing or emerging water manage plans. - Select compatible crops by choosing crops that are compatible with the available water resources. - Maximize precipitation use by implementing rain harvesting techniques and methods to reduce runoff and store water. - Conserve irrigation water by using techniques like drip irrigation, lining channels, controlling weeds, and maintaining a management logbook. Soil erosion and loss of productive capacity - Practice Integrated Nutrient Management (INM) and use crops suited to local climate and soil conditions to avoid nutrient dep or accumulation. - Use appropriate machinery to avoid soil compaction and avoid overly saline water for irrigation to prevent salinization. - Use plant cover, intercrops, and shelterbelts to reduce erosion from wind and rain, and increase soil organic matter with crop resicompost, and manure. - Add lime to soil to maintain stable pH levels and assess potential impacts of waste materials like manure and sludge for contaminating the project and soils compacts of waste materials like manure and sludge for contaminating the project align the project align the contaminating the project align the contaminating the plant cover.	
Crops Sector Activities Stress on water - Determine water needs by assessing the quantity and quality of water required for crop production. resources - Evaluate water resources by collaborating with institutions to ensure the project aligns with existing or emerging water manage plans. - Select compatible crops by choosing crops that are compatible with the available water resources. - Maximize precipitation use by implementing rain harvesting techniques and methods to reduce runoff and store water. - Conserve irrigation water by using techniques like drip irrigation, lining channels, controlling weeds, and maintaining a management logbook. Soil erosion and loss of productive capacity - Practice Integrated Nutrient Management (INM) and use crops suited to local climate and soil conditions to avoid nutrient dep or accumulation. - On steep slopes, consider planting zones and use stone barriers, terraces, or drainage canals to prevent erosion from precipitat irrigation. - Use appropriate machinery to avoid soil compaction and avoid overly saline water for irrigation to prevent salinization. - Use plant cover, intercrops, and shelterbelts to reduce erosion from wind and rain, and increase soil organic matter with crop resicompost, and manure. - Add lime to soil to maintain stable pH levels and assess potential impacts of waste materials like manure and sludge for contaminal precession.	
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- Add lime to soil to maintain stable nH levels and assess notential impacts of waste materials like manure and sludge for contami	
before use.	nants
Pesticide use - Manage pesticides to avoid their migration into off-site land or water environments by establishing their use as part of an Integ Pest Management (IPM) strategy and as documented in a Pesticide Management Plan (PMP), giving preference to alternative management strategies, with the use of synthetic chemical pesticides as a last option.	rated pest
- Alternatives to Pesticide Application: Where feasible, the following alternatives to pesticides should be considered:	
 Provide training in pest and weed identification, field scouting, and use pest-resistant crop varieties and mechanical weed co Support biological control by using beneficial organisms and protecting natural enemies of pests with favorable habitats56 Use animals for grazing, and mechanical controls like traps, barriers, light, and sound to manage pests. 	ntrol.
- <i>Pesticide Application:</i> If pesticide application is warranted, users should take the following precautions:	
 Train personnel to apply pesticides and ensure they have received applicable certifications or equivalent training where req 	uired.
 Review the manufacturer's directions and apply the minimum effective dose based on field observations, weather data maintain a pesticide logbook. 	, and
 Avoid the use of pesticides classified by the World Health Organization as Hazard Classes 1a, 1b, and II, and those listed in An A and B of the Stockholm Convention. 	ıexes
 Use only licensed and registered pesticides approved by the appropriate authority, following FAO's International Code of Co on the Distribution and Use of Pesticides. 	nduct
 Select application technologies to reduce unintentional drift or runoff, maintain and calibrate equipment as per manufact recommendations, and establish untreated buffer zones along water sources. 	urer's

Environmental Risks	Mitigation Measures
and Impacts	
	 Pesticide Handling and Storage: Contamination of soils, groundwater, or surface water resources, due to accidental spills during transfer, mixing, and storage of pesticides should be prevented by:
	 Store pesticides in their original packaging in a dedicated, dry, cool, frost-free, and well-aerated location that can be locked and properly identified with signs. Mixing and transfer of pesticides should be done by trained personnel in ventilated and well-lit areas using containers designed for this purpose. Contaminated containers should be handled as hazardous waste and disposed. Purchase and store only the necessary amount of pesticides, rotating stock using a "first-in, first-out" principle to avoid obsolescence. Prepare a management plan for the containment, storage, and destruction of obsolete stocks. Collect rinse water from equipment cleaning for reuse, ensure protective clothing is cleaned or disposed of responsibly, implement groundwater supply wellhead setbacks for pesticide application and storage, and maintain records of pesticide use
	and effectiveness.
Eutrophication of aquatic environments	 Nutrient management strategies should aim to optimize crop yield while maintaining and improving the soil nutrient status. These strategies should be implemented as part of an INM approach that aims to prevent, reduce, or control contamination of groundwater resources and eutrophication of surface water resources from runoff and leaching of excess crop nutrients. Use the following steps: <i>Evaluating the Need for Crop Nutrient</i> Application: Balance nutrient application according to INM recommendations, using reduced tillage, nutrient recycling, and one-pass soil preparation. Use crop rotation with leguminous plants, cover soil with plants during fallow periods, and incorporate organic waste into soils. Avoid excess fertilization by analyzing soil before the growing season, assess soil acidity, and provide INM training to farm operators. <i>Crop Nutrient Application</i>: Apply organic matter like manure to replace chemical fertilizers, incorporating it into the soil or between crops to reduce nutrient leached contemportant.
	 Ioss and contamination. Use fertigation in horticulture, applying small amounts of fertilizer with irrigation water, and time nutrient application using meteorological data to avoid precipitation events.
	 Use appropriate equipment for spraying manure and establish buffer zones along water sources to filter runoff. Implement INM planning with a fertilizer logbook to record purchase dates, usage, application rates, and equipment maintenance.
Loss of biodiversity	 The main ecosystem threats that should be managed at the farm level may include the following: Loss of Genetic Resources and Variability: The following actions should be taken to maintain farm-level agricultural biodiversity: Maximize reuse of crop residue on the soil surface, considering pest spread, and reduce soil preparation to maintain soil ecosystem structure.
	 Utilize field borders for wildlife corridors and provide buffer zones on farmland bordering wildland of environmental interest. Regularly monitor soil health using bioindicator species like earthworms and use certified crop seeds free from invasive species. Protect natural enemies of pests by providing favorable habitats and promote organic agricultural practices where feasible The following actions should be taken to help maintain regional biodiversity:

Environmental Risks	Mitigation Measures
and Impacts	
	 Survey the project area before converting land to annual crop production to identify and categorize habitat types and ascertain their biodiversity value.
	 Ensure that habitats to be converted do not contain critical habitats or important wildlife areas.
	 Minimize disturbance to surrounding areas when harvesting or gathering crops and consider endangered species during management.
	- Genetically Modified Organisms (GMOs), Invasive Species, and Pests: Environmental concerns of GMO crops include gene transfer to
	other species, impact on beneficial insects, and increased pest resistance. Assess GMO crops for compliance with host country
	regulations or potential impacts if no regulations exist. Manage pest introduction risks according to international phytosanitary standards.
Crop residues and	The largest volume of residues in crop production is crop residues themselves. Prevention and control of potential impacts from the generation
other solid waste	of these wastes includes the following:
	 Recycle crop residues by leaving them in fields, plowing, or composting, considering pest spread.
	 Reuse crop residues as thermal energy fuel, fermentation substrates, or biorefinery feedstock.
	- Clean and dispose of pesticide containers properly and manage expired pesticides as hazardous waste.
Atmospheric	Recommended prevention and control measures include the following:
emissions	 Use biofuels instead of fossil energy and adopt reduced tillage to increase soil carbon storage.
	 Favor solar drying techniques and avoid burning organic material to reduce particulate matter emissions.
	 Reduce ammonia and nitrous oxide emissions by managing soil nutrients and enhancing soil aeration.
Occupational Health	- Use the prevention and control measures in the WBG General EHS Guidelines for addressing physical hazards (machinery and
and Safety	vehicles), confined spaces, chemical hazards (exposure to pesticides), and exposure to organic dust.
Inland Aquaculture Acti	vities
Threats to Biodiversity	Conversion of Natural Habitats:
	 Survey the project area before converting land and water to aquaculture to identify and categorize habitats, ensuring they are not unique, protected, or of high biodiversity value.
	 Design facilities to minimize habitat conversion and degradation, leaving natural vegetation intact through buffer zones and habitat corridors.
	- Implement mitigation measures to achieve no net loss of biodiversity, such as post-operation habitat restoration, creation of comparable areas, and compensation to biodiversity users.
	Conversion of Aaricultural Land – Salinization:
	- Ensure embankments around brackish water pond systems are high enough to separate agriculture and aquaculture and treat and
	dispose of saline/brackish water discharges appropriately.
	- Hold community-level discussions to avoid conflicts of interest when agricultural land is transferred to aquaculture production.
	Introduction of Alien, Selectively Bred, or Genetically Engineered Species:
	- Farming of sterile fish and preventing the escape of species from pond-based aquaculture systems.
	Impacts of Harvesting on Ecosystem Functions:
	- Breeding of stock material in captivity.

Environmental	Risks	Mitigation Measures
and Impacts		
		Fish meal and fish oil:
		- Consider incorporating the use of alternatives to supplies of fish feed produced from fish meal and fish oil.
Contamination	of	- Soil Erosion and Sedimentation: i) Construct pond and canal levees during dry season and with a right slope. Stabilize the
Aquatic System	S	embankments to prevent erosion; ii) Reduce excavation and disturbance of acid sulfate soils during construction and install temporary
		silt fences during construction to slow down and catch any suspended sediments.
		Wastewater Discharges:
		- Feed: i) Ensure pellet feed has minimal fines to reduce nutrient load in water. Match pellet size to species' life-cycle stage and monitor
		feed uptake to adjust feeding rate; ii) Use floating or extruded feed pellets for observation during feeding; iii) Spread feed evenly to
		ensure access for all animals and reduce nutrient load from uneaten feed; iv) Halt feeding before harvest to eliminate food and fecal
		material in the animal's gut. During harvesting, contain and disinfect blood water and effluent to reduce disease spread.
		- Other organic materials: i) Perform slaughter and processing in an area where the effluent is contained; ii) Prevent effluent leakage
		from harvest rafts and bins by using harvest bins in good condition with sealed bin liners and secure lids and bindings; iii) Equip off-
		loading bays with a waterproof apron and surround with a bund to contain potential spills and prevent contamination with effluent.
		- Suspended solids: i) Avoid discharging waters from ponds while they are being harvested with nets; ii) If feasible, use partial draining
		techniques to empty ponds that have been harvested. After harvest, hold the remaining water in the pond for a number of days
		before discharge.
		- Fertilizers: I) Plan the rate and mode of fertilizer application to maximize utilization and prevent over-application, considering
		predicted consumption rates. Increase efficiency through practices like diluting liquid fertilizers or using powdered fertilizers; ii)
		Consider using time-released refulizers that release nutrients based on water temperature and movement. Avoid refulizers containing
		ammonia or ammonium in water with pH of 8 or above to prevent toxic unionized ammonia formation; iii) initiate pond fertilization
		only in static ponds with no overnow to prevent downstream impact. Conduct fertilization to minimize runoit consequences due to
		Hous of Heavy fail.
		- Chemicals. I) Design point depth to reduce chemical control of aquatic weeks and thermal stratification, ii) Avoid antioularits, clean nets manually or with a net washing machine; iii) Reuse water from harvested ponds for bloom seeding and ensure pond
		embankments are high enough to prevent effluent loss during heavy rainfall
Occupational	Health	Physical hazards:
and Safety	riculti	- Heavy Lifts: i) Use mechanical and/or automated equipment to facilitate heavy lifts: ii) Design workstations that can be adapted to
		individual workers: iii) Construct ponds that are rectangular in shape to facilitate harvesting.
		- Electric Shock: i) Waterproof all electrical installations: ii) Ensure that fuses are used and that there is an appropriate connection to
		the ground: iii) Ensure that all cables are intact, waterproof, and without connection: iv) Provide training in the correct handling of
		electric equipment (e.g. pumps and) to avoid the risk of short circuits.
Community	Health	- Effects on Water Resources: Target the maintenance of hydrologic conditions which provide water quality and quantity consistent
and Safety		with community needs and uses; and, in the case of coastal facilities, prevent saltwater intrusion from affecting drinking and
,		agricultural water supplies. Plan site design and operation to prevent and control of potential impacts from breeding grounds for
		different insects, especially the mosquito and tsetse fly. Additional information is provided in the Disease Prevention section of the
		General EHS Guidelines.

Environmental Risks	Mitigation Measures
and Impacts	
	 Food Safety Impacts and Management: i) Adopt vaccination to limit antibiotic use. Fallow sites annually for at least four weeks to manage pathogens in pen production units; ii) Use veterinary services frequently to review stock health and employee training. Apply approved antibiotics responsibly, following manufacturer's instructions and professional guidance; iii) Develop a contingency plan for antibiotic application during disease outbreaks. Store antibiotics securely in original packaging to prevent spills and unauthorized access; iv) Avoid waste antibiotic stockpiles by using a "first-in, first-out" principle and dispose of expired antibiotics according to national regulations. Physical Hazards: Communities may be exposed to a number of physical hazards, including drowning, associated with the presence of pond systems or other project infrastructure in proximity or in between community areas, requiring frequent crossing and physical interaction. Community use should be taken into consideration in the design of access routes, for example by providing wide enough walking areas with fall protection along potentially hazardous locations.
Livestock Activities	
Solid waste	 Waste Feed: Efficiently store, handle, and use feed by maintaining records and using covered feeders to prevent exposure to rain and wind. Keep feeding systems in good condition to avoid spills. Consider mixing waste feed with recyclable materials for fertilizer or assess incineration and land disposal options based on potential impacts to air, soil, and water. Animal Waste: Implement comprehensive nutrient and waste management, ensuring appropriate land for manure deposition and matching feed content to animals' nutritional needs. Use low-protein, amino acid-supplemented, and low-phosphorus diets with highly digestible inorganic phosphates. Grind feed to increase utilization efficiency, reducing the amount of manure generated. Use quality, uncontaminated feed materials with necessary additives for animal health. Construct production and manure storage facilities to prevent contamination of surface and groundwater. Keep waste dry by scraping instead of flushing, reduce water use during cleaning, and minimize manure storage surface area. Regularly check for storage system leakage, remove liquids and sludge from lagoons, and build a reserve slurry storage lagoon. Animal Carcasses: Reduce mortalities through proper animal care and disease prevention. Store carcasses until collection, using cooling if necessary to prevent putrefaction. Use approved collection companies for carcass disposal by rendering or incineration. If not available, on-site burial may be an alternative, ensuring proper soil conditions to avoid contamination.
Wastewater	 Reuse water from cleaning milking equipment for the milking parlor and reduce water use by preventing overflow and using well-maintained self-watering devices. Install vegetative filters and surface water diversions to trap sediment and direct clean runoff. Implement buffer zones to surface water bodies and reduce silage leachate by wilting plant material and adding moisture-absorbent material
GHG and Air Emissions	Ammonia and Odors:

Environmental Risks	Mitigation Measures
and Impacts	
	 Consider the siting of new facilities to minimize odor propagation and control environmental factors of manure storage to reduce emissions.
	- Compost manure to reduce odor emissions and apply it below the soil surface during favorable weather conditions.
	- Apply chemicals weekly to reduce nitrogen conversion to ammonia if necessary.
	Greenhouse gases:
	- Improve livestock productivity and efficiency through better nutrition and genetics, and supplement diets with necessary nutrients, considering potential GHG production.
	 Increase the carbon to nitrogen ratio in feeds and implement balanced feeding to reduce methane and nitrous oxide production. Manage methane emissions from manure through techniques like anaerobic digestion, flaring, biofilters, composting, and aerobic treatment.
	- Control environmental factors of manure storage and implement pasture management techniques to reduce emissions.
	 Install dust-collection systems at dusty operations, prevent overgrazing of pastureland, and implement fugitive-dust-control
	measures.
Hazardous Materials	Integrated Pest Management:
(Use of Pesticides)	 Maintain structures to keep out pests and use mechanical controls like traps and barriers.
	 Use predators to control pests and protect their natural enemies by providing favorable habitats.
	 Implement good housekeeping practices and improve drainage to control mosquito populations.
	- Cover manure piles with geotextiles to reduce fly populations and use pesticides only when necessary, evaluating their environmental
	impacts.
	Good Management Practices:
	- Train personnel to apply pesticides with protective clothing and certify them if required.
	- Review manufacturer's instructions and apply the minimum effective dose.
	 Avoid using hazardous pesticides and use only those approved and labeled according to international standards.
	 Select application technologies to reduce unintentional drift or runoff, and maintain pesticide application equipment as per manufacturer's recommendations.
	- Store pesticides in original packaging in a locked, dedicated location, away from human or animal food.
	- Mix and transfer pesticides in ventilated, well-lit areas by trained personnel using dedicated containers.
	- Dispose of used pesticide containers as per FAO guidelines, and maintain records of pesticide use and effectiveness.
Pesticides	
Occupational health	Physical Hazards
and safety	- Ensure underground manure storage tanks and lagoons are covered and fenced, and store liquid manure to minimize gas release.
,	- Design pens and chutes for easy livestock movement and instruct staff in proper care to reduce bites and kicks.
	Exposure to pesticides:
	- Train personnel to apply pesticides with necessary certifications and follow hygiene practices to avoid exposure to residues.
	- Respect post-treatment and preharvest intervals to prevent operator exposure to pesticide residues.

Environmental Risks	Mitigation Measures
and Impacts	
	Air quality:
	- Use local air extraction devices at dust-generating equipment and store only dry grain to reduce microorganism growth.
	- Have experts with relevant training repair or decommission liquid manure facilities, following strict confined space entry procedures.
	Biological Agents:
	 Inform workers of biological risks and provide training and protective equipment.
	 Ensure those with allergic reactions to biological agents do not work with these substances.
	Confined Spaces:
	- Occupational health and safety impacts associated with confined spaces associated with mammalian livestock operations are
	common to most industries, and their prevention and control are discussed in the General EHS Guidelines.
Community health and	Food Safety Impacts and Management:
safety	- Do not use banned chemical and biological substances in livestock production and avoid applying manure directly onto grazing areas
	or edible crops.
	 Use a veterinary service annually to review the health of livestock and employees' competence.
	 Implement disease prevention strategies, recommended vaccination protocols, and parasite controls.
	 Apply antibiotics responsibly, following manufacturer's instructions and professional guidance.
	 Store antibiotics in original packaging, avoid stockpiles, and dispose of expired antibiotics according to regulations.
Animal disease	- Control farm animals, equipment, personnel, and wild animals entering the facility with quarantine, disinfection, and protective
	measures.
	- Sanitize animal housing areas, segregate sick animals, and develop procedures for the removal and disposal of dead animals.
Animal welfare in	 Follow IFC's good practice in Animal welfare in animal husbandry
animal husbandry	

Annex 2 – Overall Assessment of Environmental and Social Effects against the Six E&S Core Principles

This Annex presents the overall review of E&S aspects against the six E&S core principles and identifies gaps that exist with that of the Bank requirements in table format. The discussion is consistent with the assessment presented under Section 4 and Section 5 in the main text of the ESSA.

Table A0-3: Applicability of Core Environmental and Social Principles (CP) to each Disbursement Linked Indicators (DLIs)

CP1	CP2	СРЗ	CP4	CP5	CP6		
Environment	Natural Habitats	Public & Worker Safety	Land Acquisition	Indigenous Peoples &	Social Conflict		
				Vulnerable groups			
Results Area 1. Enhanced p	Results Area 1. Enhanced production and incomes in rice-based farming systems						
PURPOSE OF DLI: Strengthe	PURPOSE OF DLI: Strengthen the Masagana Rice Industry Development Program (MRIDP)						
DLI 1.1 Administrative Order (AO) issued directing concerned agencies under the Masagana Rice Industry Development Program (MRIDP) to limit the number of approved							
and registered rice varieties	for distribution, ensuring ali	gnment with the spatial and o	climate suitability of the area	•			
Reduction of the number	PforR activities will not	Rice farming activities,	Diversification in rice-	There are rice varieties	Flexibility to be given		
of varieties of planted rice	support activities in critical	application of fertilizers	based systems and land	that only indigenous	farmers in the selection of		
seedlings will enable	natural habitats ⁴⁴ or	and pesticides, and use of	intensification will occur in	people use, with the	rice varieties of their		
sustainable use of land	critical cultural heritage	irrigation to rice farm areas	existing landholdings and	preservation of traditional	choice. Approaches to		
areas for rice and intercrop	sites and will therefore not	have inherent risks to	will not necessitate large-	and heritage rice varieties	determine seed variety		
farming by controlling the	result in adverse impacts	public and workers' safety	scale land acquisition. The	taken care of by gene	preferences to also include		
right number of fertilizers	on such sites.		use of raw land for	banks (PhilRice) and local	seed growers and local		
and pesticides. However,	Rice farm areas have been		agricultural purposes has a	seed banks. Changes in	government units (LGUs).		
infestation of pests on a	traditionally farmed by		positive effect of realizing	cropping systems and			
limited number of varieties	farmers and FCAs and are		productivity and profit	practices need to be			
of rice will greatly impact	therefore located in land		from non-productive land.	harmonized with			
the volume of rice	plots designated for			indigenous knowledge			
produced. Bottom-up	agricultural land use and			systems and practices			
planning needed as	are issued certification			(IKSP), requiring culture-			
processes are in place for	from the government			sensitive approaches in			
participatory rice variety	authorities such as the			disclosing information and			
planning in the regions.	Department of Agriculture,			engaging stakeholders.			
	and Department of						
	Agrarian Reform, and						
	delineated as agricultural						
	land in the Comprehensive						
	Land Use Plan of the Local						
	Government Unit.						
	Conversion of critical						
	natural habitats to						

CP1	CP2	СРЗ	CP4	CP5	CP6
Environment	Natural Habitats	Public & Worker Safety	Land Acquisition	Indigenous Peoples &	Social Conflict
				Vulnerable groups	
	agricultural land is not				
	anticipated.				
DLI 1.2 Rice area (in hectare	es) planted with improved vai	rieties adapted to local condit	tions (inbred and hybrid) und	er the MRIDP during wet and	dry seasons.
The productivity of inbred	Rice farm areas planting	Use of high fertilizer inputs	Has the potential of	Selective applicability to	Social conflict is likely low
and hybrid seed farming is	inbred and hybrid seed	and application of	releasing, for productive	indigenous peoples using	as intensified rice
driven by local	varieties have been	chemical pesticides	purposes, idle lands and	traditional seed varieties	production may enhance
environmental conditions.	mapped by the	present risks to farmers	those under adverse	and practicing indigenous	the demand for labor.
Hybrid seeds favour dry	Department of Agriculture	and neighbouring	ecosystems (e.g., saline	ways of planting (e.g.,	However, certain labor
conditions and require	and the Philippine Rice	communities.	conditions). Due diligence	different planting	contracting arrangements
higher chemical inputs	Institute. The PforR		on land tenure and	calendars). Would benefit	entered by certified seed
than inbred seeds.	activities will continue to		occupancy on idle lands	indigenous groups and	growers to secure laborers
Potential to maximize the	support enhanced farming		needed to avoid and	vulnerable groups driven	in future planting seasons
use of rice lands under wet	activities in areas that have		minimize displacement	by resource pressures to	could be onerous and lead
and dry conditions.	already been zoned for rice		issues.	lowland rice production or	to forced labor conditions
	farming.			seasonal work in rice	(e.g., indebtedness, no
				farms.	leverage to negotiate wage
					increases). Conflict could
					be triggered when
					community health and
					safety is threatened by
					pollution caused by
					harmful pesticides.
PURPOSE OF DLI: Increase of	and diversify incomes and resi	ilience of rice-based farming			
DLI 2.1 Administrative Orde	er issued directing the Rice Pro	ogram to collaborate with oth	ner commodity programs to e	nhance rice-based farming th	rough diversification, where
appropriate.					
DLI 2.2: Area (in hectares) o	of diversified, rice-based farms	s in MRIDP-supported proving			
Rice farms are planted with	Diversification of cropping	Farm workers are exposed	Diversification activities	Intercropping of rice with	Activity not likely to cause
other crops in between	activities may require	to health safety issues	will occur in existing rice	other crops, poultry and	social conflict because of
harvesting seasons, such	expansion of farm areas in	throughout the cycle of	farms. Increase in	livestock to benefit	income and employment
as corn and mungbean	adjacent land plots to	land preparation, planting,	farmlands practicing	vulnerable groups (e.g.,	opportunities provided.
(monggo). Diversification	accommodate additional	fertilizer, chemical	diversification likely	poor landless workers,	Farmers who belong to
enhances soil fertility and	crops and post-harvest	pesticide application, and	tarmers and FCAs increase	rural women and rural	FCAs have their own lands
helps improve soil quality	requirements. Expansion	use of mechanical	adoption. Land acquisition	youth) with year-long food	or use lands with secure
and land productivity.	of farm activities may	equipment for planting	activities due to scaling-up	supply, alternative off-farm	tenure arrangements (e.g.,
	potentially encroach on		may increase and will be		lease or share) which can

CP1	CP2	СРЗ	CP4	CP5	CP6	
Environment	Natural Habitats	Public & Worker Safety	Land Acquisition	Indigenous Peoples &	Social Conflict	
				Vulnerable groups		
Increased farming	areas serving as habitats of	and harvesting of rice and	subject to E&S due	income sources, and	minimize incidence of land	
activities may lead to	native flora and fauna	other crops.	diligence.	seasonal employment.	use conflicts.	
increased GHG emissions.	species.					
		Potential increase in child				
Diversification can		labor cases (highest in				
optimize the use of		agriculture in the				
household and farm labor		Philippines) especially in				
and can increase work		the absence of awareness-				
opportunities for women,		raising activities and lack of				
youth and landless		coordination with				
workers. Though, child		government and				
labor and forced labor		enforcement agencies in				
cases could arise in the		detection, reporting and				
process.		mitigation. Due diligence,				
		as needed, in regions				
		which are hotspots for				
		child labor in the country				
		(i.e., Northern Mindanao,				
		Bicol and CALABARZON)[1]				
		[1] Philippine Statistics				
		Authority, 2021.				
		Https://psa.gov.ph/conten				
		t/working-children-and-				
		child-labor-situation.				
		Accessed 23 January 2025.				
PURPOSE OF DLI: Enhance the efficiency of rice farming						
DLI 3: Increase in rice area ('in hectares) (wet and dry sea	son) being mechanically dire	ct seeded			
Mechanization utilizes fuel	The PforR activities will	Operation of mechanical	N/A	Reduced workdays for	N/A	
or electricity which may	continue to support	equipment has inherent		farm laborers wholly		
lead to elevated emissions	enhanced farming	risks on occupational		dependent on their labor		
of GHG.	activities in areas that have	health and safety, and		to earn income. Has a		
	already been zoned for rice	consequential effects to		gender impact as women		
	farming, and is not			tend to take on labor-		

CP1	CP2	СРЗ	CP4	CP5	CP6	
Environment	Natural Habitats	Public & Worker Safety	Land Acquisition	Indigenous Peoples &	Social Conflict	
				Vulnerable groups		
Direct seeding will reduce	anticipated to negatively	nearby communities if not		intensive work.		
demand for laborers for	impact natural habitats.	properly operated.		Agricultural jobs will be		
transplanting activities.				reduced thus lowering		
				interest in agriculture.		
PURPOSE OF DLI: Improve E	fficiency in the provision of fe	ertilizer and other farmer sup	port			
DLI 4 Farmers using IMCs (e	-voucher) for all DA-supporte	d interventions				
IMCs support farmers with	N/A	Improper use and handling	N/A	Distribution and use of	N/A	
farm interventions such as		of fertilizers and chemical		IMCs by farmers in remote		
fertilizer inputs and		fertilizers are detrimental		areas not reached by Wifi		
chemical pesticides.		to public and worker		technology and ATMs.		
Improper use of these		health and safety.		Constraints to the		
chemicals can result in				registration of individuals		
water and soil pollution.				without official birth		
				records.		
PURPOSE OF DLI: Increase t	he adoption of CSA technolog	jies and approaches				
DLI 5: Number of farmers tr	ained in at least 4 categories	of CSA technologies and app	roaches according to commo	lity and spatial climatic cond	itions	
Training farmers on CSA	N/A	CSA technologies are	N/A	Access to training on CSA	N/A	
technologies will allow		widely varied, and their		technologies can be		
them to adhere to good		use may have inherent		selective and exclude		
agricultural practices (GAP)		risks on public and		those without land where		
and utilization of CSA		occupational health and		technologies can be		
technologies will		safety.		applied. These covers		
contribute to addressing				landless farm workers,		
the impacts of climate				women and youth. A		
change.				systematic approach		
				needed so that the		
				selection of participants		
				from FCAs is inclusive and		
				equitable. Opportunities		
				to enable landless farm		
				workers to become GAP-		
				certified could be		
				explored.		
PURPOSE OF DLI: Improve productivity and climate resilience of rice-based farming						
DLI 6: Area covered under mechanization.						

CP1	CP2	СРЗ	CP4	CP5	CP6	
Environment	Natural Habitats	Public & Worker Safety	Land Acquisition	Indigenous Peoples &	Social Conflict	
				Vulnerable groups		
The use of mechanical	The PforR activities will	Use of mechanical	N/A	In areas with labor	N/A	
equipment will result in	continue to support	equipment and		shortage, mechanization		
potential increase in GHG	enhanced farming	machineries present		can enhance production		
emissions, dust and noise	activities in areas that have	worker health and safety		efficiency. In other cases,		
generation, and waste oils	already been zoned for rice	risks, and consequential		mechanization can		
from operation and	farming, and is not	impacts to nearby		displace manual labor		
maintenance controls of	anticipated to negatively	communities if not		because of reduced		
these equipment, which	impact natural habitats.	handled and operated		demand in labor-intensive		
may lead to contamination		properly.		activities like planting and		
of receiving ground surface				transplanting.		
or water bodies.						
Mechanization has impacts						
on agricultural workers						
especially on labor-						
intensive activities.						
Results Area 2. Enhanced e	fficiency and resilience of foo	od value chains				
PURPOSE OF DLI: Increased	climate resilience and quality	y of vegetable production				
DLI 7: Percentage increase i	n high-value crops and organ	ic agriculture budget				
Farming high-value crops	The PforR activities will	Farming high-value crops				
will influence soil fertility	continue to support	such as vegetables will				
and water quality.	enhanced farming	likely result in health and				
However, the use organic	activities in areas that have	safety issues to workers				
agriculture fertilizer will	already been zoned for rice	and neighboring				
have a positive effect by	farming, and is not	communities from				
reducing the amount of	anticipated to negatively	fertilizer and pesticide use.				
inorganic chemicals on	impact natural habitats.					
agricultural land.						
PURPOSE OF DLI: Reduce agri-food post-harvest losses and spoilage						
DLI 8: Volume of perishable agri-food products being processed through new and upgraded cold storage facilities						
Construction of cold	The proposed location of	Construction-related	New facilities may require	N/A	N/A	
storage facilities will result	cold storage facilities is not	activities and operation of	land for permanent and			
in localized construction-	yet known at this stage.	the post-harvest and cold	temporary works. Land			
related impacts on land,	Areas will be determined	storage facilities may	acquisition subject to due			
water, air, and biodiversity	according to the	impair worker health and	diligence.			

CP1	CP2	CP3	CP4	CP5	CP6
Environment	Natural Habitats	Public & Worker Safety	Land Acquisition	Indigenous Peoples &	Social Conflict
				Vulnerable groups	
and if not managed	recommendations of the	safety and the			
properly, are likely to result	farmer groups or FCAs,	communities where the			
in environmental pollution.	with the assistance of the	facilities will be built.			
Operation of cold storage	Department of Agriculture				
facilities will result in waste	Regional Field Offices.				
generation, high demand	Depending on land				
for electricity, and use of	availability, there is a				
chemicals for refrigeration.	possibility that the				
If cold storage facilities are	proposed location of new				
not operated and	cold storage facilities may				
maintained according to	be built on areas serving as				
good industry practices,	habitats of native flora and				
such may lead to negative	fauna species.				
impacts within its project					
footprint.					
PURPOSE OF DLI: Increase a	igri-food exports				
DLI 9. Number of export-rel	ated regulations subjected to	regulatory impact assessment	nt for efficiency.		
N/A	N/A	N/A	N/A	N/A	N/A
Result Area 3. Enhanced institutional delivery and performance					
PURPOSE OF DLI: Improve the efficiency of public expenditure on agri-fishery sectoral development					
DLI 10.1 Administrative Order issued on DA-Planning and Budgeting processes, instituting multi-year, programmatic and results-based approach.					
DLI 10.2. DA budget is allocated based on multi-year, result-based planning and indicators, and reflects priority outcomes identified in the MBP.					
N/A	N/A	N/A	N/A	N/A	N/A
PURPOSE OF DLI: Improve evidence-based decision making					
DLI 11: Develop a DA Command Center Platform for integrated and comprehensive data management to enhance data-driven decision-making and disaster management.					
Construction-related	The location of the DA	Occupational health and	Building may require land	N/A	Land use conflicts may
impacts on land, water, air,	Command Center Platform	safety issues may be	for permanent and		arise if facility is found
and biodiversity may occur	is likely to be situated in	encountered during	temporary works. Land		unsuitably sited based on
at the site where the	built-up and modified	construction phase.	acquisition subject to E&S		zoning laws
Command Center will be	areas, accessible to the	The Command Center	due diligence.		
established.	service areas of the	design not abiding by			
Operation of the	Department of Agriculture	universal access principles			
Command Center Building	Regional Field Offices, and	(especially for persons			
will result in waste and	the Central Office. Impacts				

CP1	CP2	СРЗ	CP4	CP5	CP6	
Environment	Natural Habitats	Public & Worker Safety	Land Acquisition	Indigenous Peoples &	Social Conflict	
				Vulnerable groups		
wastewater generation	on natural habitats are not	with disabilities) for				
and generation of	anticipated.	workers and occupants.				
electronic waste. If not						
managed properly, such						
waste may lead to						
environmental pollution.						
PURPOSE OF DLI: Enhance fiduciary processes and transparency						
DLI 12: Institutional strengthening of procurement system resulting in improved efficiency, better transparency, and green procurement.						
Green procurement will	N/A	N/A	N/A	N/A	N/A	
have a positive effect on						
the Program as it will						
support purchasing of						
goods and services from						
sustainable sources.						
Table A0-4: Assessment of Environmental and Social Systems and Identified Gaps to the World Bank's PforR Directive

Bank Directive Criteria	Systems Assessment	Implementation Gaps	Recommended Actions
Core Principle 1: General Pri Environmental and social m or mitigate against adverse	inciple of Environmental and Social Management anagement procedures and processes are designed to (a) pro impacts; and (c) promote informed decision-making relating	omote environmental and social sustainability in l g to a program's environmental and social effects	Program design; (b) avoid, minimize,
i. Operate within an adequate legal and regulatory framework to guide environmental and social impact assessments at the program level	The national government sets out the legal and regulatory requirements for the Philippine Environmental Impact Statement System (PEISS). The requirements of the PEISS apply to the Program activities to the extent that E&S compliance requirements should be disclosed, and the public should be consulted during EIA preparation. Approved projects that result in moderate to substantial impacts are issued an Environmental Compliance Certificate (ECC) which contains the terms and conditions to be satisfied during the program or project development cycle.	The PEISS is implemented by the DENR. Depending on the scale of the project, the review of the EIA study and approval of the ECC is done either at the Central Office Environmental Management Bureau (EMB) or the respective Regional EMB Offices across the country. In the case of PforR, the entity responsible for preparing the EIA study and report requirements under the PEISS procedural manual is the implementing agency of site- specific Program activity/ies, such as for instance the farmers' association who will operate the post-harvest facilities such as the rice dryer and milling stations, or the owner of the rice farm and crop plantation, livestock, and aquaculture project. The lack of awareness and limited ability of the farmer groups or owner of farmlands and aquaculture projects to prepare EIA reports present challenges to fulfilling the PEISS and satisfying the requirements on social preparation and public consultation.	The DA has created the Agriculture Cooperative Enterprise Development Services (ACED) in September 2024 through a Memorandum Circular 22. ACED aims to support farmers cooperatives and associations to enhance their capability in complying with the requirements of the Department of Agriculture and regulatory agencies such as the DENR. The DA is recommended to report the activities of ACED at the regional levels, and the capacity building activities at the respective farmers groups and FCAs. To further strengthen the ability of the farmers and implementing units of the Program, the ESSA proposes to conduct a dedicated assessment of how the DA can mainstream the PEISS requirements across all levels of its operations and allocate dedicated resources not only at the Central Office, but also within the organization at the Regional Offices, including the Provincial and Municipal Agriculture Offices who are directly involved in supporting the farmer groups in developing,

Bank Directive Criteria	Systems Assessment	Implementation Gaps	Recommended Actions
ii. Early screening of potential impacts	Screening of potential impacts falls under the PEISS procedural manual. The Revised Procedural Manual of the PEISS defines the screening procedure and project categories, according to the nature of the project, specific threshold limits, project size, sensitivity, and the project's	The screening procedure of the PEISS is aligned with the World Bank requirements. However, the screening of potential cumulative impacts of other project developments within the same project area of influence is not described in the	implementing and operating the Program site-specific activities. The dedicated E&S staff across DA central, regional, provincial and municipal offices will support building capacity of farmers' association on the national E&S requirements, through partnership with the DENR. The DA E&S Unit will develop a standard Screening Procedure with a checklist of E&S requirements and considerations that will help identify the potential impacts of
	location (e.g. criteria for classifying environmentally critical projects within environmentally critical areas are defined in the screening procedure). The PEISS screening requirements apply to all project development activities in the country and the level assessment of E&S risks is commensurate to the size and scale, and sensitivity of the project (i.e. Environmental Impact Statement. Initial	screening manual of the Philippine EIS system.	the proposed Program activity, including information about assessing potential cumulative impacts with other project developments and associated activities.
	Environmental Examination, or Project Description Report may be prepared depending on the scale of project impacts).		Development of an E&S Manual to harmonize all E&S guidelines, processes, activities, and tools adopted by allied offices and bureaus of DA (e.g., BSWM, BAFE), banner programs and regular activities. Decentralized Grievance Redress Mechanisms (GRM) will also be instituted.
iii. Consideration of strategic, technical, and site alternatives (including the "no action" alternative)	PEISS has provisions for assessing risks, alternatives, and impacts on ecology. Risk assessment is a component of the EIA and deals with the further analysis of hazards identified in the EIA.	The PEISS requirements are in line with the Bank requirements	N/A

Bank Directive Criteria	Systems Assessment	Implementation Gaps	Recommended Actions
iv. Explicit assessment of potential induced, cumulative, and transboundary impacts	The EIA study requirements of the PEISS include the assessment of cumulative impacts and transboundary impacts, particularly for critical projects or projects under Category A.	Low to moderate projects, such as those categorized under Category B, C, and D, or projects that require the preparation of Initial Environmental Examination do not have provisions to assess cumulative impacts. Each project is evaluated as an independent project, and not as a single co-located projects, and without consideration of potential transboundary impacts, and excludes assessment of associated facilities.	The Screening Procedure to be developed by DA shall include information regarding cumulative impacts, potential transboundary effects and an evaluation of potential impacts on associated facilities. If the screening identifies potential cumulative impacts the DA will initiate the preparation of an EIA and develop an ESMP to address such potential cumulative impact.
v. Identification of measures to mitigate adverse environmental or social impacts that cannot be otherwise avoided or minimized	The Philippine EIS System covers the assessment and development of an Environmental Management Plan for risks and impacts that cannot be avoided.	The DENR developed a template checklist for Initial Environmental Examination (IEE) of low to moderate projects or projects under Category C and D. The checklist does not evaluate in detail the potential cause and effect of an activity and the impacts mitigation are not defined in detail, but rather just described briefly and merely selected as a checkbox. The DENR aimed at simplifying the requirement for project developers and reduce the time to review and approve the ECC application. While there is value in making the IEE process straightforward, the developer could benefit from understanding the context of the likely impacts and risks and substantiate the measures needed to address such risks, as these measures are aimed at achieving environmental and social sustainability of long- term operation of the project.	Projects classified as low to moderate project should still undergo the process of Screening, according to the template similar to what had been developed for Bank- financed projects, such as the PRDP and FishCoRe, and follow the process of EIA and ESMP preparation commensurate to the risks and impacts of the proposed Program activities.
vi. Clear articulation of institutional responsibilities and resources to support	Critical projects that are required to develop an Environmental Management Plan (EMP) and Environmental Monitoring Plan (EMoP) are able to define the institutional responsibilities for implementing such plans.	Projects with low to moderate impacts miss out on the institutional mechanism of implementing EMPs and EMOPs, since such projects only requires an IEE Checklist to be filled out. The responsible entities for	The development of Environmental and Social Management Plan (ESMP), with clear description of management measures, performance monitoring

Bank Directive Criteria	Systems Assessment	Implementation Gaps	Recommended Actions
the implementation of plans		implementing the management measures are not clearly articulated, and compliance monitoring reports are not submitted to the DENR.	indicators, and responsible entities, with budget and resources, for substantial to moderate risk projects, must be institutionalized across DA operations.
vii. Responsiveness and accountability through stakeholder consultation, timely dissemination of program information, and responsive grievance redress mechanisms	Based on the field visit to Regions II and III, it was established that the RFOs have robust approaches and implementation to Participatory Rural Appraisal (PRA) and that adoption of research-based solutions are accordingly at acceptable levels with ATI as the key player in collaboration with the LGUs. Region II is vocal about the strong partnership forged with LGUs in that budget deficits are covered by the LGU, citing in particular, the province of Isabela.	The existing practices of DA RFOs are consistent with the Bank requirements. However, the grievance mechanism applied within the PEISS lacks the Bank's minimum requirements as follows: (i) Grievance uptake; (ii) Grievance log/registry; (iii) Disclosure mechanism on grievance procedures; (iv) Transparency about grievance procedure, governing structure, and decision makers; and (v) Appeals process.	Strengthen GRM procedures across the PforR implementation.
Core Principle 2: Natural Habitats and Physical Cultural Resources Environmental and social management procedures and processes are designed to avoid, minimize and mitigate against adverse effects on natural habitats and physical cultural resources resulting from program			
i. Identify and screen for adverse effects on potentially important biodiversity and cultural resource areas and provide adequate measures to avoid, minimize, or mitigate adverse effects.	The PforR excludes activities in critical natural habitats. The Philippine Government legislated laws to protect natural habitats and protected areas through the NIPAS Act and the E-NIPAS. The DENR Biodiversity Management Bureau and the Protected Areas Management Board have the authority to regulate the protection of legally declared protected areas.	The Philippine regulations are consistent with the Bank's requirements.	N/A
ii. Supports and promotes the conservation, maintenance, and rehabilitation of natural habitats; avoids the significant conversion or degradation of critical natural habitats, and if avoiding the significant conversion	The PforR excludes activities in critical natural habitats. PforR activities are within areas that have been designated for agriculture land use and were zoned by respective agencies such as the DA, DAR, PhilRice, and BSWM.	PforR Exclusion List ensures the Program activities will not encroach in areas that have been classified as critical natural habitats. No new construction activities are anticipated in natural habitats since the agriculture program will be expanded only within areas that have already been designated as farmlands and for agricultural purposes.	N/A

Bank Directive Criteria	Systems Assessment	Implementation Gaps	Recommended Actions
of natural habitats is not technically feasible, includes measures to mitigate or offset impacts or program activities.			
iii. Takes into account potential adverse effects on physical cultural property and, as warranted, provides adequate measures to avoid, minimize, or mitigate such effects.	Philippine laws and regulations on physical cultural property are contained in RA 10066 The Philippine Cultural Heritage Act; its amended version, RA 11961 (An Act Strengthening the Conservation and Protection of Philippine Cultural Heritage); and for indigenous cultural heritage, the RA 8371 (Indigenous Peoples Rights Act). The first two RAs contain differentiated approaches and mitigation for tangible (physical or human-made cultural properties) and intangible cultural heritage, including the scope of responsibilities covering various government entities, third parties and communities. In IPRA, indigenous cultural heritage belongs to 'excluded areas from development'.	PforR exclusion list covers high-risk impacts on tangible cultural heritage, including physical activities adversely impacting intangible cultural heritage. Heirloom rice varieties of indigenous peoples and local folk are not within the scope of PforR activities. The national government undertakes the preservation of these varieties through PhilRice and local seed banks. Should construction activities inadvertently impact cultural heritage, chance finds procedures must be in place in accordance with the Bank's minimum requirements.	The inclusion of chance finds procedures in ESMPs to be institutionalized in DA operations for moderate to substantial-risk projects. Minimum requirements to be complied with as to notification, fencing-off, assessment and training procedures.
Core Principle 3: Public and Environmental and social me and/or operations of faciliti	Worker Safety anagement procedures and processes are designed to protec es or other operational practices developed or promoted un preconstruction or rehabilitation of infrastructure located in	t public and worker safety against the potential r nder the program; (b) exposure to toxic chemical	isks associated with (a) construction s, hazardous wastes, and otherwise
i. Promote community, individual, and worker safety through the safe design, construction, operation, and maintenance of physical infrastructure, or in carrying out activities that may be dependent on such infrastructure with safety measures, inspections, or	The Labor Code of the Philippines (PD 442) promotes protection for government and private sector employees, the scope inclusive of agricultural and non-agricultural workers. The lead agency for implementing rules and regulations on public sector employment is the Civil Service Commission (CSC) whilst for the private sector is the Department of Labor and Employment (DOLE). Strengthening of compliance to occupational health and safety (OHS) is governed by RA 11058 (An Act Strengthening Compliance with Occupational Safety and Health (OSH) Standards and Providing Penalties for Violations Thereof Occupational health and safety (OHS). For OHS in the public sector, Joint Memorandum Circular 1	The Philippine framework on worker safety complies with Bank requirements.	E&S screening procedures to include adverse risks and impacts to worker safety as standard protocol.

Bank Directive Criteria	Systems Assessment	Implementation Gaps	Recommended Actions
remedial works incorporated as needed.	2020 is jointly implemented by the CSC with DOLE and the Department of Health (DOH).Laws and regulations to mitigate labor displacement are present in both government and the private sector (e.g., retrenchment and redundancy) with employers required to institute labor saving devices and act in good faith.		
ii. Promotes use of recognized good practice in the production, management, storage, transport, and disposal of hazardous materials generated through program construction or operations; and promotes use of integrated pest management practices to manage or reduce pests or disease vectors; and provides training for workers involved in the production, procurement, storage, transport, use, and disposal of hazardous chemicals in accordance with international guidelines	The RA 9003 and RA 6969 regulate the proper management of solid and hazardous waste, through the DENR mandate. FPA mandates the safe use of pesticides and fertilizers. FPA also regulates the private suppliers to comply with the registration requirements of fertilizers and pesticides before selling them into the market.	The DENR and the FPA requirements on good management of chemicals are aligned with the Bank's requirements. However, it was evident in site visits to FCAs in Region 2 and 3 that farm workers do not comply with the regulatory requirements on proper waste management and safe application of fertilizers and pesticides. Housekeeping at operational facilities of the FCAs could be improved, and the use of PPEs at workplace and when using chemicals need to be strictly monitoring and implemented to avoid occurrence of any potential accidents or incidents	Audit and monitoring of compliance to national regulatory standards on waste management must be strengthened through institutionalizing local ordinances at the municipal and provincial levels, and through the DA RFOs and FCAs.
iii. Includes measures to avoid, minimize, or mitigate community,	The DA collaborates with the National Disaster Risk Reduction Management Center (NDRRMC) and have its own Disaster Risk Reduction Division within its	The DA practice is consistent with the E&S core principles of the Bank.	N/A

Bank Directive Criteria	Systems Assessment	Implementation Gaps	Recommended Actions
individual, and worker risks when program activities are located within areas prone to natural hazards such as floods, hurricanes, earthquakes, or other severe weather or climate events.	organization. The DA DRRD monitors the potential risks of natural hazards and provides emergency response actions when hazards and risks occur, such as for instance during typhoon event, severe weather conditions, or volcanic eruption.		
Core Principle 4: Land Acqui	sition		
Land acquisition and loss of	access to natural resources are managed in a way that ave	olds or minimizes displacement, and affected peo	ople are assisted in improving, or at
i Avoid or minimize land	Under RA 10752 (An Act Eacilitating the Acquisition of	Large-scale land acquisition belongs to the list	E&S risk screening and the
acquisition and related	Right-Of-Way Site or Location for National Government	of high-risk activities excluded from the PforR	necessary due diligence to be
adverse impacts	Infrastructure Projects also known as The Right-of-Way	program. The Program fits into the description	undertaken for activities involving
	Act), acquisition of private property for public purposes shall not proceed without providing just compensation for landowners. The avoidance and minimization of adverse impacts is also built into the provisions on Ecological and Environmental Concerns (Sec. 8). It reads, 'In cases involving the acquisition of right-of-way site or location for any national government infrastructure project, the implementing agency shall consider the ecological and environmental impact of the project. Before any national government project could be undertaken, the implementing agency shall consider environmental laws, land-use ordinances, and all pertinent provisions of RA 7160 (Local Government Code).' RA 10752 is further articulated in full by the Department of Public Works and Highways (DPWH) in its 2017 Right-of- Way Acquisition Manual (DRAM)	of 'national government projects' where RA 10752 will apply (Sec. 3). Procedures on land donations (2017 DRAM Sec. 2.13) has no E&S due diligence procedures compared to the Bank. Lands acquired for enterprise development are lands titled to the FCA. In some cases, formal arrangements are entered with respective landowners for the lease of land for developmental purposes.	new development or in situ expansion that may require land acquisition through negotiated sale or donation.
ii. Identify and addresses	RA 10752 provides for the conduct of due diligence on the	Philippine policy generally meets Bank	N/A
economic and social	possible physical and/or economic displacement of	requirements on addressing displacement and	
impacts caused by land	persons caused by land acquisition. Further, informal	recognizing the rights of informal settlers. These	
acquisition or loss of	settlers are provided the choice of compensation for		

Bank Directive Criteria	Systems Assessment	Implementation Gaps	Recommended Actions
access to natural resources, including those affecting people who may lack full legal rights to assets or resources they use or occupy	affected structures or replacement housing. Eligibility criteria are applied, including compliance of affected settlers to the cut-off date.	are high-risk activities considered excluded in PforR activities.	
iii. Provide compensation sufficient to purchase replacement assets of equivalent value and to meet any necessary transitional expenses, paid prior to taking of land or restricting access	Under the rules of negotiated sale, the compensation price offered to landowners is the sum of three elements: (i) current market value of the land; (ii) replacement cost of structures and improvements therein; and (iii) current market value of crops and trees therein (RA 10752, Sec. 5). Based on the eligibility classification of project-affected households and the kind of losses or damages incurred during displacement, the compensation price will cover all 3 elements or only 1-2 elements.	PforR activities will not likely involve the acquisition of and payment of compensation for private lands. Enterprise development projects are likely proposed in lands already owned by and titled to the name of the FCAs.	The Program may set an additional condition that activities supported by PforR must be on lands under formal title or under secure tenure arrangements by concerned FCAs.
iv. Provide supplemental livelihood improvement or restoration measures if taking of land causes loss of income- generating opportunity (e.g., loss of crop production or employment)	Livelihood restoration programs for project-affected households are costed in the ROW budget or appropriations prepared by implementing agencies (2017 DRAM, Sec. 2.22). Under the Urban Development and Housing Act (UDHA), the entities managing resettlement sites (e.g., LGU, National Housing Authority (NHA) or the Socialized Housing and Finance Corporation (SHFC)) play an important function in facilitating support for livelihood programs through networking and resource pooling activities.	PforR activities are not expected to lead to resettlement programs with livelihood restoration activities.	N/A
v. Restore or replace public infrastructure and community services that may be adversely affected.	Clearance of public improvements along the ROW is provided for under the 2017 DRAM (Sec. 2.25). Like private structures, public or community infrastructure can only be cleared after fully acquired. Reconstruction of the structure by contract or administration is allowed depending on the agreements reached with the LGU or community. The roles and responsibilities of the parties are formalized under an Agreement to Demolish, Remove and Reconstruct Improvements (ADRRI).	PforR activities are largely in-situ or place- based. These will not entail any adverse physical impact on any public or community infrastructure.	N/A

Bank Directive Criteria	Systems Assessment	Implementation Gaps	Recommended Actions
vi. Include measures in order for land acquisition and related activities to be planned and implemented with appropriate disclosure of information, consultation, and the informed participation of those affected	Information disclosure covers the following: (i) affected lands through a public posting of the list of affected lots in conspicuous places within the city/municipality and the vicinity of the implementing agency; (ii) appraised value of lands, structures and improvements; and (iii) final resettlement plan (2017 DRAM, Sec. 2.5). ROW clearance is also required to abide by eight protocols for proper and humane relocation and resettlement (UDHA, Sec. 28). The protocols include advanced disclosure of eviction or demolition dates (at least 30 days before) and adequate consultations with project-affected households and the communities receiving them (i.e., host communities of resettlement sites).	Resettlement is a high-risk activity excluded from the Program.	N/A
Core Principle 5: Social Cons	iderations - Indigenous Peoples and Vulnerable Groups		
Due consideration is given t	o cultural appropriateness of, and equitable access to, progr	am benefits giving special attention to rights and	interests of Indigenous Peoples and
to the needs or concerns of	vulnerable groups.		
I. Give attention to groups vulnerable to hardship or discrimination, including as relevant the poor, the disabled, women and children, the elderly, ethnic minorities, or other marginalized groups; and, if necessary, take special measures to promote equitable access to the PforR Program benefits	Policies for the protection of vulnerable workers are articulated in the following: (i) RA 9208 (Anti-Trafficking); (ii) RA 9231, DOLE DO 65-04 (Child Labor); and (iii)RA 10364 (Forced Labor). Among prohibited acts under RA 10364 is debt bondage or the pledging labor or services as security or payment of a debt. Additionally, laws against discrimination and exclusion exist for women (RA 7192 and 9710) and indigenous peoples (RA 8371). There are also policies dedicated to the welfare and recognition of specific groups: (i) RA 7432 (Senior Citizens Act) and RA 9257 (Expanded Senior Citizens Act of 2003); (ii) RA 7277 (Magna Carta for Persons with Disabilities, as amended by RA 9442); and (iii) RA 8972 (Solo Parents Act) Labor and social welfare policies and laws are silent on the protection of unskilled agricultural workers displaced by the loss of agricultural jobs due to mechanization, changes in land use, or internal conflict.	ne exclusion of vulnerable agricultural workers may be heightened by the Program without adequate risk screening, identification, and mitigation. Landless workers can be displaced from labor- intensive activities replaced by mechanization. Displacement of unskilled agricultural workers is not covered by existing labor and social welfare policies. The dwindling of agricultural jobs or prevalence of seasonal employment is generally described as underemployment which is high in agriculture (Briones 2017; PSA 2022). For agricultural workers, underemployment including the loss of jobs due to mechanization is addressed by 'safety nets' in the form of training and livelihood assistance under the responsibility of ATI, PHilMech and LGUs.	activities to include conditions aggravating the exclusion of vulnerable agricultural workers, and the incidence of child and forced labor arrangements in Program sub-sectors (crop farming, livestock and inland aquaculture). Mapping and integration of agricultural information databases to consider including data on child and forced labor hotspots in agriculture.

Ban	k Directive Criteria	Systems Assessment	Implementation Gaps	Recommended Actions
			Gender disparities between women and men	
			could worsen in terms of wage rates, work	
			hours and working conditions. Indigenous	
			peoples are also at-risk of exclusion as culture	
			sensitivities and FPIC requirements tend to	
			deter engagement with them under DA's	
			regular programs.	
			The incidence of child and forced labor can	
			worsen in the absence, for one, of systematic	
			detection and monitoring.	
Cor	e Principle 6. Social Conf	lict		•
Avo	id exacerbating social co	nflict, especially in fragile states, post-conflict areas, or arec	as subject to territorial disputes.	
i.	Considers conflict	To address social conflict, relevant legislation and policies	Program activities will not likely take place in	E&S due diligence to cover security
	risks, including	consist of: (i) RA 9285 of 2003 (An Act to Institutionalize the	high-risk areas with latent or active social	situation and hotspots where
	distributional equity	use of an Alternative Dispute Resolution System); (ii) RA	conflict. BARMM, a safety and security hotspot,	Program activities are concentrated
	and cultural	6713 (An Act Establishing a Code of Conduct and Ethical	is not within the Program scope. Nevertheless,	or have a significant presence.
	sensitivities	Standards for Public Officials and Employees); (iii) RA	for a nationwide Program running for five years,	Avoidance strategies of the
		11188 (An Act Providing for the Special Protection of	constant monitoring by DA of the security	Program can contain active list of
		Children in Situations of Armed Conflict); and (iv) RA 9372	situation in certain hotspots may be necessary.	security hotspots. Should security
		of 2007)An Act to Secure the State and Protect Our People	These hotspots could be election-related or be	forces or the military be employed,
		From Terrorism).	about legacy issues linked to agriculture (e.g.,	a Memorandum of Agreement or
			labor, agrarian unrest), historical insurgency,	any similar enabling mechanism
			the operation of armed groups, civil unrest or	will be crafted that includes for a
			post-disaster humanitarian crises.	Rules of Engagement controlling
				the use and degree of force,
				especially specifying circumstances
				and limitations for engaging in
				combat or use of excessive force.

Annex 3 – Department of Agriculture and its Attached Agencies, Functions and Responsibilities, Institutional E&S Capacity Assessment

Table A0-5: Department of Agriculture Agencies, Offices and Line Bureaus and Functions and Duties, and E&S Capacity Assessment

Dep Age Bur	partment of Agriculture encies, Offices, and Line reaus	Functions and Duties, Roles and Responsibilities	E&S Specialists in the Organization
1.	Office of the Secretary (OSEC) of the Department of Agriculture (DA) Central Office	The DA is responsible for the promotion of agricultural development in the Philippines. The DA creates policy frameworks, establishes public investments, and generates support services that are needed for domestic and export-oriented business enterprises. The DA envisions a "food-secure and resilient Philippines with empowered and prosperous farmers and fishers". In partnership with the private sector, the DA aims to increase agricultural productivity and profitability while taking into account sustainable, competitive, and resilient technologies. The Office of the Secretary (OSEC) establishes rules, regulations, and other issuances in carrying out the mandate of the DA. The OSEC supervises and controls the overall functions and activities of the department. The OSEC will oversee the PforR PSAT implementation.	E&S Specialists are deployed at the Special Projects Coordination and Management Assistance Division (SPCMAD) under the Field Operations Service (FOS). ⁴⁵
2.	Planning and Monitoring Services (PMS)	The PMS leads the conduct of internal and external periodic evaluations of all DA programs and projects primarily to evaluate the effects and benefits of programs to farmers/fisherfolk. The PMS formulates medium and long-term plans and the corresponding public investment program to address food security, poverty alleviation, social equity, and income enhancement concerns. The PMS leads the annual plan and budget preparation and oversees monitoring and evaluating the medium and annual plans and programs and other concerns of the department. The PMS works with the SPCMAD for internationally funded programs.	The PMS does not allocate human resources dedicated to E&S systems implementation. The appointment of E&S specialists is made per program or project, and only if required by the respective donor and funding agencies.
3.	Field Operations Services (FOS)	The FOS is the coordinating body and the functional link of the DA Central Office to the Regional Field Offices (RFOS), Bureaus (BFAR, ATI, BAI, BAFE, BAFS, BPI, BSWM, BAR, PRRI), and Attached Agencies (i.e. PhilMECH, PCAF, FPA, ACPC, NFRDI, NMIS, PCC, PHILFIDA), including other offices (NDA, NFA, NIA, PHILRICE, PCA, NTA, PFDA, SRA), for program implementation and timely delivery of public goods and services to the Local Government Units (LGUs) through the RFOs. The FOS coordinates the technical support actions in the formulation of operational policies and program guidelines for the RFOs. It also coordinates and implements disaster risk reduction management activities and maintains the operational database of commodity programs, and agri-infrastructure foreign-assisted projects. The SPCMAD reports under the FOS.	E&S specialists of the foreign-assisted projects are housed at the SPCMAD, under the supervision of the FOS. E&S specialists are appointed at the National and Regional Project Management Offices of the specific projects or programs of FAPs / LFPs.

⁴⁵ Department of Agriculture Organogram was established through the Executive Order 366, October 4, 2004, Directing a strategic review of operations and organizations of the Executive Branch and providing options and incentives for government employees who may be affected by the rationalization of the functions and agencies of the executive branch. Organogram Link (as of January 2023), accessed on November 25, 2024: <u>https://www.da.gov.ph/wp-content/uploads/2023/01/DA-Organizational-Chart-January-2023.jpg</u>

De Ag Bu	partment of Agriculture encies, Offices, and Line reaus	Functions and Duties, Roles and Responsibilities	E&S Specialists in the Organization
4.	SpecialProjectsCoordinationandManagementAssistanceDivision (SPCMAD)	SPCMAD's main task is to ensure the smooth implementation of all foreign-assisted projects (FAPs) and locally funded projects (LFPs). The Project Development Service (PDS) of the SPCMAD was institutionalized to effectively transition project development projects from project preparation to project implementation, and from project completion to project evaluation. The SPCMAD establishes Project Management Offices (PMOs) that then execute management systems, procedures, plan of activities, annual work, and financial plans, and coordinates operational monitoring and submission of progress reports and other information required by project stakeholders of the FAPs and the LFPs.	The PMOs appoint E&S specialists per project or program according to the requirements of the FAPs / LFPs.
5.	Information and Communications Technology Services (ICTS)	The ICTS is responsible for formulating plans, policies, operating standards, and guidelines in ICT activities. The Database Management Division (DMD) under the ICTS manages a large collection of interrelated agricultural databases emanating from various DA programs, projects, activities, and other data holdings. The ICTS has created the Data Privacy Protection and Cyber Security Division (DPPCSD) to institutionalize the national data privacy and cyber security plan of the DA. The DPPCSD monitors the implementation of privacy, data protection, and cyber security measures, including continuous assessment, review, and revision of data privacy and information policy, including the information security incident management and preparation of reports and other documentation concerning security incidents or data breaches. ⁴⁶ The ICTS has set up a National Information Network connecting the regional, provincial, and municipal offices for easy access to data on agriculture and fisheries research technology. The ICTS works with the Department of Information and Communication Technology (DICT) for the establishment of infrastructure facilities to increase connectivity of the systems across various platforms of DA offices and agencies.	The ICTS appoints Data Protection Officer who is accountable for the compliance of DA activities with applicable rules and regulations relating to data protection and privacy.
6.	Agribusiness and Marketing Assistance Service (AMAS)	One of the core functions of AMAS is to develop and facilitate the implementation of a national plan for agribusiness development and investment promotion for industries with high potential for growth and global market competitiveness. The AMAS is the focal unit of the DA responsible for enterprise development, domestic and export development, logistics distribution interventions, agribusiness investments, consumer affairs, promotion of product standards and food safety, <i>halal</i> , and organic farming. AMAS is the lead unit of the One Stop Agribusiness Center (OSAC) that provides relevant agribusiness information and referrals to concerned institutions and individuals.	The AMAS has in-house staff who disseminate market information and analysis (e.g. prices, volume, supply, and demand) to agribusiness stakeholders. appoints staff who are facing stakeholders. AMAS is widely involved in stakeholder engagement through its market linkage and product promotion activities and events. Stakeholder engagement activities are done

⁴⁶ Specific functions of the Data Privacy Protection and Cyber Security Division (DPPCSD) are enumerated in the Special Order No. 479 series of 2019, link accessed on November 25, 2024, <u>https://www.da.gov.ph/wp-content/uploads/2019/06/so479_s2019.pdf</u>

Department of Agriculture Agencies, Offices, and Line Bureaus	Functions and Duties, Roles and Responsibilities	E&S Specialists in the Organization
	AMAS maintains a registry database of Farmers and Fisherfolk Enterprises and agri-based MSMEs.	in collaboration with the LGUs, private sectors, and investment promotion agencies.
REGIONAL FIELD OFFICES (RFOs)	The DA has 16 regional offices located in BARMM, CAR, Region I, Region II, Region III, Region IV- A, Region IV-B, Region V, Region VI, Region VII, Region VIII, Region IX, Region X, Region, XI, Region XII, and Region XIII. Program activities will be implemented in partnership with the respective Regional Field Offices. In the case of BARMM, the Ministry of Agriculture, Fisheries and Agrarian Reform (MAFAR) leads the regional promotion of sustainable agri-fishery growth and development, equitable land distribution, and tenurial security in the Bangsamoro Region. BARMM MAFAR will not	The PSAT Program is national in scope and will cover project activities across all 16 regions, avoiding areas of high risk in terms of contextual, political, technical, environmental, social, and fiduciary. DA RFOs has no dedicated E&S personnel for its regular projects.
BUREAUS	participate in the implementation of the PforR PSAT Program since its budget allocation and processes are under MAFAR. The DA has eight Bureaus, namely the Bureau of Fisheries and Aquatic Resources (BFAR), the Agricultural Training Institute (ATI), Bureau of Animal Industry (BAI), Bureau of Agricultural and Fisheries Engineering (BAFE), Bureau of Agricultural and Fisheries Standards (BAFS), Bureau of Plant Industry (BPI), Bureau of Soil and Water Management (BSWM), Bureau of Agricultural Research (BAR), and the Philippine Rubber Research Institute (PRRI).	The PSAT Program will tap resources from the ATI, BAFE, BAFS, BSWM, and BAR. The respective Bureaus do not have E&S specialists.
 Bureau of Agricultural and Fisheries Engineering (BAFE) 	BAFE coordinates and monitors the enforcement of standards and other regulatory policies on agricultural and fishery engineering; implements accreditation and registration schemes for agriculture and fishery machinery, tools, and equipment, in coordination with technology generators; and issues permits to operate the agriculture and fishery machinery, tools and equipment manufacturers, fabricators, assemblers and importers.	BAFE regulates the use of mechanical equipment and issues permit-to-operate according to national regulatory requirements.
8. Agricultural Training Institute (ATI)	The ATI designs, organizes, and conducts training modules, and information education, and communication (IEC) support activities. ATI organizes and administers capacity building programs for farmer cooperative associations, farm extension workers, in partnership with state universities and colleges.	ATI has about 500 staff who are involved in capacity-building activities and IEC programs of the DA, attached agencies, bureaus, corporations, and regional field offices. The existing number of staff is said to be insufficient to fulfil the training needs requirements of the farm workers and staff of the DA and the attached offices. ⁴⁷

⁴⁷ Based on information provided by ATI key informant interview participant in November 2024.

Department of Agriculture Agencies, Offices, and Line Bureaus	Functions and Duties, Roles and Responsibilities	E&S Specialists in the Organization
9. Bureau of Agriculture and Fisheries Standards (BAFS)	The BAFS formulates and enforces standards of quality in the processing, preservation, packaging, labelling, importation, exportation, distribution, and advertising of agricultural and fisheries products. The Bureau conducts regular inspection of processing plants, storage facilities, abattoirs, and public and private markets to ensure freshness, safety, and quality of product, according to the amendment of the Organic Agriculture Act of 2010. BAFS formulates and updates standards relevant to organic agriculture, issues accreditation to (a) third-party organic certifying bodies, (b) PGS groups, (c) private groups or organizations engaged in organic agriculture as direct farm producers, promoters or advocates, or as marketer of organic agriculture produce – collectively called as "organic-certifying bodies or OCBs" to provide certification to organic management system (farms etc.), and certify five individual farms as a core PGS Group.	BAFS is not on the EFA list of agencies. Their involvement in the PforR to be confirmed with DA.
10. Bureau of Plant Industry (BPI)	The BPI maintains the safety and integrity of plant food and supports the export industry through proactive biosecurity. The BPI ensures the availability of high-quality seeds and advanced farming technologies. The Bureau has six divisions, which are the Crop Research and Production Support Division, the Agricultural Engineering Division, the Crop Pest Management Division, the Plant Product Safety Services Division, the National Plant Quarantine Services Division, and the National Seed Quality Control Services Division. BPI operates five Crop Research Development and Production Support Centers, located in Los Banos, Davao, Guimaras, Baguio, and La Granja.	BPI provides accreditation to FCAs for planting rice seed variety. It has a Crop Pest Management Division regulating pest control in crops and Plant Product Safety Services Division with analytical laboratory handling pesticides testing.
11. Bureau of Soil and Water Management (BSWM)	Provides continuing assessment of the sustainability of the country's agricultural production systems, particularly soils and water as vital agricultural resources, and Recommends appropriate soil and water management policies to address issues on food security, environment, biodiversity, and climate change, including vulnerability and disaster risk assessment relative to agriculture	BSWM has environmental capacity. It operates a soils laboratory and conducts national soil and water resources research and development and extension services. Its publication in December 2023 describes the state of the Philippine soil and water resources and the DA-BSWM's National Soil Health Program (NSHP) activities. It has a program for sustainable management of land to address land degradation, enhance biodiversity, and adapt and mitigate climate change.
Research (BAR)	(R4D) programs, activities, and projects. The R4D program is implemented by the DA national and regional offices, state universities, colleges, and other research institutions. The R4D	determined.

Department of Agriculture Agencies, Offices, and Line Bureaus	Functions and Duties, Roles and Responsibilities	E&S Specialists in the Organization
	 programs on technology development and scaling include rice, high-value crops, corn, aquaculture and fisheries, livestock, climate change, and the sustainable community-based action for R4DE for livelihood enhancement, upliftment, and prosperity (SCALE UP). Improving rice varieties, enhancing seed distribution, and exploring seed screening techniques; Upscaling integrated commodity systems, implementing effective pest management, advancing agricultural innovation, and developing socially acceptable production machinery; Enhancing machinery resilience to climate change, creating value-added machinery, setting local rice product standards, innovating value-added rice products, and ensuring food safety; Developing enterprises for rice by-product utilization and development and enhancing both food and non-food rice by-products; Assessment of water quality in small-scale irrigation systems; and Assessment of various aspects of rice production and technology impact, conducting socio-economic studies on fortified rice adoption and conducting policy studies related to seed systems, agroecosystems, land reform, mechanized farming, cooperatives, and marketing strategies for rice products. 	
ATTACHED AGENCIES	Among the eight attached agencies are: ACPC, FPA, PCC, PhilMECH, NFRDI, NMIS, PCAF, and PHILFIDA	
13. Fertilizer and Pesticide Authority (FPA)	The FPA establishes rules and regulations for the registration and licensing of handlers of fertilizers, pesticides, and other agricultural chemicals, collect fees pertaining thereto, as well as the renewal, suspension, revocation, or cancellation of such registration or licenses and such other rules and regulations as may be necessary; establishes and implements regulations governing the import and export of fertilizer inputs and when required, import and/or export such items, and controls and regulates all aspects of fertilizer production	The FPA Central Office relies on field personnel appointed by the regional offices in monitoring compliance to FPA standards and regulations on safe use of pesticides.
14. Philippine Center for Postharvest Development and Mechanization (PhilMech)	PhilMech's mandate is to generate, extend and commercialize appropriate problem-oriented agriculture and fishery postharvest and mechanization technologies, practices and systems. Its main function is to conduct innovative studies, research and development, acquisition, adaptation and development strategies for the effective dissemination and application of technologies. The organization has an integrated management system (IMS) unit responsible for implementation and documenting compliance with the Quality Management System (ISO)	PhilMech has appointed Pollution Control Officers who are accredited with the DENR. The PhilMech operation is ISO 14001:2015 accredited. It has an integrated management system (IMS) policy that upholds the quality, environment, health, and safety objectives of the organization.

Department of Agriculture Agencies, Offices, and Line Bureaus	Functions and Duties, Roles and Responsibilities	E&S Specialists in the Organization
	9001:2015), the Environmental Management System (ISO 14001:2015), and the Occupational Health and Safety Management System (ISO 45001:2018).	
 Philippine Council for Agriculture and Fisheries (PCAF) 	The PCAF was established to consolidate the two councils – the National Agricultural and Fishery Council and the Livestock Development Council. PCAF serves as the forum for consultative and continuing discussions amongst stakeholders within the agriculture and fisheries sector. The PCAF assists in coordinating and integrating the private sector activities with that of the government sector on food development programs agriculture and fisheries sector.	PCAF supports FCAs and farmer groups and contributes to strengthening engagement amongst stakeholders.
ATTACHED CORPORATIONS	DA has eight attached corporations: NDA, NFA, NIA (transferred to the Office of the President in October 2024), PHILRICE, PCA, NTA, PFDA, SA.	
16. National Food Authority (NFA)	The NFA's mission is to promote the integrated growth and development of grains industry covering rice, corn, feed grains, and other grains like sorghum, mongo and peanut. NFA procures palay locally and processes the palay to serve as buffer stock at strategic locations across the Philippines. NFA manages the efficient and effective acquisition, quality maintenance, and disposition of the grains buffer stock during emergencies and calamities.	NFA operates its own rice milling and storage facilities and employs staff to maintain such facilities. Staff have an awareness of the national EIA requirements for establishing and operating such facilities.
17. Philippine Rice Institute (PhilRice)	PhilRice is a government corporate entity under the Department of Agriculture created in 1985 to help develop high-yielding and cost-reducing technologies to help farmers increase their harvest and income and to provide enough rice supply for all Filipinos. PhilRice maintains a research and development facility in Nueva Ecija and operates branch stations across the Philippines.	In 2006, PhilRice CES received ISO 9001, ISO 14001, and OHSAS 18001 certifications, with the latter migrating to ISO 45001 in 2023. From 2019 to 2020, all Branch Stations received ISO 9001 certification, adopting the Integrated Management System at the Central Experiment Station. These systems unify the organization, resources, processes, and practices to achieve the organization's purpose and mission PhilRice adheres to a system of quality management, environmental protection, and occupational health and safety in its operations to advance rice research for development and extension.

Annex 4 – Capacity Assessment of the Department of Agriculture and its Attached Agencies

The Bank team posted an online Google Form to the Department of Agriculture and its attached Agencies with a set of questions related to understanding the internal capacities and knowledge of environmental and social systems of the staff within the respective agencies. The questionnaire was presented in three sections: Section 1 asks about the respondent's affiliation within the Department; Section 2 asks about the respondent's profile, professional background, and years of service at the Department, Section 3 asks about the respondent's knowledge of Environmental and Social Systems and understanding of the World Bank Environmental and Social Core Principles. **Online responses were received between January 14 to 22, 2025**. The total number of respondents is 18. Key responses are summarized below.

Respondents Profile

- 5 out of 18 (27.8%) are employees of the Department of Agriculture, followed by the DA Regional Office in Region 3 (2 responses). Individual responses were received from other agencies such as the BFAR, BAFS, PhilRice, and the Internal Audit Services.
- 55.5% of the responses were received from the National Capital Region and the Central Office, in Metro Manila.
- 50% of the respondents are male, while the other half are female.
- None of the respondents is a member of the indigenous cultural communities.
- The respondents occupy varying positions within the Department, from administrative officer, engineer, section chief, field operation, deputy director, supervisor, and division head.
- 55.6% of the respondents have completed post-graduate or master's degree.
- 66.7% occupy managerial or supervisory positions.
- 77.8% of the respondents are permanent employees
- 33.3% of the respondents have served the Department for 6 to 10 years, followed by those working between less than 5 years, 15 to 20 years, and 21 to 30 years at 16.7% respectively.
- 61.1% of the respondents are agriculturists or have completed agribusiness management courses or agricultural economics.

Experience working with International Financing Institutions (IFIs)

- 55.6% have worked with IFIs (e.g. World Bank, ADB, AIIB, EIB, JICA, KFW, etc.)
- Such projects include the Philippine Rural Development Bank with the World Bank, Technical Cooperation with JICA, Philippine Fisheries and Coastal Resiliency Project with the World Bank.

Knowledge and experience in World Bank E&S requirements

- 72.2% of the respondents have not received any formal training on the environmental and social framework (ESF), nor the environmental and social standards (ESS) of the World Bank.
- Majority of the respondents have an 'average' familiarity with the E&S systems requirements of the World Bank.
- Responses in relation to the E&S topic statements vary between "available and operational, and "none".
- In terms of familiarity or experiences and challenges with E&S, and how to overcome these challenges, the following responses were provided:
 - The organizational capacity in terms of budget, as a Bureau, hinders the scope of implementation of plans and programs. Moreover, overlapping mandates with other government agencies can be tagged as one of the issues of the Bureau.
 - Political interference is also an issue in the effective implementation of interventions.
 - Not many staff were training on E&S.

- Implementation of innovation strategies, evaluation of impacts of the projects, ensuring the preventive, mitigating, and enhancement measures to protect the environment and the community's welfare. These were addressed through building heavy partnerships with different stakeholders.
- Delays in the LGU compliance on SES documentary requirements to include the following:
 - Land acquisition documents (deed of donation, proof of ownership)
 - Gratuitous Special Use Permit (GSUP) or Special Land Use Permit (SLUP)
 - NCIP Certification Pre-Condition (CP)and Certificate of Non-Overlap (CNO)
- Coordination and personal follow ups with the LGUs and concerned offices or agencies [is essential]
- Educating new hires.
- Internal conflict (employees' conflict).
- Organizational conflict among beneficiaries that resulted in non-operational status and non-sustainability of the project. This challenge was addressed with consultations and participatory problem solving, also close monitoring an operation and maintenance audit/inspection.
- In terms of training, the following topics are suggested in order of choice by the respondents:
 - i. Environmental and social systems and protocols
 - ii. Stakeholder engagement (i.e. public consultation, community outreach, information dissemination and education)
 - iii. Environmental and social impacts assessment guidelines and procedures
 - iv. Biodiversity protection and conservation
 - v. Indigenous peoples (IP) rights, laws, and procedures (i.e., FPIC process)
 - vi. Project Management (Planning, implementation, monitoring and evaluation)
 - vii. Pollution prevention and management
 - viii. Financial intermediaries (i.e., Environmental and social management systems with respect to project finance, private sector corporate finance, medium and small enterprise finance, microfinance, etc)
 - ix. Cultural heritage protection regulations
 - x. Gender/gender and development (GAD) mainstreaming, planning/Gender-Based Violence, Sexual Exploitation, Abuse and Harassment
 - xi. Grievance Redress (i.e., conflict resolution)
 - xii. Occupational health and safety requirements
 - xiii. Labor management and occupational health and safety regulations
 - xiv. Socio-economic impact assessment
- Preferred modes of training or capacity-building activities
 - Face-to-face sessions or workshops
 - Virtual learning sessions or knowledge or experience sharing and webinars
 - Self-paced learning courses

Recommendations to address gaps in E&S Capacity of the Department of Agriculture and attached agencies

- 72.2% of the respondents recommend hiring additional staff
- 56.6% suggest improving project coordination and internal communication mechanisms
- 50% recommends developing specific operational procedures and processes on E&S management systems
- 44.4% recommend providing infrastructure or facility or designated physical workspace
- 44.4% recommend providing additional office equipment and tools
- Other responses are:
 - Additional Plantilla position and conduct of socio-economic impact analysis, environmental analysis, and climate risk vulnerability assessment

Philippine Sustainable Agriculture Transformation (PSAT) Environmental and Social Capacity and Systems Assessment ONLINE SURVEY QUESTIONNAIRE

a) Objective:

To determine the level of environmental and social systems capacity and to assess the effectiveness of implementing the environmental and social systems of the Department of Agriculture (DA) and its attached agencies in implementing the PSAT program.

- b) Method of Assessment: Online survey tool
- c) Link: Google Form
- d) Target Respondents:

Focal staff and program-hired personnel of the respective agencies of the Department of Agriculture who are involved in the Para sa Masaganang Bagong Pilipinas (MBP) and PSAT program 2024 to 2027.

- e) Procedure:
 - 1) The link to the online survey questionnaire will be sent by email to the target respondents who will be requested to fill out the form within 3 days from the start date of distribution of the online platform link.
 - 2) Survey responses will be automatically collated in Excel format through the online survey platform.

SURVEY QUESTIONNAIRE

I. AGENCY PROFILE

- 1. Agency/Organization:
- 2. Region:
- 3. Province:
- 4. Municipality:

II. RESPONDENT PROFILE

- 1. Name (Last Name, Given Name)
- 2. Official designation:
- 3. Age Group
 - a) 18 to 24
 - b) 25 to 29
 - c) 30 to 34
 - d) 35 to 39
 - e) 40 to 49
 - f) 50 to 59
 - g) 60 and above
- 4. Gender

5.

- a) Female
- b) Male
- c) Prefer not to Disclose
- Are you a member of an ethnic or indigenous peoples' group?
 - a) Yes

b) No

If yes, which ethnic group or indigenous peoples' group are you from?

6. Educational level:

- a) Undergraduate
- b) Bachelor's Degree
- c) Post-graduate degree/Masteral Level
- d) Doctoral/PhD level

7. Role and responsibilities:

- a) Managerial/supervisory
- b) Technical position/consultant
- c) Administrative
- d) Others, please specify: _____

8. Type of service tenure

- a) Permanent employee
- b) Contractual employee / Contract of service
- c) Job order/Temporary employee

9. Years in service:

- a) Less than 5 years
- b) 6 to 10 years
- c) 11 to 15 years
- d) 15 to 20 years
- e) 21 to 30 years
- f) 31 to 40 years
- g) More than 40 years

10. Professional background

- a) Institutional/Legal Specialist
- b) Environmental Science
- c) Social Science
- d) Agriculture, Agriculture Economics, Agribusiness
- e) Engineering
- f) Management/Public Administration
- g) Economics/Finance
- h) Others, please specify:

III. ENVIRONMENTAL AND SOCIAL MANAGEMENT SYSTEMS CAPACITY ASSESSMENT

- 11. Experience in the delivery of projects financed by International Financing Institutions (i.e. World Bank, ADB, AIIB, EIB, JICA, KFW, etc.)
 - a) Yes
 - b) No
- 12. If yes, what is the Project Name/s and International Financing Institution/s?
- 13. Training activities related to environment and social systems and framework, and environmental and social standards of the World Bank, or other international financing institutions, attended in the last three (3) years
 - a) Yes
 - b) No
 - 14. If yes, what is the name of the training?

15. Level of familiarity with the following social and environmental safeguards

Choose among the levels: **poor, below average, average, above average, excellent**, in terms of:

- a) Environmental and social systems and protocols
- b) Environmental and social impacts assessment guidelines and procedures
- c) Labor management and occupational health and safety regulations
- d) Occupational health and safety requirements
- e) Pollution prevention and management
- f) Involuntary resettlement (involves land acquisition and physical and/or economic displacement of project-affected households)
- g) Biodiversity protection and conservation
- h) Indigenous peoples (IP) rights, laws, and procedures (i.e. FPIC process)
- i) Cultural heritage protection regulations
- j) Stakeholder engagement (i.e. public consultation, community outreach, information dissemination and education)
- k) Financial intermediaries (i.e., Environmental and social management systems with respect to project finance, private sector corporate finance, medium and small enterprise finance, microfinance, etc)
- I) Grievance Redress (i.e., conflict resolution)
- m) Gender/gender and development (GAD) mainstreaming, planning/Gender-Based Violence, Sexual Exploitation, Abuse and Harassment
- n) Project Management (Planning, implementation, monitoring and evaluation)
- 16. Familiarity with E&S internal systems procedures (i.e., availability and implementation of operational manuals, guidelines, and processes, etc.) in DA and attached agencies

Choose among 1 = available and operational, 2 = available but not implemented, 3 = Others, please specify: ongoing revisions, for signature, etc., 0 = none

- a) Environmental and social systems and protocols
- b) Environmental and social impacts assessment guidelines and procedures
- c) Labor management and occupational health and safety regulations
- d) Occupational health and safety requirements
- e) Pollution prevention and management
- f) Involuntary resettlement (involves land acquisition and physical and/or economic displacement of project-affected households)
- g) Biodiversity protection and conservation
- h) Indigenous peoples (IP) rights, laws, and procedures (i.e., FPIC process)
- i) Cultural heritage protection regulations
- j) Stakeholder engagement (i.e., public consultation, community outreach, information dissemination and education)
- k) Financial intermediaries (i.e., Environmental and social management systems with respect to project finance, private sector corporate finance, medium and small enterprise finance, microfinance, etc)
- I) Grievance Redress (i.e., conflict resolution)
- m) Gender/gender and development (GAD) mainstreaming, planning/Gender-Based Violence, Sexual Exploitation, Abuse and Harassment
- n) Project Management (Planning, implementation, monitoring and evaluation)
- 17. For those familiar/with experience, can you cite the challenging E&S issues you/your team faced in performing your tasks and how you/your team were able to overcome these

issues? If you were not able to resolve these issues, what, in hindsight would be your suggestions in attempts to resolve the issues?

- 18. Training needs on Environmental and Social Systems and Impacts and Risks Assessment, please choose:
 - a) Environmental and social systems and protocols
 - b) Environmental and social impacts assessment guidelines and procedures
 - c) Labor management and occupational health and safety regulations
 - d) Occupational health and safety requirements
 - e) Pollution prevention and management
 - f) Involuntary resettlement (involves land acquisition and physical and/or economic displacement of project-affected households)
 - g) Biodiversity protection and conservation
 - h) Indigenous peoples (IP) rights, laws, and procedures (i.e., FPIC process)
 - i) Cultural heritage protection regulations
 - j) Stakeholder engagement (i.e. public consultation, community outreach, information dissemination and education)
 - k) Financial intermediaries (i.e., Environmental and social management systems with respect to project finance, private sector corporate finance, medium and small enterprise finance, microfinance, etc)
 - I) Grievance Redress (i.e., conflict resolution)
 - m) Gender/gender and development (GAD) mainstreaming, planning/Gender-Based Violence, Sexual Exploitation, Abuse and Harassment
 - n) Project Management (Planning, implementation, monitoring and evaluation)
 - o) Others, please specify: ____
- 20. Preferred modes of training or capacity building activities (Rank 1 to 3, 1 being most preferred)
 - a) Virtual learning sessions/knowledge or experience-sharing webinars
 - b) Face-to-face sessions/workshops
 - c) Self-paced online learning course
 - d) Others, please specify: _____
- 21. What are other capacity gaps of the Department / Agency / Bureau / Division that need to be addressed to ensure effective implementation of the PSAT, especially the social and environmental systems, E&S core principles and measures to satisfy national E&S regulatory requirements?
 - a) Hire additional staff, please specify the technical expertise needed (Plantilla position / Contract of service:
 - b) Provide infrastructure/facility or designated physical workspace
 - c) Provide additional office equipment and tools
 - d) Improve project coordination and internal communication mechanisms
 - e) Develop and implement specific operational procedures and processes on environmental and social management systems
 - f) Others, please specify: _____

--- End of Questionnaire ---

~ Nothing follows ~