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Report No: PAD3599

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED LOAN

IN THE AMOUNT OF US\$370 MILLION

TO THE

REPUBLIC OF THE PHILIPPINES

FOR

SUPPORT TO PARCELIZATION OF LANDS FOR INDIVIDUAL TITLING PROJECT

June 5, 2020

Urban, Resilience and Land Global Practice  
East Asia and Pacific Region

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## CURRENCY EQUIVALENTS

(Exchange Rate Effective March 31, 2020)

Currency Unit =	Philippine Peso (PhP)
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US\$ =	50.98 PHP
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## FISCAL YEAR

January 1 - December 31

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## ABBREVIATIONS AND ACRONYMS

A&D	Alienable and Disposable
ARB	Agrarian Reform Beneficiary
ASP	Approved Survey Plan
CARP	Comprehensive Agrarian Reform Program
CBA	Cost Benefit Analysis
CLOA	Certificate of Land Ownership Award
CO	Central Office
COA	Commission on Audit
DAO	Department Administrative Order
DAR	Department of Agrarian Reform
DBM	Department of Budget and Management
DENR	Department of Environment and Natural Resources
DICT	Department of Information and Communication Technology
DILG	Department of the Interior and Local Government
DOF	Department of Finance
EAPGIL	East Asia and Pacific Gender Innovation Lab
EFA	Economic and Financial Analysis
ENPV	Economic Net Present Value
ESF	Environmental and Social Framework
ESA	Environmental and Social Assessment
ESMF	Environmental and Social Management Framework
ESRS	Environmental and Social Review Summary
ESS	Environment and Social Standard
FASPO	Foreign-Assisted and Special Projects Office
FEP	Foreign Exchange Premium
FM	Financial Management
FMB	Forest Management Bureau
FMS	Financial Management Service
FNPV	Financial Net Present Value
FOO	Field Operations Office
GAM	Government Accounting Manual
GDP	Gross Domestic Product
GOP	Government of the Philippines
GRM	Grievance Redress Mechanism
GRS	Grievance Redress Service
IBRD	International Bank for Reconstruction and Development
IFR	Interim Financial Report
IPF	Investment Project Financing
IPP	Indigenous Peoples Plan

IPPF	Indigenous Peoples Policy Framework
IPRA	Indigenous Peoples Rights Act
IRR	Implementing Rules and Regulations
IT	Information Technology
LBP	Land Bank of the Philippines
LMP	Labor Management Procedures
LRA	Land Registration Authority
M&E	Monitoring and Evaluation
MOA	Memorandum of Agreement
NCIP	National Commission on Indigenous Peoples
NEDA	National Economic and Development Authority
PDO	Project Development Objective
PDP	Philippine Development Plan
PhP	Philippine Peso
PMO	Project Management Office
POM	Project Operations Manual
PPSD	Project Procurement Strategy for Development
PCC	Project Coordinating Committee
PSC	Project Steering Committee
RAP	Resettlement Action Plan
ROD	Registry of Deeds
RPF	Resettlement Policy Framework
SEP	Stakeholder Engagement Plan
SOE	Statement of Expenditure
SPLIT	Support to Parcelization of Lands for Individual Titling
STEP	Systematic Tracking of Exchanges in Procurement
US\$	United States Dollar
WB	World Bank
WoP	Without Project
WP	With Project



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## DATASHEET

**BASIC INFORMATION**

Country(ies)	Project Name	
Philippines	Support to Parcelization of Lands for Individual Titling (SPLIT) Project (P172399)	
Project ID	Financing Instrument	Environmental and Social Risk Classification
P172399	Investment Project Financing	High

**Financing & Implementation Modalities**

<input type="checkbox"/> Multiphase Programmatic Approach (MPA)	<input type="checkbox"/> Contingent Emergency Response Component (CERC)
<input type="checkbox"/> Series of Projects (SOP)	<input type="checkbox"/> Fragile State(s)
<input type="checkbox"/> Performance-Based Conditions (PBCs)	<input type="checkbox"/> Small State(s)
<input type="checkbox"/> Financial Intermediaries (FI)	<input type="checkbox"/> Fragile within a non-fragile Country
<input type="checkbox"/> Project-Based Guarantee	<input type="checkbox"/> Conflict
<input type="checkbox"/> Deferred Drawdown	<input type="checkbox"/> Responding to Natural or Man-made Disaster
<input type="checkbox"/> Alternate Procurement Arrangements (APA)	

Expected Approval Date	Expected Closing Date
26-Jun-2020	31-Dec-2024

Bank/IFC Collaboration

No

**Proposed Development Objective(s)**

To improve land tenure security and stabilize property rights of agrarian reform beneficiaries (ARBs).

**Components**

Component Name	Cost (US\$, millions)
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Parcelization of Collective CLOAs	327.64
Capacity Building and Technical Assistance	3.51
Project Management and Monitoring and Evaluation	28.50
Contingency (Price & Physical)	10.30

**Organizations**

Borrower:	Republic of Philippines
Implementing Agency:	Department of Agrarian Reform

**PROJECT FINANCING DATA (US\$, Millions)****SUMMARY**

Total Project Cost	473.56
Total Financing	473.56
of which IBRD/IDA	370.00
Financing Gap	0.00

**DETAILS****World Bank Group Financing**

International Bank for Reconstruction and Development (IBRD)	370.00
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**Non-World Bank Group Financing**

Counterpart Funding	103.56
National Government	103.56

**Expected Disbursements (in US\$, Millions)**

WB Fiscal Year	2020	2021	2022	2023	2024	2025
Annual	18.88	232.38	108.96	9.28	0.51	0.00
Cumulative	18.88	251.25	360.21	369.49	370.00	370.00



## INSTITUTIONAL DATA

### Practice Area (Lead)

Urban, Resilience and Land

### Contributing Practice Areas

Agriculture and Food

### Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

## SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	● Substantial
2. Macroeconomic	● Moderate
3. Sector Strategies and Policies	● Moderate
4. Technical Design of Project or Program	● Moderate
5. Institutional Capacity for Implementation and Sustainability	● Substantial
6. Fiduciary	● Substantial
7. Environment and Social	● High
8. Stakeholders	● Moderate
9. Other	● Moderate
10. Overall	● High

## COMPLIANCE

### Policy

Does the project depart from the CPF in content or in other significant respects?

☐ Yes ☒ No

Does the project require any waivers of Bank policies?

☐ Yes ☒ No





## Environmental and Social Standards Relevance Given its Context at the Time of Appraisal

E & S Standards	Relevance
Assessment and Management of Environmental and Social Risks and Impacts	Relevant
Stakeholder Engagement and Information Disclosure	Relevant
Labor and Working Conditions	Relevant
Resource Efficiency and Pollution Prevention and Management	Relevant
Community Health and Safety	Relevant
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Relevant
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Relevant
Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Relevant
Cultural Heritage	Relevant
Financial Intermediaries	Not Currently Relevant

**NOTE:** For further information regarding the World Bank's due diligence assessment of the Project's potential environmental and social risks and impacts, please refer to the Project's Appraisal Environmental and Social Review Summary (ESRS).

## Legal Covenants

### Sections and Description

#### Institutional Arrangements

Loan Agreement: Schedule 2, Section I.A.1

Recurrent, Continuous

The Recipient shall maintain, throughout the Project implementation period, the Project structures at the national and sub-national levels all with composition, functions, staffing and resources satisfactory to the Bank and set out in the Project Operations Manual.

National Project Steering Committee, National Project Coordinating Committee and Central Project Management Office

Loan Agreement: Schedule 2, Section I.A.2.(a)

The Recipient shall establish and thereafter maintain a National Project Steering Committee, a National Project Coordinating Committee and a Central Project Management Office with composition, functions, staffing and



resources satisfactory to the Bank.

Regional and Provincial Project Coordinating Committees and Project Management Offices

Loan Agreement: Schedule 2, Section I.A.2.(b), (c)

Prior to commencement of the Project activities in the respective region and province, Recurrent and Continuous

The Recipient shall establish and thereafter maintain the Project Coordinating Committees and Project Management Offices at regional and provincial levels; and technical team in each Municipal Agrarian Reform Office; all with composition, functions, staffing and resources satisfactory to the Bank.

Memoranda of Understanding

Loan Agreement: Schedule 2, Section I.A.3

The Borrower, through DAR, shall enter into a memorandum of understanding with each of the Partner Agencies under terms and conditions acceptable to the Bank.

Project Operations Manual

Loan Agreement: Schedule 2, Section I.B

Recurrent, Continuous

The Borrower shall carry out the Project in accordance with the Project Operations Manual, and not amend, waive or abrogate any provisions of the manual unless the Bank agrees otherwise in writing.

Annual Work Plans and Budgets

Loan Agreement: Schedule 2, Section I.C

Recurrent, Annual

The Borrower shall prepare and furnish to the Bank for its no-objection no later than October 31 of each fiscal year an annual work plan and budget during the implementation of the Project containing relevant Project activities and expenditures proposed to be included in the Project in the following fiscal year, including a specification of the sources of financing.

Environmental and Social Standards

Loan Agreement: Schedule 2, Section I.D

Recurrent, Continuous

The Borrower shall ensure that the Project is carried out in accordance with the Environmental and Social Standards and the Environmental and Social Commitment Plan.

Mid-term Review

Loan Agreement: Schedule 2, Section II.B

Once, 24 months after the Effective Date

Obligation of the Recipient to prepare and furnish to the Bank a mid-term report in form and substance satisfactory to the Bank.

## Conditions

Type	Description
Effectiveness	Loan Agreement: Article V



	<p>(a) the Borrower, through the DAR, has prepared and submitted the the Project Operations Manual in form and substance satisfactory to the Bank.</p>
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## I. STRATEGIC CONTEXT

### A. Country Context

1. The Philippines, a lower middle-income country with a population of around 109 million, is currently one of the fastest growing economies in the East Asia and Pacific Region. Economic growth has been robust in recent years, averaging 6.3 percent per annum between 2010 and 2019, behind only China and Vietnam among major economies in the region. The Gross Domestic Product (GDP) per capita nearly doubled over the past two decades, going from US\$1,607 in 2000 to US\$3,022 in 2018 (constant 2010 US\$). However, the Philippines continues to face a complex range of development challenges. Foremost among them are high, though recently declining, poverty incidence; persistent inequality; and the dual risks of conflict and natural disasters, which place the country near the top of global vulnerability rankings.
2. The Philippine economy has made progress in delivering inclusive growth. The poverty rate declined from 21.6 percent in 2015 to 16.6 percent in 2018, which translates to 17.6 million Filipinos who live below the poverty threshold.<sup>1</sup> Despite the improvements made in the past decade, available measures suggest that the gap between the rich and the majority of the population in the Philippines is one of the largest in the world.<sup>2</sup> Some three-quarters of the poor live in rural areas, and the rural poverty rate is three times higher than in urban areas.
3. The Philippines has 182 ethnolinguistic groups, 110 of which are designated indigenous peoples, about 17 percent of the country's population.<sup>3</sup> Indigenous peoples are spread across the country except in Region 8 (Eastern Visayas).
4. The coronavirus (COVID-19) reached the Philippines on January 30, 2020, with the first case confirmed. Immediately, the Government moved aggressively to mitigate the negative impacts. The President imposed an enhanced community quarantine and declared a national state of emergency.<sup>4</sup> The necessary disease containment measures have led to temporary job losses for millions and are expected to substantially slow down economic growth in 2020. To protect vulnerable households and firms, the Government has laid out an extensive fiscal support package worth over US\$4 billion that includes expanded social protection subsidy for 18 million low-income families, among others.<sup>5</sup> Despite these actions, COVID-19 cases and economic pressures continue to rise, amplifying the importance of strengthening the nation's public health, safety net and social protection measures.

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<sup>1</sup> The Philippine Statistics Authority (PSA), 2018 Census of Population.

<sup>2</sup> The *Gini index*, calculated from survey-based consumption data, shows a value of over 44 percent which puts the Philippines in the top third of economies. The *Gini index* measures income inequality with 0 = every resident has the same income, and 100 = one resident has all the wealth.

<sup>3</sup> The National Commission on Indigenous Peoples designates 110 ethnic groups as indigenous groups. Some Muslim ethnic groups are designated indigenous groups and others are not. "Muslim" is defined in this analysis by membership in a predominantly Muslim ethnic group.

<sup>4</sup> Curfews, cancellation of non-essential work in private and public offices, and the suspension of public transportation come with the enhanced community quarantine on the National Capital Region. Local authorities in other parts of the Philippines are adopting measures similar to those in Luzon.

<sup>5</sup> In addition to the 4.4 million households assisted under 4Ps, 2.9 million poor senior citizens are assisted through a social pension program and 2.2 million other poor families identified from the country's social registry – Listahanan—will also receive unconditional cash transfer (UCT). About 8 million informal sector workers and vulnerable individuals who are not part of existing programs are also targeted.



## **B. Sectoral and Institutional Context**

5. Agriculture has greatly underperformed but has high potential. A recent period of renewed overall economic growth has been accompanied by an acceleration of the shift of the economy away from agriculture. The sector's contribution to GDP declined from 13.3 percent in 1998 to 8.5 percent in 2017, and its annual growth rate was much lower than other Southeast Asian countries. Investment and growth in the agriculture sector was stymied by the country's vulnerability to natural disasters, a policy focus on rice self-sufficiency, the weakness of institutions that support agriculture, and uncertainties generated by a lengthy and unfinished agrarian reform process. These factors have inhibited the agriculture sector's contribution to economic growth, job creation, and poverty reduction.
6. Land tenure has long been a central issue affecting the country's agriculture productivity. The Philippines has an extensive history of inequitable and distorted land tenancy. Beginning with the Spanish colonial period (1565- 1898) large private estates dominated the rural landscape. Farmers cultivated the land under share-cropping arrangements, without the freedom to choose the crops they grew or the option to own the land they tilled. By 1980 this imbalance had left 60 percent of the agricultural population landless. To rectify this pervasive arrangement and reverse colonial land tenure inequalities, in 1988, the Government launched the Comprehensive Agrarian Reform Program (CARP). This transformative program implemented by the Department of Agrarian Reform (DAR) and the Department of Environment and Natural Resources (DENR) worked to improve the lives of small farmers by offering them land tenure security, agrarian support services and mechanisms for social justice.
7. Over the past 30 years, CARP has pursued its goal of equity and social justice, improved farming efficiency, and poverty reduction. As of December 2018, the program has distributed 4.8 million hectares of land (16 percent of the nation's land) to almost 3 million agrarian reform beneficiaries (ARBs). To achieve these results, CARP efforts have been primarily two-fold. First, to acquire and distribute public and private agricultural land holdings to tenants, landless farmers or tillers who qualify as ARBs. ARBs must actively farm land not larger than 3 hectares. Second, to provide integrated support services to these small land holders including agriculture related infrastructure, technical assistance and credit. The goal is to develop the ARBs into self-reliant producers with secure land tenure. Once complete, CARP will have redistributed over 70 percent of the land classified as alienable and disposable (A&D) in the Philippines.
8. Of the CARP land distribution targets, approximately 53 percent was distributed in the form of individual titles, called Certificates of Land Ownership Award (CLOAs), and an estimated 47 percent was issued as collective CLOAs. Collective CLOAs were largely issued in the 1990s to expedite land redistribution, with the intention of subdividing and titling them individually later. Issuance of a collective CLOA avoided the necessary and lengthy processes of subdivision surveys, inspection, verification and approval required to issue an individual title. While most ARBs wish to receive an individual title, the subdivision process, called "parcelization" is voluntary. ARBs wishing to continue to farm their land in a communal manner can opt out of the parcelization process.
9. While CARP has made significant progress in land distribution, limited resources and inefficient systems have hindered the efforts to finalize the parcelization process and issuance of individual titles. Although DAR has been incrementally subdividing collective CLOAs and issuing individual titles over the past two decades, the process is lengthy and cumbersome, including many steps and involving multiple institutions. Currently ARBs wishing to obtain individual titles typically wait many years even when there are no disputes. The lengthy process, coupled with recent DAR staff reductions and budget constraints, has generated a backlog of collective CLOAs awaiting parcelization. To tackle this backlog, there is a renewed push from the Government to accelerate the parcelization process and



complete the subdivision of remaining collective CLOAs over the next 3 years. To accomplish this goal, increased resources and more efficient processes will be required.

10. A gap exists in gender equality in agricultural land titling. While females are eligible to be ARBs under the current legal and regulatory framework, there are no national data available on the actual number of female ARBs who have received their individual titles. With regard to co-ownership (marital properties), a recent study found that most married male ARBs do not include their wife's name on their land titles.<sup>6</sup> This contributes to the difficulty encountered by women in terms of access to land assets.
11. The land administration system in the Philippines is complex, with overlapping land allocations, fragmented land information, long delays in land registration and expensive service provision. There are multiple agencies involved, outdated laws, as well as several land survey, mapping and registration standards and processes to be followed. No agency has a complete set of records for landholdings and there is no single or integrated land information system or database. Despite attempts to rationalize the land administration sector by merging the key land administration agencies into a single agency, standardizing the titling process and providing services through one-stop-shops, the reform law has been pending for many years.
12. There has been some move toward development of digital land administration in recent years. The Land Management Bureau of the DENR, which is responsible for approving cadastral surveys,<sup>7</sup> is implementing the land administration and management system computerized information system that will consolidate survey and mapping data when complete. The Land Registration Authority (LRA)/Registry of Deeds (ROD), which is responsible for issuing titles and registering subsequent transactions, also has an information technology (IT) system currently managed by a private company under a public-private partnership agreement. The company charges significant IT service fees, including for CARP. However, despite these modernization attempts, land information continues to be exchanged between agencies and issued to users mainly in manual form.
13. The project will make ARBs more resilient to COVID-19. With the economic contractions caused by COVID-19, subsistence farmers are at a high risk of falling deeper into poverty. Many of these rural poor lack social security, savings, and access to formal financing. Furthermore, if farmers do not have proper documentation, such as a wrong name on a title, they risk being excluded from economic relief and aid. However, ARBs with individual titles will have security of tenure which is a form of safety net and will have access to credit through the LandBank and other financing institutions. If ARBs or members of their family fall ill, clear and valid documentation of their property will allow them to mortgage their land, sell, or pass to family members through inheritance.

### **C. Relevance to Higher Level Objectives**

14. The high-level objective of the proposed project is to contribute to rural poverty reduction and increased rural economic growth through improved land tenure security. This concept is consistent with the World Bank Group's Country Partnership Framework (2019-2023) (Report No. 143605-PH) that states that an overarching objective to reduce core constraints to inclusive growth and poverty reduction in relation to people, competition and key vulnerabilities as necessary. More specifically, it emphasizes engagements that: (a) invest in Filipinos to improve

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<sup>6</sup> Preliminary results from semi-structured interviews conducted by The World Bank's East Asia and Pacific Gender Innovation Lab (EAPGIL) 2019 found that only 34 percent of married ARBs include their respective wife's name on their land titles.

<sup>7</sup> Note that the Land Registration Authority also approves surveys, resulting in cases of overlapping and inconsistent survey and mapping information.



human capital development and help position the Philippines to harness its future demographic advantage; (b) enhance competitiveness and economic opportunities for job creation, and (c) promote peace and build resilience. By providing rural farmers with individual titles, this project will invest in some of the poorest Filipinos. It will also indirectly facilitate small-farm owners to invest in production and agribusiness and improve their access to support services, including credit and financing. Moreover, it will encourage sustainable resource management and contribute to reduced conflicts over land such as boundary and inheritance disputes.

15. The Philippines' Systematic Country Diagnostic: "Realizing the Filipino Dream for 2040" (Report No. 143419-PH), highlights the need for improving agricultural productivity, but also states an overarching priority of "upgrading public administration to be fit for purpose to meet the objectives and challenges set out in *"Ambisyon Natin 2040"* (Our Ambition). The report continues by specifying that "what is needed is principally not policies or programs but follow-through and successful implementation of existing efforts." The proposed project is an example which follows this finding; i.e., to support and strengthen an existing program, CARP. The report also highlights a need to improve gender equality and promote female empowerment. It notes that while women have steadily improved their voice and agency, they still have "limited property rights". This project will raise awareness of female property rights and promote the registration of female names on property titles.
16. The Philippine Development Plan (PDP) 2017- 2022 aims to develop a competitive, sustainable, and technology-based agricultural sector to contribute to inclusive growth and poverty reduction. The project will support streamlining processes and computerizing many of the land administration and management activities that are currently being performed manually. By incorporating technology into the parcelization process, DAR will create digital records that can be securely maintained, stored and shared with other agencies. Beneficiaries of the project will have digitally transparent proof of ownership, giving them easier access to lending institutions and other agricultural or social services, thereby empowering them to increase crop productivity and competitiveness.

## II. PROJECT DESCRIPTION

### A. Project Development Objective (PDO)

#### PDO Statement

17. The project development objective is to *improve land tenure security and stabilize property rights of agrarian reform beneficiaries (ARBs)*.
18. The PDO will be achieved through accelerated subdivision of collective CLOAs and generation of individual titles on the lands awarded under CARP.

#### PDO Level Indicators

19. The PDO will be measured by the following indicators:
  - Eligible collective titles (CLOAs) with a validated list of ARBs.<sup>8</sup>

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<sup>8</sup> Many of the collective CLOAs have outdated master lists (i.e., original ARBs have left the area, are no longer farming, have died, etc.). Part of Component 1 includes the validation process and updating of the eligible ARBs on the master list as defined in the legal and regulatory framework. Therefore, tenure security is improved for ARBs with collective CLOAs regardless whether they opt for individual



- Eligible individual titles issued (Including individual titles in target areas with ownership, co-ownership, and marital property rights issued to females).<sup>9</sup>

## **B. Project Components**

20. The project will be implemented through three components. These components were designed to accelerate the ongoing government program for parcelization while seeking to gain efficiencies through technology, workflow streamlining and increased stakeholder engagement. The project will focus on supporting the processes necessary for the parcelization of collective CLOAs and registration of individual CLOAs. These processes include community consultation (including separate sessions for men and women), preparation and approval of master lists of ARBs, reaching agreement on lot allocation, conducting the cadastral survey, and preparation and signing of deeds of parcelization.

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titles or not.

<sup>9</sup> This refers to the individual titles issued, thereby stabilizing and strengthening the property rights of ARBs who opted for individual titles. The sub-indicator refers to the individual titles that are directly issued under the name of the female ARBs or as spouses of the male ARBs.





**Table 1. Project Cost Table (estimated in USD million)**

Component		Total (USD million)	WB (USD million)	GoP (USD million)
	Total budget (with contingency)	473.56	370.00	103.56
	Price Contingency	21.21	00.00	21.21
	Physical Contingency	28.02	10.30	17.72
	Budget (without contingency)	424.31	359.70	64.61
1	Parcelization of Collective CLOAs	372.79	327.64	45.15
1.1	Improved Regulatory Framework	0.80	0.80	00.00
1.2	IT Support	7.40	7.40	00.00
1.3	Completing the Inventory of Collective CLOAs	9.51	8.40	1.11
1.4	Field Testing of Improved Procedures to Subdivide Collective CLOAs	18.27	16.17	2.10
1.5	Rolling Out Improved Procedure in Other Regions	336.81	294.87	41.94
2	Capacity Building and Technical Assistance	3.51	3.51	00.00
3	Project Management and M&E	48.00	28.50	19.50
3.1	Project Management	37.81	21.76	16.05
3.2	M&E and Safeguards	10.20	6.79	3.41

21. **Component 1: Parcelization of Collective CLOAs.** This component will support the improvement of processes for the parcelization of collective CLOAs. It will accelerate the generation and issuance of individual titles by conducting the following activities: (a) coordination of technical working groups, improvement of the regulatory framework, preparation of a targeted communication program and policy review; (b) development and implementation of a CLOA Document Management System and a Digital Archive for the issued individual titles; (c) completion of an inventory of collective CLOAs for parcelization; (d) field testing improved procedures in three regions, including modern survey techniques, inclusion of female names on titles and improved communications to both genders; and (e) rolling out the improved procedures to complete collective CLOA parcelization in the 15 regions.

22. Component 1 includes following sub-components:

- a. **Sub-component 1.1: Improved Regulatory Framework.** This sub-component will support the: (i) updating of DAR's Department Administrative Orders (DAO) related to collective CLOA parcelization and the preparation of the accompanying implementing rules and regulations to include strengthened inter-agency institutional arrangements (DAR, DENR, LRA/ROD and the National Commission on Indigenous Peoples NCIP). The new DAO



will reflect procedures that require the inclusion of qualified female names, digital workflows and information systems, and safeguards arrangements; (ii) development of a media and communications strategy that includes aspects such as, access to agricultural services, climate-smart agricultural practices as well as materials for wider dissemination to encourage ARB participation in the parcelization process; and (iii) assessment of the policy and operational implications of the enhanced parcelization process and the results of the collective CLOA inventory to further improve parcelization. An inter-agency Technical Working Group will be established by DAR to review and improve the regulatory framework.

- b. **Sub-Component 1.2: Information Technology Support.** This sub-component will support workflow optimization for the parcelization of collective CLOAs through the: (i) development and implementation of a central CLOA Document Management System and a central digital archive system for individual titles, which provides a backup in case of climate or human induced disasters; (ii) development of automated tools and digital forms to support the local level processes; (iii) upgrading of the DENR eSurvey Plan module for geodetic engineers; (iv) technical assistance to the staff at the central and field offices to use and maintain the new system and automated forms, and provide help desk support as well as on-the-job assistance; and (v) supply of hardware, licenses, communication equipment and rental of communication lines.

The central CLOA Document Management System and digital forms will establish a central database, from which the status of each CLOA is tracked and various statistical and management reports are generated to support the decision-making process, monitoring and reporting. The system will provide information about the performance of field offices and the processing time for each major step in the process, which can be used to further optimize and streamline processes. It will generate gender disaggregated data and other reports to support the monitoring and evaluation process, and DAR staff across all levels will receive training on digital technology. In addition, the information for the closed CLOA cases (issued/rejected CLOAs) will be stored in DAR's digital archive system for future reference. However, under the existing legal framework, the individual titles are registered and maintained by the LRA.

- c. **Sub-Component 1.3: Completing the Inventory of Collective CLOAs.** This sub-component will support the: (i) inventory of ARBs in the collective CLOAs to produce an approved ARB master list, through DAR's inclusion/exclusion process; (ii) verification and certification of the collective CLOA land classification with inputs from DENR; and (iii) determination if there are issues related to the overlap with forest/timber lands or ancestral domains, and addressing these issues with the relevant institutions.
- d. **Sub-Component 1.4: Field Testing of Improved Procedures to Subdivide Collective CLOAs.** This sub-component will introduce new techniques to encourage female participation and awareness of their rights during the titling process and will support the: (i) field validation and consultation with ARBs, noting that ARBs can opt out of the parcelization process; (ii) field testing of new survey techniques and enhanced procedures in selected pilot regions; (iii) parcelization survey (if necessary); and (iv) redocumentation and generation of individual titles; (v) public communication and dissemination activities for wider and informed ARB participation; and (vi) identification and re-constitution of lost or destroyed collective CLOAs, where necessary. In the case of overlap with forest/timberland, the project will coordinate with the relevant government authorities for issuance of other applicable tenure instruments. Prior to field testing, public communication and dissemination activities will be conducted to ensure wider and informed ARB participation. Where it is necessary to reconstitute lost or destroyed collective CLOA documents the sub-component will start this process and it is likely that these collective CLOAs will be included in sub-component 1.5.



- e. **Sub-component 1.5: Rolling Out Improved Procedure in Other Regions.** This sub-component will support the:
  - (i) scaling up of parcelization activities across 15 regions based on the improved procedures and field coordination that were tested under Sub-Component 1.4.
- 23. **Component 2: Capacity Building and Technical Assistance.** This component will support the capacity building activities for DAR and partner agency, central and field office staff on the adoption of enhanced guidelines and processes. Activities will include: (a) orientation/reorientation on the enhanced workflow and parcelization processes and use of digital and modern technology; (b) cascading of revised rules and procedures for the parcelization process and agrarian reform cases; and (c) coaching sessions for field office staff on various aspects such as effective stakeholder engagement and gender sensitive community interaction.
- 24. **Component 3: Project Management and Monitoring and Evaluation (M&E).** This component will support project implementation, including with partner agencies, at central and field levels in project management and coordination, technical operations, procurement management and supervision, financial management and disbursement, environmental and social risk and impacts, grievance mechanisms and M&E activities. This component will also support the establishment and functioning of the Steering Committee at the national level and Coordinating Committees at the national, regional and provincial levels.
- 25. The project activities will address the corporate commitments including gender, climate change and citizen engagement. These three themes and relevant activities include:
  - a. **Gender.** Despite DAR's regulations supporting gender equality in the parcelization process, the number of females as primary ARBs or through co-ownership rights through marital property, is not nationally monitored. For marital property, many field staff believe that spouses' names should only be included if they are involved in direct tillage and as a result often do not include the wife's names on CLOAs. A recent study covering a few sample provinces revealed that titling in the name of both spouses, in particular female co-ownership through marital property, is low. The study also cited the lack of gender disaggregated data collected by DAR as being a major hindrance to ensuring gender equity in CARP.<sup>10</sup> Nationally, data on female attendance during consultations or on female ownership (either as primary or co-ownership/marital property) is not consistently collected or reported.
  - b. The project will address this gender gap by testing and scaling up new procedures to increase the number of female names on titles as either individual owners or co-owners through marital property.<sup>11</sup> Specifically, the updated procedures for field consultations, in the Project Operations Manual (POM) will require DAR staff to inform both males and females of their ownership rights and facilitate the registration of all female ARBs as primary owners or the inclusion of spouses on the title. Secondly, DAR staff will be trained to ensure appropriate information is conveyed to ARBs about ownership and marital property rights. Thirdly, a communication campaign will target both men and women with educational information on the benefits of

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<sup>10</sup> Preliminary results from semi-structured interviews conducted by The World Bank's East Asia and Pacific Gender Innovation Lab (EAPGIL) 2019 found that only 34 percent of married ARBs added their wife's name. However due to the limited scope and coverage of this study, this preliminary number may not be nationally representative.

<sup>11</sup> While spousal rights predominately pertain to females, there are also cases where men will be married to a female ARBs. The project will provide the same support to ensure marital property rights are respected for both males and females.



land ownership for both spouses. Finally, project monitoring reports will track female participation in training and capacity building activities, as well as titling and ultimately ownership of land. The digital CLOA Document Management System will generate gender disaggregated data. This information will be used to set an accurate baseline, update targets and measure the indicators that monitor the gender gap including: percent of female ARBs informed of their rights and the procedures of the parcelization process, percent of married ARBs with female spouses' name on the title, and individual titles in target areas with ownership, co-ownership through marital property rights issued (Female).

- c. **Climate Change.** The Philippines is highly vulnerable to climate change, in part due to its location in the path of Pacific typhoons and the sizable population living near sea level. Climate change is projected to increase the frequency and intensity of extreme weather events, depress agricultural yields, and destroy vital ecosystems. Climate change also threatens to amplify levels of violent conflict and decrease the prosperity of the Filipino people. At least 74 percent of Filipinos are vulnerable to natural disasters, which have killed 33,000 people and adversely affected 120 million in the last 30 years.<sup>12</sup> The Philippines has experienced more than 90 destructive earthquakes and 40 tsunamis in its history.<sup>13</sup> The most frequent of the 2,754 natural hazard events that took place during 2005-2015 were climate-related. Around 90 percent of damage in recent years has been from typhoons. In 2013, Super Typhoon Yolanda killed 6,300, wounded 28,689 persons, and caused PhP571.1 billion (US\$11.2 billion) in damage, according to the Philippine Statistical Authority. The damage included the loss of land records in several provinces. The PDP (2017-22) identifies climate change as one of the main challenges in increasing future agricultural yields and farmer prosperity. To mitigate future risks, the government has emphasized a substantial policy shift from emergency response to disaster preparedness, resilience, and financial protection.<sup>14</sup>

The project will work to mitigate and reverse the impacts that climate change and natural disasters pose to farmers and, indirectly, the nation's agriculture sector. During flooding, typhoon and fire events, paper titles are often damaged or lost, leaving people without proof of ownership. In Component 1, the project will support the reconstitution of titles that have been previously damaged and the digitization (with back-up) of records to prevent future loss. Furthermore, Sub-component 1.5 will focus on scaling up and expediting the issuance of individual titles to ARBs in need of more secure tenure. Parcel mapping with coordinates, combined with added tenure security will give owners and occupants the confidence to leave their land and property during severe situations knowing that they will be able to safely return, identify the location of their individual property and reconstitute the boundaries even if the natural features are lost. Secure property rights and clear ownership titles would also increase incentives for owners to invest in climate-smart agriculture techniques, longer life perennial crops and trees, higher-quality building materials, and proper connections to water and electricity networks that are essential for climate change resilience. In Sub-component 1.3, all collective CLOAs will be inventoried and mapped. ARBs that are found to be farming inside areas classified as protection forest or protected areas will be provided with forest or protected area stewardship contracts. Natural resource and biodiversity management schemes (e.g. through Community-Based Forest Management Plans or Protected Area Management Plans) connected with these contracts will strengthen protection and restoration of critical natural habitats and biodiversity. For protection forests and strict protection zones, appropriate reversal procedures will be initiated by DENR in coordination with DAR. Lastly, Sub-component 1.2 will create a digital Document Management System that DAR can quickly use to verify land ownership. During disaster recovery, residents

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<sup>12</sup> GFDRR, 2011

<sup>13</sup> Philippine Institute of Volcanology and Seismology 2013

<sup>14</sup> The Philippine Disaster Risk Reduction and Management Act of 2010



lacking secure tenure face the challenge of receiving compensation when there has been damage. International donors supporting the recovery are also less willing to assist rebuilding if the beneficiaries cannot prove that they own the land upon which they are building, as evidenced by the post-Typhoon Yolanda<sup>15</sup> recovery where only farmers with individual titles received aid money; those in collective CLOA did not receive the funds. Through this project, DAR will be able to advance the Government's goal of shifting from response to preparedness. ARBs who experience extreme weather events will not only be better equipped to recover, but also more resilient.

- d. **Citizen Engagement.** Citizen engagement is an integral part of the parcelization process through communication and awareness raising activities, consultation/meetings with ARBs at various stages of the process including participation in the review of the ARB eligibility lists and preparation of the land parcel survey, as well as the public display and confirmation of the parcelization information. The project will ensure that ARBs are informed and guided on how to submit a claim through which they can voice opinions and raise concerns about aspects of the parcelization process. Additional information about citizen engagement will be detailed in the Stakeholder Engagement Plan and Grievance Redress Mechanism (GRM) which would be implemented by safeguards focal persons at the municipal and provincial level. The GRM will include standards for addressing and communicating advice and decisions to stakeholder questions or complaints through different accessible means such as in person consultations or feedback links on the DAR website. It will embody the principle that the Project upholds and respects the rights of parties who are subject to complaints to be present and be heard before the appropriate complaint/grievance committee that will hear, settle, mediate or conciliate complaints or grievance. Aggrieved parties will also be informed of their option to appeal their grievance outside of the Project-level GRM process. Participation of ARBs in project activities and monitoring of complaints will be reported regularly as part of the M&E activities and measured through the indicator 'Number of project provinces implementing the GRM strategy'.

## C. Project Beneficiaries

26. The project's direct beneficiaries include an estimated 750,000 farmers who wish to convert their collective CLOAs into individual titles.<sup>16</sup> By having individual titles, farmers will gain clarity and legal proof of the land they own and occupy. This security will encourage investment in agriculture productivity, and once they have occupied the land for 10 years and paid the land amortization (repayment to the government for the land), they have the freedom to sell, lease out or otherwise transfer the land in which they have invested. Gaining an individual title will also provide them with a personal account at the Land Bank of the Philippines (LBP), thereby providing them a form of collateral and access to credit and support financing from the government and other financing institutions. Lastly, establishing and clarifying land boundaries and rights will reduce community conflict. Figure 1 shows the spatial distribution of the collective CLOAs by region. While the CLOAs are widely dispersed, there are several areas of concentration that will receive priority during implementation. There is currently no mechanism for the project to cover the Bangsamoro Autonomous Region in Muslim Mindanao, however there is potential for future inclusion.

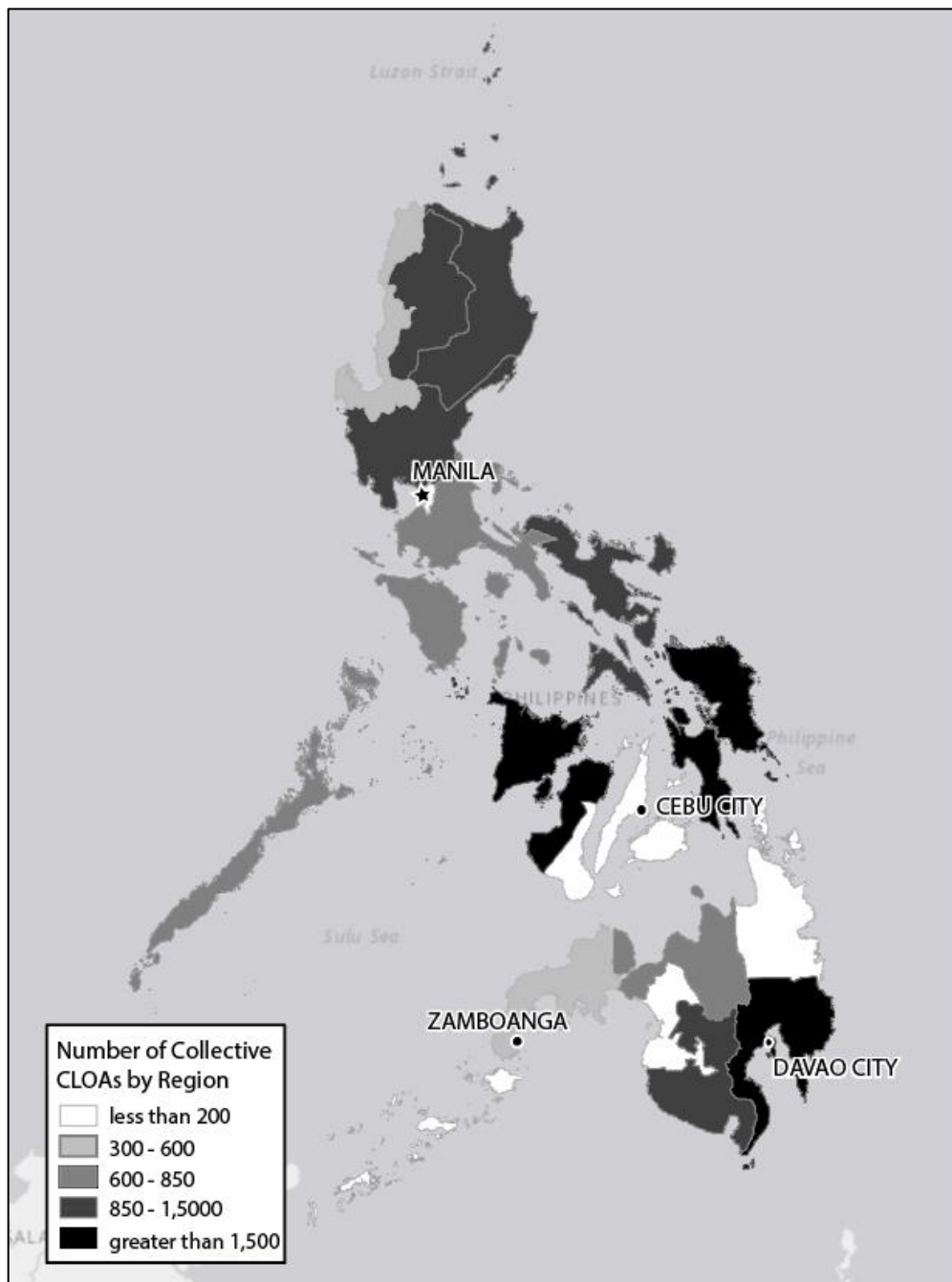
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<sup>15</sup> Anecdotal evidence learned during project preparation field visits.

<sup>16</sup> DAR estimates a total of 1.14 million ARBs have collective CLOAs and estimated 750,000 are expected to be eligible for parcelization.



**Figure 1. Map of Collective CLOAs by Region Proposed for Parcelization in SPLIT Project.**



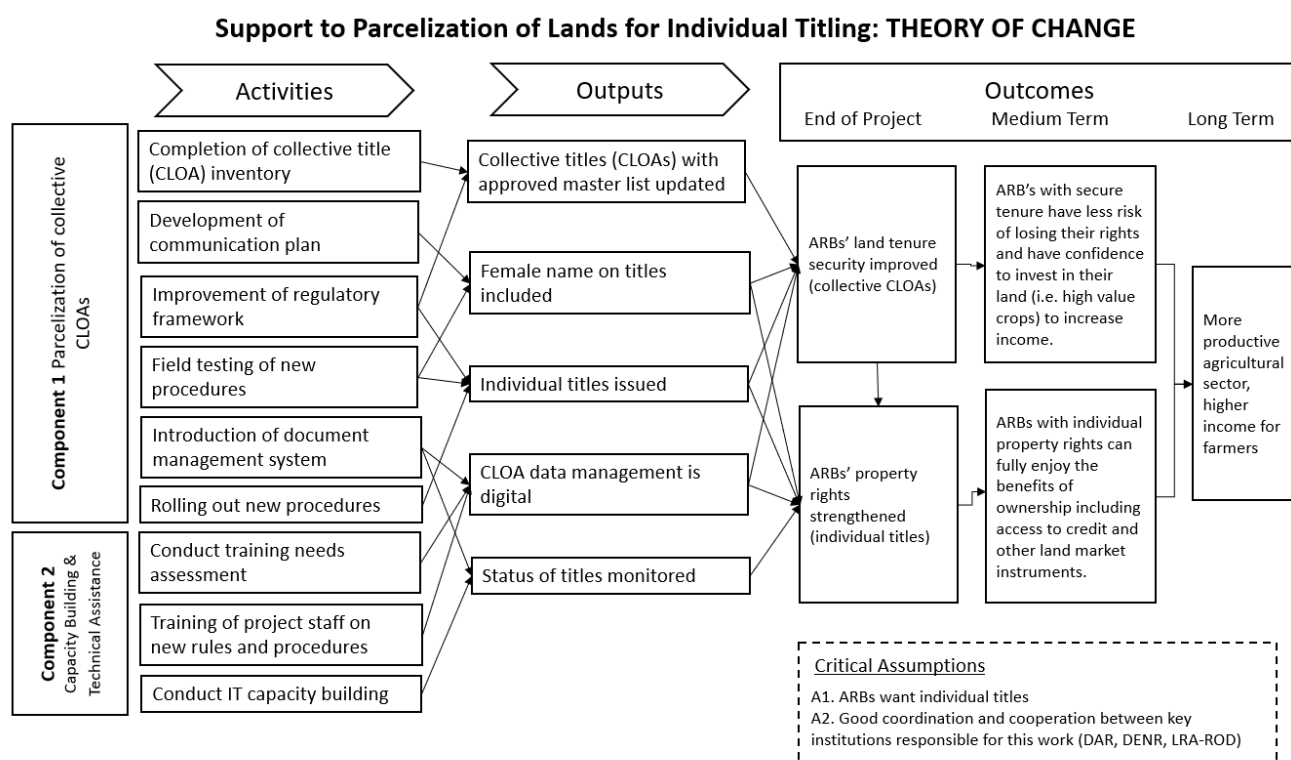


## D. Results Chain

27. **Problem:** Secure land tenure is important for maximizing land productivity and motivating farmers to make more sustainable investments in their land. However almost half of all small-scale farmers in CARP do not have clear and individual land tenure. While the scope of the project is relatively narrow, it does contain important theory of change principles and outcomes.

**Objective:** To improve land tenure security and stabilize property rights of agrarian reform beneficiaries (ARBs).

Figure 2. Theory of Change



## E. Rationale for Bank Involvement and Role of Partners

28. Land reform and titling is a fundamental part of the basic public infrastructure required by a modern market economy. A 2014 study on completed land administration projects concluded that public sector investment in land registration systems is highly beneficial to the economic development of the country with a high rate of return on public investment.<sup>17</sup> This also translates to economic impacts for both individuals and the country's agricultural

<sup>17</sup> Economic Impact of 20+ Years of ECA Land Registration Projects; Satana, Adlington, Torhonen, Anand; Annual World Bank Land and Poverty Conference, 2014.





sector. The proposed project will support the Government to place individual titles into the hands of small-scale farmers. This reversal of long-standing unclear land ownership and tenancy has the potential to elevate the rural economy especially in terms of investment, productivity, income growth, and poverty reduction. At the farm level, formalization of individual land rights offers access to and control of agricultural land thus enabling beneficiaries to construct viable livelihoods and overcome rural poverty.

29. The World Bank has decades of experience in supporting land administration systems and registration-cadaster projects around the world. It has extensive experience in the East Asia and Pacific Region where it has invested in land administration and management systems since the 1980s. It also has experience in providing technical support to the implementation of IT systems that harmonize data and streamline process. In addition, the Bank has been involved in the agrarian and land administration and management sectors in the Philippines and understands well the key challenges and opportunities. The Bank's unparalleled value-added is driven by this combination of understanding the local context and incorporating regional and international good practices. In partnership with the Food and Agriculture Organization of the United Nations, the Bank will also bring experience implementing the Voluntary Guidelines on the Responsible Governance of Land, Forests and Fisheries, a global guidance for best practices in land governance.<sup>18</sup>

#### **F. Lessons Learned and Reflected in the Project Design**

30. The project will introduce specific efficiency gains in the parcelization process. For the past 30 years, DAR managed the subdivision process and inter-agency workflows mainly through paper forms and records. There are also multiple agencies involved in the process. Before a CLOA can be subdivided, DAR must verify with DENR that the land is an A&D land. This verification is based on approved land classification maps and the approved survey plan (ASP). The LRA/ROD is responsible for the cancellation of the collective CLOA as well as registering and issuing the individual titles. Within DAR, the parcelization process also involves several information exchanges with redundant data entry in different paper archives and IT systems using paper-based field forms, multiple site visits, and inputs by DAR municipal staff with central/regional/provincial level reviews and approvals. The result is a parcel cost significantly above World Bank experience both globally and in the region. Thus, efficiency gains will be sought through streamlining procedures and automating the processes.
31. The project design reflects lessons from previous land administration operations, analytical work, and international good practice.
- a. **Automation and unified digital databases improve data quality and data exchanges between institutions.** Currently much of the parcelization process consists of paper forms, repetitive field visits and verifications with various institutions. The project will provide funding and technical assistance to address operational bottlenecks, streamline workflows, increase staffing and capacity, integrate digital technologies, and strengthen institutional coordination and dataflows. By creating a single relational database, data entry efforts will be reduced, data quality checks will be automated (reducing error) and information can be automatically communicated between institutions and systems.

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<sup>18</sup> CFS: Committee on World Food Security. Voluntary guidelines on the responsible governance of tenure of land, fisheries and forests in the context of national food security. VGGT, 2012





- b. **Simple and comprehensive communication is key.** The project will support a new public awareness campaign to inform farmers of their rights and status in the parcelization processes. This project will reach out to the broader community via multiple channels (texts, notifications, websites, and social media) so information can be shared widely among stakeholders, particularly those which might not be present at the time of the field visits for ARB verification, lot allocation and cadastral surveying. Gender and indigenous peoples' sensitive communications will be included in the communications strategy.
- c. **Training and IT capacity building offers lasting benefits.** An investment to build IT capacity within DAR creates long term spillovers that will help move towards the adoption of digital agriculture practices and the implementation and monitoring of DAR's support services. Providing the foundation for an integrated digital spatial data platform for improved decision making during parcelization also has the potential to support agricultural productivity, infrastructure analysis and value chain assessments.
- d. **Strong inter-agency coordination is essential for success in the land reform process.** The project will address the backlogs and will strengthen inter-agency coordination to ensure there are no bottlenecks, particularly with problematic cases. Similar projects in the Land sector have shown that regular inter-agency working group coordination and a digital information management system can facilitate faster decision making. For DAR, resolving boundary disputes and petitions from excluded farmers will need to be fast-tracked through the strengthened institutional arrangements.
- e. **Gender matters.** There are numerous studies that assess the benefits of titling land in the name of both the husband and wife, with positive impacts on family decision making, household expenditures and the health and education of children. The proposed project will ensure measures to empower women and promote gender equality. The new regulatory framework and procedures will require that all female ARBs will have their name included on the titles. Additional efforts will be made during the communication campaigns to raise female awareness of their property rights and resources available to them under CARP.

### III. IMPLEMENTATION ARRANGEMENTS

#### A. Institutional and Implementation Arrangements

- 32. The project will be implemented by DAR in partnership with DENR, LRA/ROD, LBP, NCIP and the Department of Interior and Local Government (DILG). Under respective Memorandum of Agreement (MOA), the partner agencies will perform their mandates and inherent functions in the execution of CARP transactions particularly in the delivery of individual titles and implementation of the different project components. DAR is the lead implementing agency and shall perform overall administration, planning, control, management and supervision of the project in accordance with the POM. The project will also hire full time technical staff and experts to support the land reform staff at the central, regional, and provincial levels. The following implementation and management structures will also be established:
  - a. **Project Steering Committee and Coordinating Committees.** A Project Steering Committee will be established at the national level (National PSC), and respective Project Coordinating Committees (PCC) will be created at the national, regional and provincial levels, all of which will be chaired by DAR with the representatives from partner agencies including DENR, LRA/ROD, LBP, NCIP and DILG; and oversight agencies such as the Department of Finance (DOF), National Economic and Development Authority (NEDA) and Department of Budget and



Management (DBM). The National PSC will provide policy direction and overall guidance to the project. The National PCC will provide operational guidance in the implementation and management of project at the national level, monitor project performance and address operational issues and problems that may arise during the course of implementation. The Regional PCC will review the work and financial plan, provide guidance in the implementation and management of component activities at the provincial level and monitor project accomplishments. The Provincial PCC will be responsible for preparing annual work plans and budget, monitoring of project implementation progress and maintaining good coordination among implementing agencies at the provincial and municipal level.

- b. **DAR Foreign-Assisted and Special Projects Office (FASPO) and Field Operations Office (FOO).** The FASPO in coordination with the FOO will be responsible for the project's overall management and supervision. High-level DAR officials shall be designated as the National Project Director and Deputy Project Director and will be responsible for the operation and implementation of the project at the national and field levels. The DAR's Finance and Management Service (FMS), Administrative Service, and Project Management Service, will provide financial, administrative and technical guidance, respectively, as well as support to the Central PMO to ensure that all budgetary, administrative and reporting requirements are met. Technical Working Groups composed of representatives from relevant agencies shall be established to work on project-specific tasks and requirements.
- d. **Project Management Offices (PMO).** These will be established at the central, regional and provincial level. The Central PMO will be established at FASPO under the management and operational guidance of the Undersecretary of FASPO/DAR Project Implementation Officer to oversee day-to-day operations, management, coordination and implementation of all component activities in accordance with the approved operations manual, as well as create an annual work plan and budget and establish and maintain interagency coordination mechanisms. The Regional PMO will manage and consolidate the implementation of component activities at the regional level and in provinces under its jurisdiction in coordination with regional counterparts from other partner agencies. The Provincial PMO will oversee and coordinate parcelization of collective CLOAs including community consultation and participation, management of environmental and social risk and impacts, field-based validation and identification, DAR survey module contracting, generation and submission of individual titles to ROD for registration and adjudication cases. In addition, a technical team in each Municipal Agrarian Reform Office shall oversee the project activities at the municipal level and coordinate with concerned municipal and barangay local government units in the validation of actual status of collective CLOA at the field level.

## **B. Results Monitoring and Evaluation Arrangements**

- 33. A baseline survey will be conducted during the first year of project implementation. Project monitoring and evaluation will be done in two ways: (i) a monitoring system will be established at the start of the project to collect and assess implementation performance in terms of activities, outputs and achievements of PDO and intermediate indicators; and (ii) at least two surveys to monitor customer satisfaction will be undertaken during the project lifetime to provide a platform for citizen engagement and serve as a feedback mechanism for the project. The survey will occur during the first and second year, so results can influence further capacity building efforts at DAR, and the relevant customer suggestions or complaints will guide further improvements in the parcelization and registration services. Survey results and feedback will be disseminated to the wider public in a user-friendly format.
- 34. An enhanced GRM will also be set up at all levels of DAR to receive and address grievances and feedback received from the different stakeholders. DAR will respond to all grievances and feedback, and the information gathered will



be used to improve services provided and to mitigate any negative social impacts on individuals or communities. The GRM is aimed to increase project transparency and accountability and reduce the risk of possible unintended adverse effects.

### **C. Sustainability**

35. A number of activities will be undertaken to ensure project sustainability. To make sure that benefits of secure tenure are sustained, the project will include information and education campaigns to explain how individual title holders can improve agricultural productivity and diversification, enterprise development, access to credit, and market access. The project will also proactively link the beneficiaries with existing DAR programs and projects which provide support services to individual ARBs and organizations of ARBs.<sup>19</sup> During parcelization consultations and meetings, DAR will reinforce the message and offer female targeted information on women's rights and benefits under CARP. Well informed farmers will be able to exercise their rights and start using land as a productive asset, access services and credit, and increase their land-based income in the medium and long term.
36. By building capacity within DAR central, regional, provincial and municipal offices, the project will create long term benefits that will help move towards the adoption of digital agriculture practices and monitoring of DAR's activities. Streamlined procedures, automated processes and digital data will lead to a more modern and efficient land management system for CARP. Equipment and methods used under the project can later be used for new land reform activities and the project will include a sustainability plan for digital data management. Lastly, providing the foundation for an integrated digital spatial data platform for improved decision making during parcelization has the potential to support agricultural productivity, infrastructure analysis and value chain assessments.
37. In order to ensure knowledge transfer and continuation of IT support after project closure, DAR will ensure that the regional and provincial offices have at least one IT expert hired by the third year of the project.

## **IV. PROJECT APPRAISAL SUMMARY**

### **A. Technical, Economic and Financial Analysis**

38. The project aims to sub-divide/parcelize all eligible remaining collective CLOAs (an estimated 1.368 million hectares) in 82 operating provinces covering 15 regions nationwide. If all farmers opt for parcelization, the project will impact an estimated 4.5 percent of the country's total land. Initial efforts will focus on determining the status of collective CLOAs through desktop verification and field validation. The project will then work to accelerate the process of surveying and gain efficiencies in issuing individual titles to approximately 750,000 ARBs.
39. The economic and financial benefits are expected to come from several sources. Firstly, the systematic mapping, registration and individual titling of approximately 139,000 collective CLOAs stabilizes tenure for approximately

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<sup>19</sup> DAR has a long history and track record of implementing locally-funded and foreign-assisted projects supported by World Bank, ADB, JBIC/JICA, IFAD, FAO, Italian, and Spanish governments, among others. Central to these is the provision of support services to individual ARBs and organizations of ARBs focusing on social infrastructure building, enterprise development and economic support, climate resilient farm productivity support, and basic essential social services access facilitation and enhancement. These are implemented under the DAR's Support Services Office.



750,000 farmers. Once in possession of a land title, the benefits are two-fold and complementary. Firstly, farmers are more likely to invest in their land, purchasing equipment and inputs to modernize and increase yield productivity, thereby increasing their income. Secondly, the farmers could gain access to credit from formal banking institutions, providing them an opportunity to invest further in their agribusiness, diversify crops to increase resilience during a low-yield season. The expected results will be an increase in small-scale farmer income and agricultural production.

40. Numerous external studies have also evaluated the impact of CARP, and found that despite its slow pace, it generally has had a positive impact on the welfare of small-scale farmers. Barrios et al. (2015) examined the differences between non-ARBs and ARBs and discovered a positive correlation between ARBs and increased income. Monsod, et al. (2016), looked more specifically at land tenure, and found that farmers who hold individual titles through agrarian reform, have higher predicted welfare and less probability of being poor. Furthermore, a World Bank Study undertaken by Balisacan and Fuwa (2004) found that CARP increased household consumption and could account for eight percent of the average rate of poverty reduction for the period of 1990-2006. Studies also concluded that the reimbursable fees farmers pay for their CLOA is well below market value, amounting to no more than US\$3,879 over 30 years.
41. The public sector financing of SPLIT is an appropriate vehicle for this project as the project itself concerns a high number of small-scale farmers with collective land use rights. The previous attempts of the agrarian land reform undertaken by the GoP were slow and didn't provide individual land titling to all farmers. Many of the small-scale farmers in the Philippines have been waiting for the individual land titles for over 30 years. To be able to accommodate the subdivision of collective CLOAs and issuance of individual land titles, the public funding is necessary as the project's development impact can't be achieved due to the unavailability of the private sector funding.
42. The WB's value added to the SPLIT project comes as a consequence of the provision of a loan that will allow the subdivision of collective land among small-scale farmers. The supply of the loan, in turn, will benefit small-scale farmers through an assurance that the farmers obtain property rights to the land that they currently cultivate. The conditions of the WB loan also include numerous safeguards associated with gender equality, and climate, for example. The proposed safeguards are put in place to ensure that SPLIT puts emphasis on gender equality and females' participation in the project.
43. The parcelization of collective CLOAs also has benefits for the government. Currently, amortization payments (reimbursement of the government's previous land acquisition costs) for CLOAs and particularly collective CLOAs are low. LBP data show estimates that the payments received from amortization are less than the payments they provide land owners in compensation, largely due to low collection rates and the inability to set up payment accounts for collective CLOAs. Over the past 30 years of struggling to collect payments for collective CLOAs, LBP estimates a loss of US\$280 million.
44. While the benefits stated above can be quantified, it is more difficult to assign a monetary value to other benefits. For example, indirect benefits may include reduction of community disputes over land and increased investments in climate resistant seeds. Ongoing work from the World Bank's Gender Innovation Lab shows initial reports of increased bargaining power when women have their name included on the individual title. This information aligns with global studies on the benefits of co-titling.



## **B. Fiduciary**

### **Financial Management**

45. DAR has been a previous partner agency in the implementation of a number of foreign assisted projects and therefore is familiar with Bank requirements on the maintenance of acceptable Financial Management (FM) arrangements. In general, the existing country and DAR FM systems will be used as part of the overall FM system. Although DAR is familiar with FM arrangements, the project will be implemented nationwide through DAR field offices which have varying FM capacity. Unfamiliarity of assigned project staff with FM policies is likely to increase risks of noncompliance and delays in submitting consolidated financial and audit reports. The key FM arrangements and mitigating measures proposed for the project includes the following:
- a. Separate books of accounts shall be maintained by the project so that issues identified on other DAR financial statements will not be mixed with those of the Project. Resolution of or action upon audit issues on the project financial statements shall be required within six months from the issuance of the report;
  - b. A Designated Account shall be maintained for the project where all loan proceeds released from the World Bank are credited;
  - c. FM Manual shall be developed for the project and incorporated in the POM;
  - d. Sufficient human resources will be hired in the PMO and FMS in the central, regional and provincial offices to ensure that FM processes are implemented, and reporting requirements are submitted. Appropriate FM training will be conducted during the first six months of the project;
  - e. An Annual Work and Financial Plan will be prepared by DAR for approval by the World Bank and submitted in October of the preceding budget year;
  - f. Quarterly Interim Financial Reports shall be submitted to the World Bank no later than 60 days after the end of each calendar quarter; and
  - g. Annual project audited financial statements shall be submitted to the World Bank no later than six months after the end of each calendar year. The audit of the financial statements of the Project shall be carried out by the Commission on Audit (COA).

### **Procurement**

46. All procurement under the project financed by the loan shall be carried out in accordance with the World Bank's Procurement Guidelines for IPF Borrowers (July 2016, revised November 2017 and August 2018) and the provisions of the Loan Agreement and Procurement Plan. For open national competitive procurement, the requirements stated in paragraph 5.4 of the Procurement Regulations and in the Procurement Plan will also be applicable.
47. Procurement under the Project is expected to include Goods/IT systems, such as office and surveying equipment, IT systems upgrading and vehicles (including motorcycles). Consultant services may be required for technical assistance and operational support, capacity building, various studies for project implementation and monitoring, and IT-related consultancy services. Non-consultant services may include surveying services.
48. The DAR will be responsible for all procurement under the project, with some contracts being procured by the Central PMO and others by the DAR Regional and Provincial Offices, as indicated in the Procurement Plan. The Central PMO will also provide supervision and implementation support to the various procuring entities at the



regional and provincial levels. A Project Operations Manual for each of the project components, including a chapter on Procurement, will be developed and submitted to the World Bank for review.

49. The DAR Central Office (CO) has experience carrying out World Bank funded procurement through previous projects. However, the Regional and Provincial Offices have no experience carrying out World Bank funded procurement, applying the World Bank Procurement Regulations. The procurement capacity assessment by the Bank and the Project Procurement Strategy for Development (PPSD) prepared by DAR identified the key risks that may impact procurement under the project along with the recommended mitigation measures, which are listed under the Fiduciary Risk section. Further details of the procurement arrangements are provided in Annex 1.

### C. Legal Operational Policies

	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

### D. Environmental and Social

50. The project aims to support poor farmers, including indigenous people, by enhancing tenure security. However, there may be situations where individual households and communities may be adversely affected. For instance, the validation of collective CLOAs with respect to A&D land classification may result in the return of some land parcels back to forest land and protected area status which, in turn, results in the attenuation of property rights of the affected ARBs, or in extreme cases result in their displacement if they are denied issuance of alternative tenure instruments under DENR's regulation. The issuance of individual titles may also result in evictions of current occupants of parcels within the collective CLOAs, who were not the original ARBs or otherwise do not meet the eligibility criteria under CARP.
51. Mitigation measures are in place to address these risks and the DAR is working with other agencies to avoid or reduce many of these, for instance by potentially re-classifying forest land to A&D land to be eligible under the CARP. Nevertheless, the social risks are assessed to be high given that the prevalence of these risks will only be confirmed during project implementation, the scale of the project, the client's lack of experience with the ESF and the participation of indigenous peoples. The environmental risks are assessed to be moderate mainly due to potential overlap of collective CLOAs with areas designated as forest land or protected areas. Greater investments in agriculture may also increase the use of fertilizer and pesticides, and place greater demands on water for irrigation. Indirect environmental impacts may generally be positive as land ownership normally promotes good environmental stewardship. The security of tenure that results from the issuance of individual titles is expected to encourage beneficiaries to engage in sustainable land management practices, including landscape conservation and biodiversity areas preservation, invest in environmentally sustainable permanent structures and plant permanent crops.
52. To address the environmental and social risks and potential impacts, an Environmental and Social Assessment (ESA) has been undertaken, including a social, legal, and institutional assessment to identify potential risks and impacts of the land titling process, especially on poor and vulnerable groups. All the Environment and Social Standards (ESS)





are relevant except for ESS9 Financial Intermediaries<sup>20</sup>. The ESA has informed the development of mitigation measures and the grievance redress mechanism described in the following instruments: Stakeholder Engagement Plan, Labor Management Procedures, and Environmental and Social Management Framework, including a Resettlement Policy Framework and an Indigenous Peoples Planning Framework (IPPF). A framework approach is appropriate since individual sites will only be identified during project implementation on a rolling basis. The ESMF includes a participatory planning process to identify risks and vulnerable groups and households, to enhance the project benefits to these, and to allow communities and households to make informed decisions about their participation in the project. The first-year implementation will not involve individual titling in sites with conflicting land claims or areas overlapping forest land, protected areas and ancestral domains. Should these be identified for subsequent years, ESF instruments<sup>21</sup> included provisions for the site-specific plans to address E&S risks and impacts.

53. To address potential risks for farmers who may owe taxes that have not been collected for a number of years, or who may not be able to afford the amortization, DAR is consulting with relevant agencies to explore options to exempt taxes, flexible payment options and to provide other forms of assistance. Awareness raising and flexible arrangements will also be considered to address potential risks for farmers who are tempted to sell part of their land with the new titles for investments or to pay off debt, potentially rendering the remaining land unviable. Information materials would be prepared to inform beneficiaries of such risks and support services provided by the DAR or other entities to enhance their livelihood and income. Policy related activities will be informed by the relevant Bank's ESS through assessing their potential environmental and social implications and risks and public consultations.
54. The project aims to benefit indigenous peoples, who are subject to strong rights, including to land, under the Indigenous Peoples Rights Act (IPRA). Some collective CLOAs may overlap with areas covered by ancestral domains under the IPRA and may not be eligible for participation (leaving the land subject to tenure security under the IPRA). Some indigenous communities outside of ancestral domains may also wish to continue collective land tenure arrangements within the collective CLOA which will be verified following a participatory planning process. Adverse impacts on indigenous peoples would be avoided through the application of national legislation and ESS7. The IPPF includes provisions to obtain free, prior and informed consent from indigenous peoples.
55. The DAR will establish a dedicated team that handles environmental and social standards for the project. The capacity for implementing environmental and social aspects has been assessed as part of project preparation and the ESMF includes capacity building and staffing plans. The Environmental and Social unit of the Central Project Management Office will include DAR staff and two hired specialists on environmental and social risk management and stakeholder engagement to provide advisory and oversight assistance. In addition, regional and provincial offices will include E&S specialists and focal persons with responsibility to implement the ESMF and associated frameworks and protocols.

<sup>20</sup> The World Bank has 10 Environmental and Social Standards (ESS): • ESS1: Assessment and Management of Environmental and Social Risks and Impacts; • ESS2: Labor and Working Conditions; • ESS3: Resource Efficiency and Pollution Prevention and Management; • ESS4: Community Health and Safety; • ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement; • ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources; • ESS7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities; • ESS8: Cultural Heritage; • ESS9: Financial Intermediaries; and • ESS10: Stakeholder Engagement and Information Disclosure

<sup>21</sup> The following ESF instruments were prepared and disclosed in March 2020: Labor Management Procedures (March 24, 2020), Environmental and Social Commitment Plan (March 23, 2020), Environmental and Social Management Plan (March 23, 2020), Resettlement Framework (March 23, 2020), Environmental and Social Assessment (March 23, 2020), Indigenous Policy Framework (March 23, 2020), and Stakeholder Engagement Plan (March 20, 2020).



## V. GRIEVANCE REDRESS SERVICES

56. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the WB's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate GRS, please visit <http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service>. For information on how to submit complaints to the World Bank Inspection Panel, please visit [www.inspectionpanel.org](http://www.inspectionpanel.org).

## VI. KEY RISKS

57. **Overall Risk: High.**<sup>22</sup> The proposed project reflects the accumulated experience and lessons learned from previous Bank-financed land titling projects and supports an on-going government program. The government program has a clearly defined scope and it enjoys an unprecedented high level of government support and political commitment. The overall risk is considered High due to the underlying implementation risks which include, environmental and social, political and governance, institutional capacity, fiduciary, as well as procurement.
58. **Political and Governance Risk: Substantial.** There is strong political support for the project from the Secretary of DAR, the Secretary of Finance, as well as the Office of the President. This support is expected to continue as every presidential administration since 1972 has supported CARP. Therefore, the risk for the implementing agency stems not from political will but the tight timeline to complete CARP within three years and the large coordination effort necessary to manage the project's size. To mitigate this risk, extensive field testing of new practices and procedures will be carried out prior to implementation and scale up. Furthermore, a strong communication strategy and design will help the public and beneficiaries better understand the goals and speed of the project. Until the collective CLOA is finished, the full scope and scale of the project is challenging to estimate. This unknown aspect makes planning difficult. After the first year of implementation, the WB and DAR will evaluate the project's timeline and targets, then modify where appropriate.
59. **Institutional Capacity Risk: Substantial.** There are four different institutions involved in the parcelization process, each with its own systems, data and procedures. To expedite the issuance of individual titles, close coordination amongst these institutions is necessary. Given the inter-reliant nature of the processes, procedures and data standardization, solid coordination (i.e., Technical Working Groups) and dispute resolution mechanisms will be in place. The parcelization process will be described in a new DAO which outlines all roles and responsibilities. A new manual will also be drafted that further explains how the CLOA titling will be fast-tracked by each institution. Finally, an inter-agency Steering Committee will be set up for coordination and implementation and MOA will be signed as needed.

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<sup>22</sup> This section discusses the principal risk elements and the corresponding risk management measures of only those risk categories that are rated either Substantial or High.





60. **Fiduciary Risk: Substantial.** The key financial management issues on the proposed project include the following: (i) proposed project involves the implementation of various components on a nationwide level through the regional and provincial agrarian reform offices that have varying financial management capabilities, some of which may not be able to maintain acceptable FM arrangements; (ii) accountability issues were noted at DAR with its audited financial statements from CY 2008-2017 showing adverse audit opinion, significant internal control weaknesses and low resolution of COA audit findings. The latest audit report for CY 2018 was rendered a qualified opinion which is a marked improvement from prior year's financial reports, however, the auditors still noted several issues that need resolution; and (iii) 2015 Rationalization Plan had an impact on the FMS in terms of adequacy and capacity of staff who will handle the financial management of the project. A number of positions in the FMS unit are still unfilled to date. The Bank has carried out the requisite financial management assessment and identified risks and the necessary mitigating measures. The residual Financial Management risk is Substantial.
61. The procurement risks under the project are as follows: (i) lack of readiness of the technical requirements for the survey services, support services and equipment; (ii) lack of qualified procurement staff that will be available to meet the demands of the project, and inadequate procurement training for enhancing procurement knowledge, specifically on WB procurement procedures for the regional and provincial officials; (iii) limited contracting authority of the regional and provincial offices which is currently PhP5 million (approx. US\$100,000 equiv.) and PhP1 million (approx. US\$20,000), respectively; whereas there are some higher value contracts expected to be procured under the project; (iv) limited number of available survey contractors in the provinces; and (v) large volume of equipment to be procured and support services to be hired under the project and the need to have these available at the early stages of the project. The mitigation measures include: (i) before commencement of the procurement process, DAR will ensure completeness of the technical requirements for the survey services, support services and equipment; (ii) a Procurement Specialist (individual consultant) knowledgeable and experienced on the World Bank's Procurement procedures will be hired at the Central PMO level to provide technical assistance and training to the project staff, including regional and provincial offices; (iii) the Bank will provide supplementary training on Bank's Procurement Regulations during project preparation and implementation to DAR staff; (iv) project Operations Manual will include a chapter detailing the internal process and approving authority for procurement; (v) STEP will be used for processing all procurement transactions with the Bank and recording all documentation, including the Procurement Plan; (vi) DAR will prepare quarterly procurement monitoring reports using data available in STEP system and include reporting of the actual progress of each procurement package against the approved Procurement Plan, including identifying constraints/bottlenecks and recommending corrective actions; (vii) DAR Central Office to issue a General Memorandum Order increasing the contracting authority of the DAR regional and provincial offices; (viii) DAR to meet regularly with the Geodetic Engineers of the Philippines to get their buy-in and ensure participation of their survey contractor members in bidding opportunities under the project; and (ix) procurement of all required equipment under the project will be centralized through the DAR Central Office and distributed to the various offices. The residual Procurement risk is Substantial.
62. **Environmental and Social Risk: High.** The ESA and the World Bank's due diligence have identified the following key environmental and social risks, rendering the environmental risks moderate and the social high: potential physical and economic displacement of occupants not eligible under CARP or whose land is also classified as forest land or protected area, the presence of vulnerable groups who may face constraints in fully benefiting from the project, impacts to indigenous peoples, overlap of collective CLOAs with areas designated as forest land or protected areas, and increased use of pesticides and fertilizers. The SEP, ESMF, RPF and IPPF have been prepared to address these risks based on the findings of the ESA and public consultations. Site-specific plans will be prepared when needed during project implementation. The instruments and GRM include screening tools to assess potential impacts and



screen out activities with significant impacts that cannot be addressed through mitigation and compensation measures (e.g., CLOAs that overlap with ancestral domain, forest land and protected areas). The RPF defines eligibility criteria, a screening and assessment process, and mitigation and compensation measures for affected people. The IPPF defines a participatory approach for titling of collective CLOAs among members of indigenous communities, including the undertaking of free, prior and informed consent. Subdivisions of CLOAs during project implementation will be undertaken in a phased manner to screen out potential sites with overlapping claims and social impacts requiring mitigation plans (e.g., RAP or IPP) during the first year of implementation.

63. **Other: Moderate.** The COVID-19 pandemic has resulted in dramatic movement restrictions, due to a government imposed enhanced community quarantine. If such restrictions are not relaxed by the time this project begins, there is a risk the project experiences delays. While the timing of restrictions are not certain, they are expected to be lifted gradually over the coming months, allowing the project to continue. To further mitigate any health risks, the adoption of virtual meetings (procurement video conferencing technology) remote survey techniques (expansion of drone imagery use) and community consultations that adhere to social distancing measures will be supported by the project.



## VII. RESULTS FRAMEWORK AND MONITORING

### Results Framework

COUNTRY: Philippines

Support to Parcelization of Lands for Individual Titling (SPLIT) Project (P172399)

#### Project Development Objectives(s)

To improve land tenure security and stabilize property rights of agrarian reform beneficiaries (ARBs).

#### Project Development Objective Indicators

Indicator Name	PBC	Baseline	End Target
<b>To improve land tenure security of agrarian reform beneficiaries</b>			
Eligible collective titles (CLOAs) with a validated list of ARBs (Percentage)		0.00	80.00
<b>To stabilize property rights of agrarian reform beneficiaries</b>			
Eligible Individual titles issued (Percentage)		0.00	80.00
Including individual titles in target areas with ownership, co-ownership, and marital property rights issued to females (Percentage)		0.00	45.00

**Intermediate Results Indicators by Components**

Indicator Name	PBC	Baseline	End Target
<b>Parcelization of collective CLOA</b>			
Establishment of improved rules and regulations for parcelization (Yes/No)		No	Yes
Collective CLOA Document Management System developed and operational (Yes/No)		No	Yes
CLOA Document Management System generates monitoring reports (gender disaggregated) (Yes/No)		No	Yes
ARBs informed of their rights and the procedures of the parcelization process (gender disaggregated) (Percentage)		0.00	100.00
Percent of female ARBs informed of their rights (Percentage)		0.00	100.00
Married ARBs with female spouses' name on the title (Percentage)		0.00	40.00
<b>Capability Building and Technical Assistance</b>			
Project staff that received technical training (Percentage)		0.00	100.00
Percent of female project staff that receive training (Percentage)		0.00	100.00
<b>Project Management and M&amp;E</b>			
M&E system developed and operational (Yes/No)		No	Yes
Number of project provinces implementing the GRM strategy (Number)		0.00	76.00

**Monitoring & Evaluation Plan: PDO Indicators**

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Eligible collective titles (CLOAs) with a validated list of ARBs	Percent of eligible collective CLOAs in DAR's inventory that have been verified, undergone inclusion/exclusion and now have an approved master list. Eligibility for CLOAs and ARBs is defined as part of the validation process as defined in the legal and regulatory framework. Preliminary estimates of eligible collective CLOAs ranges from 90,000 to 100,000.	Annual	DAR	DAR progress reports	DAR
Eligible Individual titles issued	Percent of eligible individual titles issued in target areas. Eligibility for CLOAs and ARBs is determined during the validation process as defined in the legal and regulatory framework. Parcels that are not classified as A&D or are subject to court cases, will be deemed ineligible. Validation of the collective CLOA master list determines	Annual	DAR	DAR progress reports	DAR



	the eligibility of the ARBs. Preliminary estimates of eligible ARBs range from 550,000 to 750,000.				
Including individual titles in target areas with ownership, co-ownership, and marital property rights issued to females	This indicator includes females as the primary beneficiary as well as co-ownership rights granted through marital property. The indicator will be measured by the percentage of titles with female names on them.	Annual	DAR	DAR progress reports	DAR

#### Monitoring & Evaluation Plan: Intermediate Results Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Establishment of improved rules and regulations for parcelization	A Department Administrative Order (DAO) with a new parcelization processes should be issued and implemented	Once	DAR	Copy of the Department Administrative Order (DAO) shared	DAR
Collective CLOA Document Management System developed and operational	A modernized CLOA Document Management System will be developed during the first year and during the second year it will be operational.	Annual	DAR	DAR progress reports	DAR
CLOA Document Management System generates monitoring reports (gender	The new Document Management System will	Annual	DAR	DAR progress reports	DAR



disaggregated)	produce reports on the number of collective CLOAs that are being sub-divided (parcelized) and individual titles issued with female names included (if applicable).				
ARBs informed of their rights and the procedures of the parcelization process (gender disaggregated)	ARBs in target areas will be informed of their rights through consultations conducted by the DAR. Females will be informed of their rights over the land and property.	Annual	DAR	DAR progress reports	DAR
Percent of female ARBs informed of their rights	The percent of female ARBs in target areas that are informed of their property rights through consultations and targeted communication campaigns.	Annual	DAR	DAR progress reports	DAR
Married ARBs with female spouses' name on the title	Currently DAR does not have procedures in place to register both spouses on the title, and no data are systematically collected. Preliminary results from a recent and small scale survey show that 34% of male ARB's include their wife's name, however this number is a rough estimate. When more accurate and				



	reliable information is produced the base line will be adjusted.				
Project staff that received technical training	This indicator will measure the number of project staff at the DAR, DENR, LRA/ROD (male/female) who participate in project financed training activities and will be measured through attendance sheets.	Annual	DAR	DAR progress reports	DAR
Percent of female project staff that receive training	This indicator will track the number of female project staff at the DAR, DENR, LRA/ROD who participate in project financed training activities.	Annual	DAR	DAR progress reports	DAR
M&E system developed and operational	An M&E system is functioning and collecting monthly information that tracks the project's implementation	Annual	DAR	DAR progress reports	DAR
Number of project provinces implementing the GRM strategy	This indicator measures effectiveness of citizen feedback mechanisms established under the Project, by counting the number of project provinces that have the GRM system addressing cases (including complaints and inquiries) per the standards agreed	Every six months	DAR	DAR progress reports	DAR





	upon in the GRM procedures.				



## **ANNEX 1: Implementation Arrangements and Support Plan**

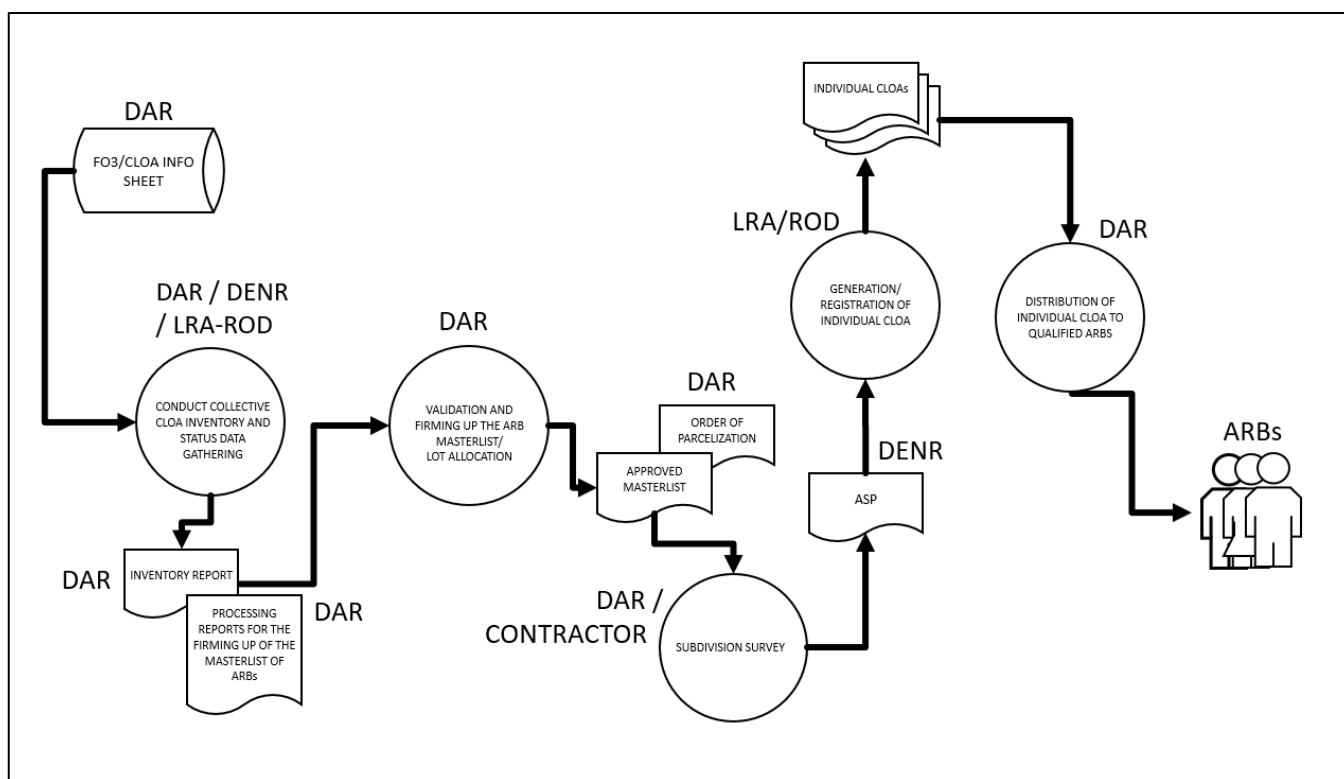
### **COUNTRY: Philippines**

#### **Support to Parcelization of Lands for Individual Titling (SPLIT) Project (P172399)**

1. Implementation arrangements shall be led by the Department of Agrarian Reform (DAR) which will perform the subdivision in-house and coordinate with the other agencies involved in the parcelization process. DAR will perform overall administration, planning, control, management and supervision of the project in accordance with the Project Operations Manual (POM). The project will also hire full-time technical staff and experts to support the land tenure staff at the central, regional, and provincial levels. As the government's lead agency in the implementation of the Comprehensive Agrarian Reform Program (CARP), DAR has the mandate and experience of subdividing collective Certificates of Land Ownership Award (CLOAs) into individual titles. However, this process includes other government institutions such as the Department of Environment and Natural Resources (DENR), Land Registration Authority/Registry of Deeds (LRA/ROD), Land Bank of the Philippines (LBP) and National Commission on Indigenous Peoples (NCIP). A Memoranda of Agreement (MOA) will be established between DAR and the other agencies. Technical working groups and a project steering committee will be set up with representatives from all relevant institutions, to approve annual workplans and budgets, review and oversee project implementation and make decisions that support streamlining data flows, automating procedures, setting fees and approving processing times and service standards.
2. The process of collective CLOA parcelization involves many forms and inter-agency data exchanges. Figure 3 presents the many steps of the parcelization workflow. DAR has the prime role in implementing CARP and is responsible for communications with the agrarian reform beneficiaries (ARBs), working with the ARBs to agree on lot allocation, commissioning the surveys and preparing the legal documents necessary for registration of individual titles. The DENR is responsible for confirming that land covered by a collective CLOA is eligible alienable and disposable (A&D) lands and for specifying and approving the survey plans for parcelization that are prepared by surveyors. The LRA/RODs are responsible for registering the collective and individual titles. The national title registration system is implemented by a private company under a public-private partnership contract. The title registry has largely been computerized and related e-Services are under development, although processing times and performance for an influx of requests such as those anticipated under the project could be a bottleneck. Fees are charged for registration and other services, including to government agencies such as DAR.



**Figure 3. Parcelization Workflow**



3. Historically, DAR managed the subdivision process mainly through paper forms and records. However, Component 1.2 will create a digital document system to improve efficiencies and eliminate redundant data entry. Before a CLOA can be subdivided, DAR must verify with DENR that the land is A&D land. This is done using the approved land classification maps and the approved survey plan that was the basis for the issuance of the collective CLOA. Based on multiple forms from DAR, the LRA/ROD is responsible for the cancellation of the collective CLOA and registering and issuing the individual titles.
4. Through Component 3, the project will support DAR with overall project management and monitoring and evaluation. This will include day-to-day coordination, monitoring of the workplan and procurement plan, M&E, and reporting within and across the agencies. The role of these agencies during the CLOA parcelization process is mapped out in Figure 3.

### Financial Management

5. The project will be implemented using the national government's and DAR's financial management (FM) systems as the basis for budgeting, accounting, internal controls, financial reporting and auditing.
6. **FM Organization and Staffing.** DAR has a well-defined organizational structure. The DAR's Financial Management Service (FMS) supervises the Accounting, Budget and Management Divisions. Its primary task is to advise top management on problems relative to financial and administrative matters. It also provides proper and timely



allocation of funds, management control and accounting of funds, establishes management systems and procedures, and sets financial and administrative standards and guidelines for field offices. For the project, FMS will maintain the books of account and sign-off on all disbursement vouchers and financial reports submitted to the Bank.

7. The Foreign-Assisted and Special Projects Office (FASPO) through the Central Project Management Office will assign a designated FASPO personnel to look into the FM requirements of the project and will hire on a project basis an FM Specialist for the monitoring, supervision, and maintenance of all project financial records, as well as the preparation of basic financial reports required by DAR CO, donor institution and oversight agencies.
8. In addition to FM staff in the CO, the project will be implemented by field offices and other implementing agencies. These field offices have varying capacity and as such, capacity building in terms of FM and establishment of clear FM guidelines is critical to ensure the smooth implementation of the project. At the regional and provincial offices, FM matters are handled by the Chief Finance and Administrative Officer. Directly under this office is one Budget Officer and an Accountant. The sole Budget Officer handles all the budgetary tasks while the Accountant performs all accounting functions. Job order/casual staff are maintained to augment the manpower constraint.

**FM Arrangements:**

- a) To ensure that FM systems are adequately addressed, FASPO will hire adequate FM personnel in the central, regional and provincial offices who will facilitate FM requirements and monitor financial reporting requirements from field offices and partner agencies.
  - b) The project should prepare a POM that will clearly define the roles and responsibilities of FM personnel in the central, regional and provincial offices. The FM section in the POM should also document the specific reporting requirements, funds flow instructions and audit requirements necessary to show accountability of transactions.
9. **Budgeting.** Budget proposals will be prepared annually by DAR and submitted to the Department of Budget and Management (DBM) for review. The annual budget of DAR is included in the annual General Appropriations Act approved by the Congress. DAR has a Budget Division responsible for the preparation and monitoring of its overall budget.

**FM Arrangements:**

- a) The Central PMO will finalize the budgetary requirements for the project components and DAR FMS to ensure appropriate budget cover for government counterpart during the budget preparation
  - b) Prepare annual work and financial plan during project implementation for approval by the Bank by October of the preceding budget year.
10. **Accounting.** DAR conforms to the Government Accounting Manual (GAM) and has already rolled out the use of electronic New Government Accounting System and eBudget in all field offices. The agency is also targeting the rollout of Budget and Treasury Management System in the coming year. However, it is to be noted that, due to the un-integrated systems, DAR needs a lot of manual intervention to prepare financial reports. The FMS has servers for financial data and back-ups are done on a regular basis (daily). The financial statements of DAR have been prepared in accordance with state accounting principles and standards. Review of prior period audit reports showed that the financial statements of DAR were given a modified or adverse opinion by the auditors in the previous years. As such, the agency financial reports are not as reliable due to the qualifications and have significant audit findings.



**FM Arrangements:**

- a) Due to the modified and adverse audit findings in the agency financial reports, separate books of account will be maintained for the project
- b) Any audit findings noted by the Commission on Audit (COA) on the project financial statements should be resolved within six months after receipt of the audit report.

11. **Internal Controls.** Basic internal controls such as separation of conflicting functions, segregation of bookkeeping functions from custodianship of assets, reconciliation of subsidiary records with the corresponding general ledger control account, and a multilevel system of review and approval of transactions before their execution are required under GAM. DAR is also in the process of finalizing the agency FM Manual. However, the 2018 Audit Report by COA revealed a number of observations resulting from the Financial and Compliance Audit, which are indicative of an inadequate and ineffective internal control system. Of the 54 prior year's audit recommendations, only five were implemented, while 49 were not implemented.

**FM Arrangements:**

- a) FM Manual as part of the POM to be prepared for the project prior to loan effectiveness and the following items will be included:
  - (i) FM structure in the central, regional and provincial office.
  - (ii) Funds flow arrangements from DAR CO to field offices and no funds will be downloaded to other national government agencies.
  - (iii) Accounting for funds and financial reporting requirements in the field offices.
  - (iv) Overall internal control procedures.
  - (v) Sample financial reports/templates to be filled.
- b) Training to be provided on FM upon loan effectiveness.

12. **Disbursement Arrangements and Funds Flow.** The lending instrument that has been selected is Investment Project Financing (IPF). A transaction-based disbursement modality would be used to download funds from the Bank to DAR. In this modality, Bank funds will be downloaded to DAR at least on a semestral basis based on the semestral cash flow needs of the project. Submission of Statements of Expenditures (SOEs) will be required for the reporting of fund usage at least on a quarterly basis. DAR would forecast the cash needs of the project for a six-month period and submit a Withdrawal Application to the Bank. In succeeding withdrawal applications, the cash forecast requirements and Statement of Sources and Uses of Funds (SSUF) for previous downloads would be submitted as supporting documents. To facilitate reporting, the Provincial PMOs and Regional PMOs would submit the SOEs to the Central Office monthly to consolidate all SOEs and report on fund utilization. DAR would open and maintain a Designated Account in US Dollars in an authorized government depository bank acceptable to the Bank. Loan disbursement would be in accordance with the financial plan of the project for the following categories:

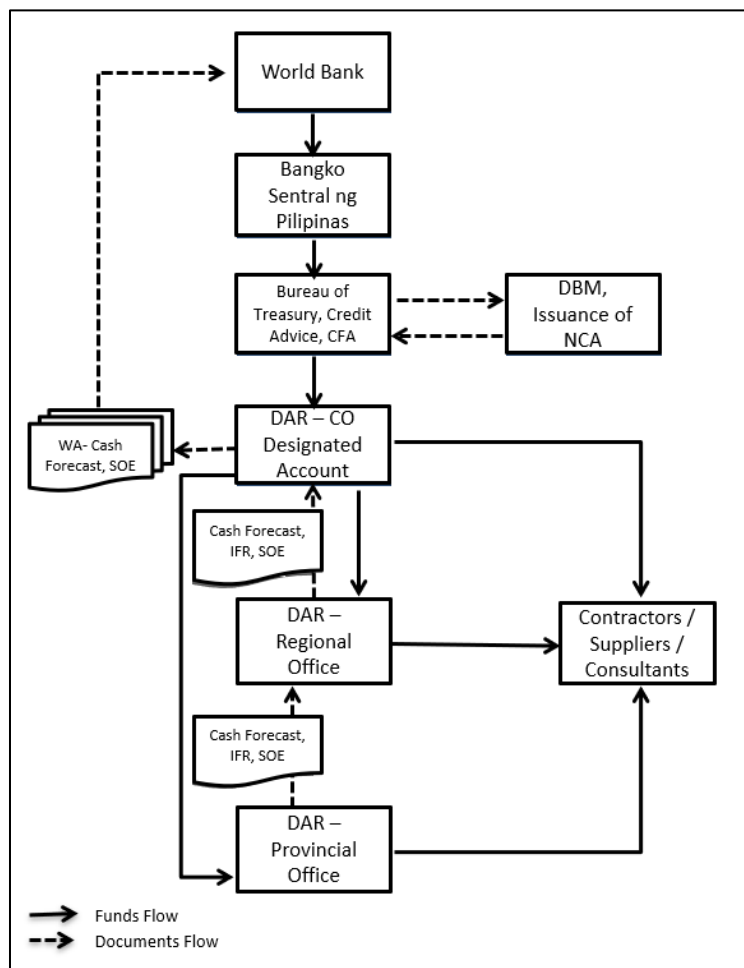
**Table 2. Allocation of IBRD Loan Proceeds**

Disbursement Category	Amount of the Loan (US\$)	Percentage of Expenditures to be Financed (%)
A. Goods, Non-Consulting Services, Consulting Services, Training and Workshops, and Incremental Operating Costs	370,000,000	100%
Total	370,000,000	100%



13. **Funds Flow from World Bank to DAR.** The funds will flow from the World Bank to the Bureau of Treasury's account at the *Bangko Sentral ng Pilipinas* (Central Bank of the Philippines). After approval by the DBM, through the issuance of a Notice of Cash Allocation, funds flow to the DAR's Designated Account maintained in an acceptable depository government commercial bank. Figure 4 shows the complete flow of financing between institutions.

**Figure 4: Funds Flow from World Bank to DAR**



14. The funds flow from the DAR's CO to DAR field offices in the regions and provinces will follow the existing FM arrangements of the agency. Project bank accounts shall also be opened at field offices for loan and government counterpart funds to pay for Philippine Peso-based expenditures.
15. Expenses in the field offices are expected for goods, support personnel and incremental operating costs to support project implementation. To trigger disbursements, supporting documents such as cost proposals, cash disbursement forecasts, etc. will be prepared by the provincial offices for review and consolidation in the regional offices which in turn will be submitted to the DAR's CO along with the costs of the regional offices. Based on the proposals, a Sub-



Allotment Release Order will be issued from CO to regional offices and from the regional offices to provincial to allow contracting of goods and services. All funds downloaded will be subject to liquidation and will be used as basis by the CO in reporting to the Bank actual usage of funds.

16. **External Audit.** The COA, the Supreme Audit Institution of the country, is performing the external audit of DAR's financial reports. COA is an independent office which was given the mandate under the Philippine Constitution to audit all accounts pertaining to government revenues and expenditures, uses of government resources and to prescribe accounting and auditing rules. The COA's audit is substantially in accordance with the international auditing standards prescribed by the International Organization of Supreme Audit Institution.
17. The audit of the Project Financial Statements will be conducted by COA. The scope of the audit shall include a review of the Designated Account and eligible expenses to be conducted on an annual basis and submitted to the Bank six months after the end of each calendar year.

**Summary of FM Arrangements:**

DAR shall submit the following reports to the Bank throughout the life of the project:

- a) Quarterly Interim Financial Reports (IFRs) within 60 days after the end of each calendar quarter. The format of these IFRs will be incorporated in the POM.
  - b) Annual Audited Project Financial Statements together with a copy of the management letter reflecting the auditor's findings and recommendations shall be submitted to the Bank no later than six months after the end of each fiscal year. The auditor for this project is COA. DAR will also monitor issues noted by COA and prepare a time-bound action plan to resolve all issues within 6 months after the receipt of the audited financial statements.
18. **Supervision Plan.** FM implementation review shall be undertaken twice a year during project implementation to ensure that the loan proceeds are used for the purpose they were granted, which may take at the most two weeks. The scope of the supervision is left to the professional judgment of the FM Specialist. It may cover any of the following: (a) review of the continuous maintenance of adequate FM system by DAR; (b) review of IFRs; (c) follow up of timeliness of FM reporting and actions taken on issues raised by external auditors; (d) follow up of the status of the any agreed action; and (e) review of compliance with the financial covenants.

**Procurement**

19. All procurement under the project shall be carried out in accordance with and governed by the World Bank Procurement Regulations for IPF Borrowers (July 2016, revised November 2017 and August 2018) and the provisions stipulated on the Loan Agreement and in the Procurement Plan. The general description of various items under different expenditure categories financed by the Bank are described below.
  - a) **Goods/IT Systems:** Expected procurements under this project will include equipment (office, surveying, information technology or IT), vehicles (including motorcycles), and development/upgrade of IT-related systems.
  - b) **Consulting Services:** Consulting firms and individual consultants may be required for technical assistance and operational support, capacity building, various studies for project implementation and monitoring, IT-related consultancy services.
  - c) **Non-consulting Services:** Surveying services will be procured at the provincial office level.



20. The applicable method of procurement for each specific contract and the Bank's review requirements (prior or post review) will depend on the nature, value, and risk of each contract and are specified in the Procurement Plan approved by the Bank. For open national competitive procurement, the requirements stated in paragraph 5.4 of the Procurement Regulations and in the Procurement Plan will also be applicable.
21. The procurement arrangements and procedures will be detailed and fully documented in the Procurement Section of the POM based on the provisions of the Loan Agreement and as agreed between DAR and Bank. The POM will also detail the processing timelines, and the hierarchy of approval within DAR.
22. **Capacity and Risk Assessment.** DAR will be responsible for all procurement under the project, with some contracts being procured by the Central PMO and other by the DAR Regional and Provincial Offices, as indicated in the Procurement Plan. Central PMO will also provide supervision and implementation support to the various procuring entities at the regional and provincial levels. While DAR has experience at the central level of carrying out procurement under previous World Bank financed projects, the regional and provincial offices do not have such experience though they are capable of conducting competitive bidding and shopping following Government procurement procedures. Support of technical and procurement consultants will be required for supporting DAR in carrying out the project procurement, particularly the large volume of survey services, equipment and support services, and complemented by training. The capacity assessment and PPSD identified a number of risks and mitigation measures (see section on Key Risks – Fiduciary for the list of identified risks and the required mitigation measures).
23. **Procurement Plan.** Contracts eligible for financing shall be procured following the Procurement Plan which defines the applicable procurement methods, estimated costs, prior review requirements and time frame. A Procurement Plan for the first 18 months of the project was prepared by DAR and approved before negotiations. This will be published through the Bank's Systematic Tracking of Exchanges in Procurement (STEP) system. The Procurement Plan will be updated annually, or as may be required, to reflect project implementation needs and improvements in institutional capacity and procurement risk.
24. **Project Implementation Support Staff.** Individuals to be contracted for positions to support DAR in carrying out its project management functions, other than individual consulting positions identified in the Procurement Plan, may be selected according to DAR/Government's personnel hiring procedures, as reviewed and found acceptable by the Bank. This means that such project implementation support staff are not deemed as Consultants as defined in the Bank's Procurement Regulations and their selection and contracts are not governed by the consultant selection procedures under the Bank's Procurement Regulations, but by the DAR/Government's own rules. Such personnel should not be included in the Procurement Plan in STEP but identified in the project implementation/staffing plan.
25. **Procurement Support Plan.** In addition to the prior review of procurement transactions, at least two implementation support missions per year by the Bank will be fielded to review the progress of the project. Conduct of post reviews will be done during these missions. The post review sample size will not be less than 20 percent of the contracts that were not subject to the Bank's prior review.





## **ANNEX 2: Detailed Project Description**

### **COUNTRY: Philippines**

#### **Support to Parcelization of Lands for Individual Titling (SPLIT) Project (P172399)**

1. **Component 1: Parcelization of Collective Certificates of Land Ownership Award (CLOAs)** The objective of Component 1 is to complete the parcelization of the remaining collective CLOAs. This will require the hiring of additional human resources, development of a clear communication and outreach program, testing and rolling-out a more efficient parcelization processes, and the development and deployment of digital processes and document management system. This component will support the Department of Agrarian Reform (DAR) and partner implementing agencies to facilitate completion of parcelization, initially testing in the first year, and then rolling-out in subsequent years. To streamline the parcelization process and address bottlenecks that have occurred in the past, DAR will take the following actions: (a) manage the inclusion / exclusion process to determine who is eligible to receive an individual title; (b) facilitate preparation and notarization of documents, and submission to the courts if necessary (there has been no dedicated agrarian court since 2017); (c) hire geodetic engineers to conduct surveys, including initial field testing to develop an accelerated approach; and (d) expedite title issuance by the Land Registration Authority/Registry of Deeds (LRA/ROD). Sub-components 1.1, 1.2 and 1.3 are considered preparatory components of work prior to commencing the parcelization process. Sub-component 1.4 covers field testing procedures in select regions, and Sub-component 1.5 reflects the scaling up of the parcelization process that has been field tested.
2. **Sub-Component 1.1: Improved Regulatory Framework.** To accelerate the parcelization process, improvements to the regulatory framework are required. In April 2019, Department Administrative Order (DAO) No.2 (series of 2019) was issued, providing guidelines for the parcelization of collective CLOAs. However, in order to complete an accelerated parcelization process, this DAO will need further updating. DAR will establish a technical working group and conduct consultations in the regions and provinces to review and update the DAO and complete the implementing rules and regulations to facilitate the roll out of the parcelization process, including details such as: institutional arrangements, financial management, procurement arrangements and plan, digital workflows and information systems, safeguards arrangements, etc. These requirements will also be integrated into the Project Operations Manual (POM). This sub-component will also strengthen institutional arrangements and coordination amongst DAR, Department of Environment and Natural Resources/Land Management Bureau (DENR/LMB), LRA/ROD, DILG and National Commission on Indigenous Peoples (NCIP) at the national, regional and provincial levels. While some provinces have effective local working relationships, the increase in volume of work and resource of line agencies require good project governance and effective coordination mechanism among and between implementing partner agencies.
3. This sub-component will also include development of a clear and comprehensive public information campaign using simple and local language dialects and various media, such as radio and text messages to target agrarian reform beneficiaries (ARBs). During the early phase of the project, an assessment of current communication formats and audiences will be made, followed by the creation of a media and communications strategy and the design of core information, education and communication materials to support parcelization activities. The communication material will explain document preparation requirements and procedures, tenure arrangements, amortization requirements, gender rights information and options for redress mechanisms,



options for disaster affected records, and how to address some of the complex succession arrangements that ARBs might face.

4. Upon completion of the collective CLOA inventory, a study will be conducted that considers policy implications for the findings from the inventory process and results. In addition to policy considerations, this study will inform the review of the regulatory framework. Further review and improvement to the regulatory framework will be done following the implementation of field testing in Sub-component 1.4. to consolidate the operational efficiencies and experience of the parcelization activities prior to scale up under Sub-component 1.5.
5. **Sub-component 1.2: Information Technology (IT) Support.** This sub-component supports the optimization of workflows for the parcelization of collective CLOAs with the aim to upgrade the existing manual and paper-based processes to digital workflows and data exchange, through: (i) the development and implementation of a central CLOA Document Management System and a central digital archive system for individual title; (ii) the development of automated tools and digital forms to support the local level processes; (iii) upgrading the DENR eSurvey Plan module for geodetic engineers; (iv) technical assistance to staff at central and field offices to use the new system and automated forms, maintain the system, provide help desk support and on-the-job assistance, as needed; and (v) supply of hardware, licenses, communication equipment and renting communication lines. To improve information management, this sub-component will introduce a central CLOA Document Management System, a Digital Archive for individual titles and digital forms that will establish a central database that tracks the status of each CLOA and generates various statistical and management reports to support the decision-making process, monitoring and reporting. The system will provide information about the performance of local offices and the processing/waiting time for each major step in the parcelization process. This information can then be used to further optimize and streamline the process. It will also generate gender disaggregated statistics and other reports to support the monitoring and evaluation process. DAR staff across all levels will receive training on digital technology.
6. Currently, personal information collected by DAR includes full names and, in some cases, additional information such as passport numbers, birth certificate numbers, and birthdates to help identify individuals in a unique way. This sub-component will be used to standardize ARB information and provide a basis to link land data to other information such as the Unified Multi-Purpose Identification system. The design of the data model of the CLOA Document Management System will take into consideration the data model of the current and planned personal register to ensure system inter-operability in the future.
7. This sub-component will also support the capacity building of the DAR's IT staff and will provide IT consultants to support the DAR's Management Information Systems Service to help manage the software development and implementation of a CLOA Document Management System and Digital Archive System as well as provide help desk support for new regional and the provincial level IT support staff. The Department of Information and Communication Technology (DICT) has a mandate to observe/supervise the supply of hardware and IT system development to ensure the inter-operability and compatibility of government IT systems. The DICT infrastructure may be used as a backup location to host a copy of the database of CLOA Document Management System. The issued individual titles will be registered and maintained by the LRA/ROD, as per the existing legal framework. The IT system of the LRA is currently maintained by a private company under a public-private partnership agreement, although land information is not exchanged digitally with DAR and fees are charged to both entered and received land information. Under the project, information for the processed



cases (both issued and rejected CLOAs) will be stored in DAR's digital archive system for future reference such as provision of farmer support services.

8. **Sub-Component 1.3: Completing the Inventory of Collective CLOAs.** This sub-component will consist of creating a detailed inventory of all existing collective CLOAs. During this process, CLOAs will be verified and marked as either alienable and disposable (A&D) land, forest land or another land classification. This work will commence in consultation with the regional and provincial offices prior to project start up.
9. The inventory will identify ARBs in the collective CLOAs and ensure the masterlist of ARBs is appropriately documented and approved. The process will confirm aspects such as land type, survey status, ARB group/type, actual land use of each land holding, and identify collective CLOA with pending legal cases. Preparing the inventory will require desk work and field verification.
10. The final step in completing the inventory is confirming that the land classification of each collective CLOA has the status of agricultural land (alienable and disposable). Land classification is the mandate of the DENR at the Community Environment and Natural Resources Office level. Efficiencies can be gained by completing land classification reviews of collective CLOAs centrally, certified by the Forest Management Bureau (FMB) of DENR. This process will require revision of the existing regulatory framework and transfer of the signing authority for certification of land classification to the FMB. To complete the projection of approximately 139,000 collective CLOAs onto the land classification map in a timely manner, the project will support DENR with additional equipment and staff resources.
11. The inventory will identify collective CLOAs that have serious legal or technical issues that need to be addressed before parcelization can commence. These issues may include that fact that the collective CLOAs cover unclassified land, land classified as forest land, or other land not deemed as A&D land; ARB masterlists that are not approved which may require inclusion/exclusion; and those subject to pending cancellation cases. These problems may result in delays while the issues are resolved or some applications that cannot be processed during the project life.
12. **Sub-Component 1.4: Field Testing of Improved Procedures to Subdivide Collective CLOAs.** To complete the parcelization of collective CLOAs, new procedures and survey techniques will be tested during the first year of the project. Testing is planned to take place in up to three regions to ensure effective management of new processes, resourcing and new procurement rules. The regions will be selected based on agreed criteria such as where there are a significant number of collective CLOAs and LMB/DENR have largely completed the digitization of approved survey plans.
13. The field testing will pilot the key stages of the parcelization process to identify sources of lag time and identify ways to gain workflow efficiencies. For collective CLOAs that do not have approved survey plans (ASP), the activities will cover the validation, confirmation of the ARB masterlist, the agreement on lot allocation and the request for survey services. For collective CLOAs with ASP, the field test stage will cover redocumentation and the activities necessary to prepare and issue individual titles. It is expected that some of the collective CLOAs both with and without ASPs will require inclusion/exclusion, reconstitution and re-issuance of title. It is also expected that some of the collective CLOAs with ASP will require re-survey or new surveys. The area for the field testing will be selected to minimize these complications.
14. Prior to field testing, all field staff will receive communications training to ensure effective and consistent information is shared and that there is a clear message explaining the processes and procedures. Public



communications and media activities will initially target the provinces that are selected for the field testing. This campaign will use the materials prepared under Sub-component 1.1.

15. Field Validation will be a major activity under Sub-component 1.4. and will be undertaken by additional DAR staff arranged into teams that include a surveyor, a legal officer, and documenter(s). Documents will be gathered and encoded at the provincial office. The initial consultation with ARBs in a collective CLOA may be consolidated into the field validation activity where a community consultation ("pulong-pulong") will be held. In the "pulong-pulong", ARBs have the choice of opting out of the parcelization process. If there is no approved masterlist, work to prepare a masterlist of ARBs will commence. The process to approve a masterlist includes a 15-day public display during which time any complaints, corrections or rejections are addressed. If there is an approved ARB masterlist that is no longer in accordance with eligible ARBs in the collective CLOAs, an inclusion/exclusion process is required to ensure that the approved masterlist reflects the situation on the ground. Also, during the "pulong-pulong", the review of existing approved subdivision survey plans is completed and the lot allocation scheme is determined and agreed. If the ARBs do not reach agreement on lot allocation, DAR issues an Order of Lot Allocation.
16. There are instances when titles at some RODs were either damaged or destroyed by fires or typhoons or are missing from their files which necessitates DAR to file for reconstitution of title. Based on field estimates, roughly 20 percent of collective CLOAs require reconstitution of titles. Those requiring reconstitution will not be included in the field tests. Since the Agrarian Courts were closed in June 2017, there is no special processing for ARBs and they will need to go through the regular court system.
17. **Parcelization Survey and Issuance of Individual titles.** The long period since the issuance of the collective CLOAs may result in differences between the parcels defined on the original ASPs and the current situation on the ground and will require a re-survey, especially in areas where surveys were conducted prior to 2009. Surveys for the field testing will be undertaken by DAR staff under administration arrangements. To carry out re-surveys, new survey techniques using modern technology, particularly Real Time Kinematic (RTK) GPS, drones and satellite imagery, will be tested to rapidly capture collective CLOA subdivisions and re-establish boundaries where necessary.
18. The process will include the preparation of the deed of parcelization and other documentation required for the land distribution folder. Once the necessary documents are available and signed, they are submitted to the ROD for registration of the individual titles. To minimize delays in the registration process, support staff may be engaged for specific tasks at the ROD. For collective CLOAs that are based on compensable land holdings under Compulsory Acquisition and Voluntary Offer to Sell scheme, a Land Distribution Information Schedule is issued to the Land Bank of the Philippines to establish an appropriate amortization account.
19. Upon the completion of the field tests, DAR will conduct regional and national stakeholder consultation workshops to document lessons and experiences and make any necessary amendments to the regulatory framework, including DAOs and corresponding implementing rules and regulations.
20. **Sub-Component 1.5: Rolling-Out Improved Procedure in other Regions.** The scaling-up of parcelization activities across the remaining regions is planned to start in year two of the project and will be based on improved procedures and field coordination tested under Sub-component 1.4. Significant survey work is required to complete the roll out and will be undertaken by private Geodetic Engineers which will require



coordination with the Geodetic Engineers' professional organizations to overcome previous difficulties in contracting and completing quality subdivision surveys. Other issues such as processing times for the high volume of applications, data exchange, and addressing legal issues for ARBs will also need to be addressed based on the lesson learned during the field testing.

21. **Component 2: Capability Building and Technical Assistance.** The objective of this component is to ensure that the project activities are undertaken by experienced and well-trained staff that builds sustainable capacity of DAR and implementing partners.
22. The project will introduce a range of efficiencies and changes to workflow procedures in order to increase the rate of parcelization activities for collective CLOAs and improve the communication with ARBs. These improvements will require training of existing and additional staff of DAR and partner implementing agencies. A comprehensive capacity building and training program will be developed early in the project.
23. To ensure progressive improvement of core competencies of DAR staff at the regional, provincial and field offices, the project will also conduct technical orientation training on the new issuances/revised rules and procedures involving agrarian reform cases/processes as well as coaching sessions for the local level project staff. A training of trainer approach may be adopted, utilizing the experiences of staff from the test regions and ensuring cross regional exchanges and cooperation to provide necessary assistance during the scaling-up after the first year.
24. Specific training with the geodetic engineers during the test on the use of modern survey equipment including drone, plotter, and survey software programs using satellite images, Geographical Information System, and Global Positioning System will aim to establish more rapid procedures in facilitating field validation. After field testing and consultation, technical documents and implementing rules and regulations will be reviewed to ensure all administrative and contracted private surveyors conform to agreed procedures.
25. **Component 3: Project Management and M&E** This component aims to provide the necessary technical and funding assistance to the project implementing units and partner agencies at the central, regional and provincial levels to support the management and coordination of project activities including planning, budgeting, financial management, procurement and disbursement, M&E and environmental and social safeguards.
26. Under the project, DAR will organize relevant management and coordination structures such as the inter-agency Steering Committees at the national level and Coordination Committees at the regional and provincial levels. The project will operate under the guidance and supervision of DAR's Foreign-Assisted and Special Projects Office and the Field Operations Office and will be led by DAR high ranking officials as the Project Director and Assistant Project Director.
27. Provision has also been made for the employment of full-time staff in the Central Project Management Office (PMO) including a National Project Manager, Deputy Project Manager, and technical and operational support staff. Additional staff (co-terminus with the project) would also be engaged to oversee and coordinate activities at the Regional PMO, Provincial PMO, and Municipal Agrarian Reform Office level. Technical Working Groups and Special Task Forces will also be established for specific activities and thematic tasks.



28. The project will be implemented by DAR in partnership with the DENR's Land Management Bureau and Forest Management Bureau, LRA/ROD, Land Bank of the Philippines, NCIP and the Department of Interior and Local Government. In consideration of their respective mandates and inherent functions in the execution of CARP activities particularly in the delivery of individual titles, DAR would coordinate and enter into applicable memorandum of agreement with these agencies. This component will support the design, development and implementation of a results-based monitoring system. The project will also carry out socio-economic baseline surveys, customer satisfaction survey, mid-term review, and end-of-project evaluation.
29. The information gathering and reporting process will follow the project implementation and management structure at the central, regional, and provincial levels for progress monitoring. Thus, the Central PMO will be responsible for the overall M&E system which will involve monitoring of physical performance and results as well as financial accounts based on the data from the Regional and Provincial PMOs.
30. Monitoring will be carried out through all levels of project implementation. The project will conduct planning workshops to prepare annual work plan and budgets for each component, based on the annual work plans of the central, regional and provincial PMOs. Quarterly progress reports will be prepared and submitted to the relevant oversight agencies.





### **ANNEX 3: Economic and Financial Analysis (EFA)**

#### **COUNTRY: Philippines**

#### **Support to Parcelization of Lands for Individual Titling (SPLIT) Project (P172399)**

1. More than half of the population of the Philippines<sup>23</sup> lives in rural areas and agriculture remains the most important form of employment. While the country's agricultural sector underperforms in recent years,<sup>24</sup> it has a high potential for development. One of the major challenges faced by farmers in the Philippines is collective ownership of agricultural land. The Philippines have a long history of attempts of agrarian reform aimed at the division of collective landholdings. The most significant land reform, the Comprehensive Agrarian Reform Program (CARP) was introduced around 30 years ago. CARP constituted an expanded version of earlier attempts of land distribution. The outcomes of the CARP reform are considered modest suggesting that CARP wasn't fully successful. The program didn't achieve all of its goals as it failed in the optimal targeting of beneficiaries and areas covered. Consequently, division of all collective CLOAs and assignment of individual property rights weren't fully achieved.<sup>25</sup>
2. Through the provision of the necessary funding, the SPLIT project aims at assisting the Government of the Philippines in the subdivision of the remaining collective CLOAs that haven't been subdivided under either CARP or earlier attempts of agrarian reform. In particular, the SPLIT project development objective is to stabilize land security and rights of agrarian reform beneficiaries (ARBs) through parcelization of collective CLOAs and issuance of individual land titles. The project aims to divide an estimated 1,368,883 ha of collective CLOAs and benefit around 750,000<sup>26</sup> agrarian reform beneficiaries (ARBs).
3. The insecurity of property rights that negatively influences ARBs investments in cultivated land is the natural consequence of lack of individual land titles. To show potential benefits that will accrue to the beneficiaries of the SPLIT Project, the Economic and Financial Analysis (EFA) of the project is pursued. The EFA focuses on benefits that are likely to accrue to ARBs upon parcelization and receipt of individual land titles.

#### **Rationale**

4. It is expected that the issuance of individual land titles will facilitate access to credit and financing for ARBs as they will have a personal account in the LBP. Furthermore, the ARBs will also be able to use their titled land as collateral which, in turn, will help them to obtain less expensive funds necessary for improved agricultural production.<sup>27</sup> Lastly, upon a full payment of the land amortization, the ARBs will be free to sell or lease their farm lands. Consequently, the ARBs will be able to use profits incurred through either lease or land sales to invest their funds on their farms or elsewhere.
5. Once the collective CLOAs are subdivided and ARBs own individual titles, it is expected that they will be more willing to invest in improvements of agricultural land as they will consider it a future income stream.<sup>28</sup> Consequently, it is

<sup>23</sup> The total population of the Philippines is around 107 million people and around 62.4 percent of the population is employed in the agriculture sector.

<sup>24</sup> The agriculture's share of GDP dropped to 9 percent in 2017 from 13.3 percent in 1998.

<sup>25</sup> As per: [https://ideas.repec.org/p/phd/rpseri/rps\\_2018-03.html](https://ideas.repec.org/p/phd/rpseri/rps_2018-03.html)

<sup>26</sup> DAR estimates a total of 1.14 million ARBs have collective CLOAs and estimated 750,000 are expected to be eligible for parcelization.

<sup>27</sup> ARBs can obtain necessary funds from commodity traders. The rates of interest are high (up to 40 percent).

<sup>28</sup> The income may come about through continued self-cultivation of the land, land lease or land sales.



- expected that ARBs will be willing to keep their land more productive and use farming techniques that will improve the land's fertility, ensuring higher long-run productivity. The expected investments might be realized through:
- a. Better tillage techniques;
  - b. Increased use of mechanization;
  - c. Increased use of site-suitable seeds (improved seeds and hybrids);
  - d. Proper application and dosage of chemical fertilizers (e.g., no overuse of chemical fertilizers, hence lower cost of inputs and healthier soils);
  - e. The higher adoption rate of natural fertilizers (e.g., use of manure and compost instead of chemical fertilizers, hence likely lower input costs, and improved quality of soils);
  - f. Adoption of climate-smart soil quality improving techniques (e.g., rice straw usage to recycle Potassium).
  - g. Agricultural diversification: crops rotation or intercropping; and/or
  - h. Engagement in additional on-farm activities like animal rearing and fattening.
6. The changes in land management might result not only in higher yields with possibly lower costs of inputs but they could also add to the future value of land as more fertile, better quality plots might have higher lease or sales values in the future. Additionally, the inclusion of extra on-farm activities like animal rearing and fattening might bring to ARBs additional earnings. These investments, in turn, might increase ARB's future incomes, reduce poverty rates, enhance households' food security, and overall improve ARBs' livelihoods.
7. The aggregation of benefits accruing to ARBs through the ability to lease or sell land is also likely to have a positive long-run effect on the other sectors and the economy of the Philippines as a whole. However, this effect is currently impossible to quantify with any degree of precision due to its inherent forward-looking nature, associated with uncertainty, and lack of data. While the direct benefits will accrue mainly to ARBs and their households, upon implementation of the project, some additional indirect benefits will also be realized. The expected benefits are likely to be incurred from the following sources:
- a. Stimulation of agricultural markets through a switch to the production of agricultural crops that the country has a natural advantage in;<sup>29</sup>
  - b. Increase in the mobility of rural workers;
  - c. Development of modern land markets (national and provincial) with an improved land valuation system;
  - d. Possibly higher foreign investment in the agricultural sector due to increased availability of land leases and facilitated investment environment;
  - e. Digitalization of the national database and an improved, more efficient flow of documents and data in the system. Also, a higher degree of transparency and tenure security will be enabled;
  - f. Expected improvements in the overall quality of the land parcelization process. A better planning, faster processing of new land titling cases, more efficient allocation of land, and improved collection of taxes;
  - g. Likely reduction in land disputes and other associated conflicts.

### Assumptions Used

8. The developed Cost-Benefit Analysis (CBA) models that allowed the estimation of Financial and Economic Net Present Values (FNPV and ENPV) of the proposed scenarios involving three commodities: rice, yellow corn, and coconut, were employed to help quantify potential benefits that will accrue to ARBs after parcelization and issuance of individual land titles. To estimate the benefits, the following assumptions were used:

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<sup>29</sup> A gradual switch from the production of staple rice to more valuable commodities might follow. This switch might be enforced through ARBs' ability to sell privately titled land opening a possibility for some gains if more efficient farmers will start cultivating the land.





- a. Farmers will be willing to invest in their land after they receive individual titles. This assumption was supported during field interviews pursued in the Philippines in November 2019. Some ARBs stated that they wished to invest in their agricultural lands after they receive individual land titles.<sup>30</sup>
- b. The CBA is based on a 30-year period to incorporate the standard full amortization period of parcelized land. While the government of the Philippines aims to finish the parcelization of all outstanding collective CLOAs in the first three years of the project (last quarter of 2020-2022), and the WB envisions a standard five year loan period (2020-2024), the ARBs costs and benefits are likely to accrue over longer period due to land amortization schedule of 30 years. Since the main goal of this analysis is to present benefits accruing to direct beneficiaries (ARBs), the 30-year period was chosen as a suitable timeframe for this analysis.
- c. The land amortization rate is assumed at 6 percent (as per Land Bank of the Philippines).
- d. To estimate the FNPV, a 5 percent discount rate was used, as per the latest WB recommendation stated in the “Technical Note on Discounting and Benefits in Economic Analysis of World Bank Projects.”
- e. To estimate ENPV, a 10 percent social discount rate was used, as per the latest recommendation by the National Economic and Development Authority (NEDA).<sup>31</sup>
- f. The commodities that were chosen to build the CBA models of ARBs include rice, corn, and coconut. The choice of commodities was based on the most prevalent commodities that are currently cultivated in the areas where collective CLOAs will be parcelized (based on the information obtained from DAR and confirmed during field interviews with ARBs).
- g. The matrix of analyzed CBA scenarios of the “Without Project (WOP)” and “With Project (WP)” scenarios is presented in Table 3 below. The modeling of the “WP” scenarios was constructed using the data obtained during field visits in November 2019 in Palo, Leyte and San Juan, Batangas. Desktop research was pursued as a secondary source of information and data.

**Table 3. Cost-Benefit Analysis of Without and With Project Scenarios**

Model	Without Project (WoP)	With Project (WP)
Commodity	Description of Scenario	Description of Scenario
Rice	Rice mono cropping in the irrigated production setup using inbred seeds.	<ul style="list-style-type: none"> <li>• Rice mono cropping in the irrigated production setup using improved seeds that are suitable for saline soils.</li> <li>• Decrease in the use of chemical fertilizer and an increase in the use of natural fertilizer (rice straw application to recycle Potassium) - climate smart agriculture.</li> <li>• Additional engagement in pig fattening activities.</li> </ul>

<sup>30</sup> The land sales will be allowed after 10 years and full repayment of land amortization.

<sup>31</sup><http://www.neda.gov.ph/wp-content/uploads/2017/01/Revisions-on-ICC-Guidelines-and-Procedures-Updated-Social-Discount-Rate-for-the-Philippines.pdf>



Model	Without Project (WoP)	With Project (WP)
Commodity	Description of Scenario	Description of Scenario
<b>Yellow corn</b>	Yellow corn mono cropping in the unirrigated production setup.	<ul style="list-style-type: none"> <li>• Rotation of yellow corn and peanuts (one season corn, second season peanuts) in the unirrigated production setup.</li> <li>• Decrease in the use of chemical fertilizers due to nitrogen fixating properties of peanuts. Soil's buildup and potential positive environmental effect-climate smart agriculture.</li> </ul>
<b>Coconut</b>	Coconut–bananas intercropping in the unirrigated production setup. Coconut production focuses on cultivation of mature nuts.	<ul style="list-style-type: none"> <li>• Intercropping of coconut with bananas in the unirrigated production setup.</li> <li>• Coconut production focuses on mature nuts, not copra.</li> <li>• The use of natural and chemical fertilizers.</li> <li>• Additional engagement in pigs fattening activities.</li> </ul>

- h. The Foreign Exchange Premium (FEP) was assumed to be at the level of 5 percent and a sensitivity analysis was pursued to incorporate its changes and an inherent uncertainty.<sup>32</sup>
- i. The domestic inflation rate was assumed to be at the level of 5.2 percent and the US inflation level was assumed at 2.4 percent
- j. The Philippine Peso (PhP) to the USD exchange rate is assumed to be PhP52.66.
- k. It is assumed that 1,368,883 ha of collective CLOAs that will benefit around 750,000<sup>33</sup> ARBs will be parcelized and individually titled through the project. For simplicity, the financial and economic analysis for all three commodities is based on one ha of cultivated land.<sup>34</sup>
- l. The results obtained in the one ha analysis are then aggregated assuming the following share of total land cultivation divided into three commodities: 50 percent, 30 percent and 20 percent of all hectares under collective CLOAs for rice, corn, and coconut, respectively.
- m. The average value of land amortization was assumed to be at the level of PhP62,000 per ha.<sup>35</sup> The sensitivity analysis was pursued on this value to incorporate potential region-specific differences.<sup>36</sup>
- n. The average ARB's household size is assumed to be four people.
- o. Two planting/production seasons per year were assumed for annual crops.<sup>37</sup>
- p. It is assumed that farmers have their own funds to engage in agricultural production as described in the WoP and WP. Therefore, no financing is modeled in the analysis.<sup>38</sup> Also, capital expenditures are assumed away (no CAPEX).

<sup>32</sup> The FEP is important for Conversion Factors and its level affects the ENPV

<sup>33</sup> DAR estimates a total of 1.14 million ARBs have collective CLOAs and estimated 750,000 are expected to be eligible for parcelization.

<sup>34</sup> The expected average size of an individual ARB title is estimated to be around 1.2 ha so the 1 ha modeling assumption seems rational.

<sup>35</sup> As per Table 15 on page 56 of this publication: *"The Comprehensive Agrarian Reform Program after 30 years: Accomplishments and Forward Options."* Philippine Institute for Development Studies, Discussion Paper Series No. 2017-34.

<sup>36</sup> Field interviews in November 2019 confirmed that the market value of land tends to be higher than the ARBs amortization levels. For example, the price of 1 ha of land in the area of Palo, Leyte can be in the range of PhP400,000-1,000,000, depending on the location of the plot.

<sup>37</sup> Some other, more detailed, production and commodity-specific assumptions are used for each of the modeled commodities (e.g., labor requirement, fertilizer use, expected yield, prices of commodities, etc.). Sensitivity analysis is pursued on some of these variables to grasp the uncertainty and riskiness.

<sup>38</sup> It is possible to model in a loan to the WoP and WP scenarios but for simplicity, it wasn't pursued in this analysis.



## Results

9. The development of the EFA is based on a standard CBA methodology that involves the construction of the WoP and WP scenarios. The scenarios are modeled separately for each of the selected commodities and include the WoP, WP and incremental analysis.<sup>39</sup> The WoP scenario constitutes a benchmark that is used to compare how the current situation (WoP scenario) might differ when the project land parcelization provides ARBs with individual land titles (WP scenario). The scenarios are constructed to calculate FNPVs and ENPVs and to validate the level of potential benefits that can be attributed to the intervention that will endow ARBs with individual land titles under the project.
10. Each of the analyzed commodities is modeled based on the data regarding actual on-farm activities, commodities' production patterns, yields, and associated information gathered from ARBs during field interviews. A realistic and representative individual ARB's household that is currently engaging in the cultivation of either rice, corn or coconuts is used to set up a WoP scenario. The WoP scenario is constructed separately for each of the modeled commodities as the universe of farmers that currently cultivate rice only, corn only, or coconut differs.<sup>40</sup> A representative ARB's household together with its expected changes and investments planned for the time after the reception of an individual land title is also modeled separately for each commodity (WP scenarios).
11. As a result, the FNPVs and ENPVs are estimated, separately for each of the selected commodities and scenarios. Table 6 and Table 7 below present obtained values for individual ARB (Table 6 ) as well as for an assumed aggregate number of hectares assigned to each of the commodities of interest (Table 7). The estimated NPVs (financial and economic) are positive in the case of both, the WoP and WP scenarios, and for all analyzed commodities. However, the FNPVs and ENPVs of the WP scenarios are much higher than their equivalents in the case of the WoP scenarios. This suggests that, assuming the ARBs follow with similar investments in their agricultural land, as outlined in the presented CBA models, they are likely to benefit economically from individual land titling. Therefore, the obtained results suggest that the parcelization and issuance of individual land titles are likely to benefit the ARBs.
12. One striking example of an improvement in the ARBs financial well-being after they receive an individual land titling is visible when the financial part of the WoP and WP of the RICE Model are compared (Figure 5 below). As the financial part of the WoP model shows, the ARBs that keep farming under collective CLOAs will continue having negative annual cash flows in each year. The negative cash flows of the WoP financial model confirm the statements heard from the ARBs during field interviews. The farmers stated that after each planting season they had to borrow money to replant rice in the next season. The farmers tend to go to rice traders to obtain necessary funds and are obligated to pay an interest rate on their loan of up to 40 percent for the short-term loans. However, as the WP model shows, these negative cash flows are likely to disappear when ARBs receive individual land titles, invest in their land and diversify agricultural production. The results of the analysis also show that the ARBs shouldn't have any problems repaying their land amortization as they will have enough financial resources for full repayment.

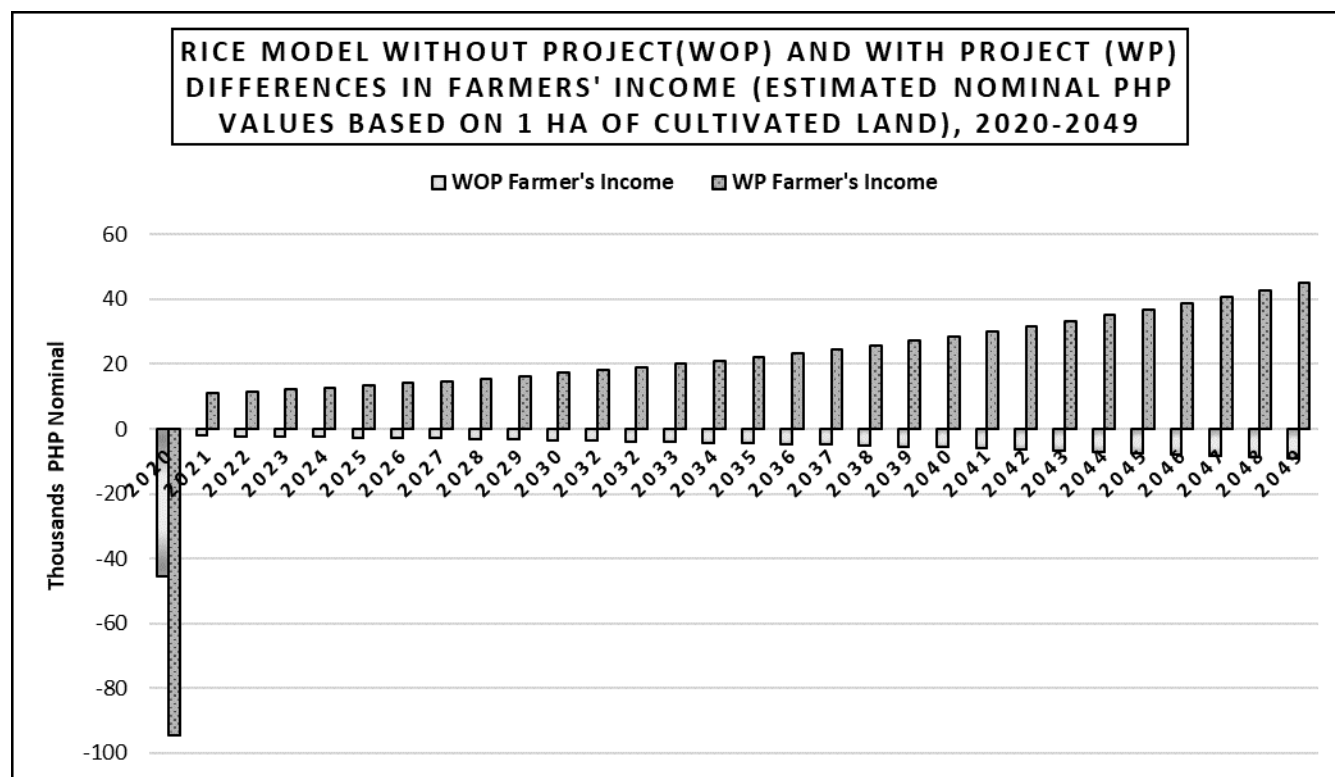
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<sup>39</sup> There are three types of analyses constructed for each of the commodities: WoP Scenario analysis (financial and economic), WP Scenario analysis (financial and economic), and Incremental analysis (financial and economic).

<sup>40</sup> Farm activities vary, incomes are different, costs of inputs differ, etc.



**Figure 5. Farmers' Income in Rice Model under Without and With Project Scenarios**



13. The sensitivity analysis shows that the obtained FNPV and ENPVs might be sensitive to the yield of commodities and prices of inputs (Table 4 below). For example, in the case of the RICE Model, a 20 percent decrease in the assumed yield of rice (in the WP scenario) turns the FNPV into a negative value. Similarly, in the case of the COCONUT Model, a 30 percent decrease in the yield of coconuts (in the WP scenario) makes the FNPV negative. In addition, a 30 percent increase in the price of piglets destined for fattening turns the FNPV of the COCONUT model into a negative value. However, the sensitivity of the obtained results to changes in the yield and prices of inputs is not specific only to these commodities and this specific project but remains a challenge everywhere as agriculture remains a risky business.

**Table 4. Financial NPV of Selected Commodities/Models**

RICE MODEL (WP)		
Rice yield	Yield/ha	FNPV
[-10%]	6,750.00	5,865.76
[-20%]	6,000.00	-164,230.91
[-30%]	5,250.00	-334,327.59
Modeled	7500.00	175,962.44
COCONUT MODEL (WP)		
Coconuts yield		



	Yield/pcs/ha	FNPV
<b>[-10%]</b>	9,900.00	45,687.00
<b>[-20%]</b>	8,800.00	14,616.00
<b>[-30%]</b>	7,700.00	-16,456.00
<i>Modeled</i>	<i>11,000.00</i>	<i>76,759.00</i>
<b>Price of piglets</b>		
INDIVIDUAL	Price/piece	FNPV
<b>[+10%]</b>	1,980.00	4705.00
<b>[+20%]</b>	2,160.00	18651.00
<b>[+30%]</b>	2,340.00	-10403.00
<i>Modeled</i>	<i>1,800.00</i>	<i>76759.00</i>

14. While the ARBs remain the main beneficiaries of the parcelization and individual land titling, the Government of the Philippines will constitute another beneficiary of the SPLIT. The government will benefit through at least two sources: land amortization payments as well as taxes and duties, levied on imports of agricultural inputs, e.g., fertilizers, improved seeds, pesticides, etc.<sup>41</sup> While the potential level of earnings coming from the land amortization is relatively straightforward to calculate (Table 5 below shows these estimates), the level of earnings from taxes and duties is much harder to predict as it will strongly depend on a set of future micro and macroeconomic variables.<sup>42</sup>

**Table 5. Government of the Philippines Potential Aggregate Earnings over 30 years from Land Amortization (in million PhP)**

Amortization Payment	Amortization Interest	Amortization Principal
PhP101,345	PhP54,845	Ph46,500
Assuming 750,000 as an expected number of ARBs' amortizations and an average value of amortization of PhP62,000/ha under SPLIT.		

## Conclusions

15. Overall, the results of the analysis confirm that the ARBs are likely to benefit financially and economically from the parcelization of collective CLOAS and individual land titling. In the short-run, the main gains will manifest through increased income influenced by higher yields, investments in improved seeds and fertilizers as well as diversification of the agricultural portfolio. Relatively small on-farm investments and diversification activities, as modeled in the WP scenarios are likely to happen (e.g.: pigs fattening). However, it is expected that in the longer run, when the ARBs are allowed to sell or lease their land, the situation might change. As the flow of land is facilitated through land leases and sales, more efficient farmers might be able to obtain bigger plots of land and engage in extensive cultivation of more profitable commodities. Consequently, the economies of scale might be realized bringing higher economic benefits to the Philippines economy as a whole.
16. The SPLIT's development impact will come as a result of parcelization of collective CLOAs and issuance of individual

<sup>41</sup> The Philippines market of agricultural commodities remains distorted due to the presence of numerous import duties and tariffs. This is especially visible in the case of rice where there are different levies put on rice "in quota" versus "out quota" rice.

<sup>42</sup> These variables include world demand for commodities produced by ARBs, exchange rates, level of domestic production in any given year, and similar.



land titles to ARBs. Upon the project's implementation, the ARBs will receive individual property rights to the land that they are already cultivating under collective agreements. They will also gain access to credit as they will be able to use their plots as collateral. Furthermore, the post-SPLIT diversification in agricultural production is likely to diminish agricultural risks associated with the cultivation of a single crop. Consequently, the ARBs will be able to invest in their land and diversify agricultural production allowing for an increase in households' incomes and improving households' food security.

17. There exist some agriculture-specific caveats that might influence the expected benefits. The main issue can be traced to the changing climate and its influence on commodities yields and planting patterns. While it is expected that in the years to come climate variability might influence different planting patterns and enforce a switch in commodities, farmers are predicted to adapt to this changing environment. Some of the coping strategies involve diversification of agricultural portfolio through intercropping, crop rotation, as well as the rearing and fattening of farm animals. These climate-smart agricultural strategies have been modeled into the WP scenarios of this analysis. Lastly, the Philippines is a natural disasters-prone country (typhoons, volcanic eruptions) and there exists a level of risk associated with these events. However, agriculture production persists in the country despite relatively frequent onsets of hazards, which prove that farmers are smart as well as able to adapt and incorporate risk factors in their on-farm investment decisions.

**Table 6. Financial and Economic NPVs of Selected Commodities/Models**  
(Values per ARB based on one hectare of cultivated land)

Values for individual ARBs (based on 1 ha of cultivated land)			
<b>Rice Model</b>			
<b>WoP</b>			
<b>Values in PhP</b>		<b>Values in US\$</b>	
FNPV	ENPV	FNPV	ENPV
36,422	108,015	692	2,051
<b>WP</b>			
<b>Values in PhP</b>		<b>Values in US\$</b>	
FNPV	ENPV	FNPV	ENPV
175,962	341,216	3,341	6,480
<b>Yellow Corn Model</b>			
<b>WoP</b>			
<b>Values in PhP</b>		<b>Values in US\$</b>	
FNPV	ENPV	FNPV	ENPV
13,194	56,318	251	1,069
<b>WP</b>			
<b>Values in PhP</b>		<b>Values in US\$</b>	
FNPV	ENPV	FNPV	ENPV
359,552	303,722	6,828	5,768
<b>Coconut Model</b>			
<b>WoP</b>			
<b>Values in PhP</b>		<b>Values in US\$</b>	



FNPV	ENPV	FNPV	ENPV
2,278	11,477	43	218
<b>WP</b>			
<b>Values in PhP</b>		<b>Values in US\$</b>	
FNPV	ENPV	FNPV	ENPV
76,759	181,352	1,458	3,444

**Table 7. Financial and Economic NPVs of Selected Commodities/Models  
(Aggregate Values in '000 PhP and '000 US\$)**

<b>Aggregate Values in '000 PHP and US\$<sup>43</sup></b>			
<b>Rice Model</b>			
<b>WoP</b>			
<b>Values in PhP</b>		<b>Values in US\$</b>	
FNPV	ENPV	FNPV	ENPV
24,928,860	73,930,010	473,393	1,403,912
<b>WP</b>			
<b>Values in PhP</b>		<b>Values in US\$</b>	
FNPV	ENPV	FNPV	ENPV
120,436,084	233,542,403	2,287,051	4,434,911
<b>Yellow Corn Model</b>			
<b>WoP</b>			
<b>Values in PhP</b>		<b>Values in US\$</b>	
FNPV	ENPV	FNPV	ENPV
5,418,276	23,127,883	102,892	439,193
<b>WP</b>			
<b>Values in PhP</b>		<b>Values in US\$</b>	
FNPV	ENPV	FNPV	ENPV
147,655,251	124,727,864	2,803,936	2,368,550
<b>Coconut Model</b>			
<b>WoP</b>			
<b>Values in PhP</b>		<b>Values in US\$</b>	
FNPV	ENPV	FNPV	ENPV
623,551	3,143,623	11,841	59,697
<b>WP</b>			
<b>Values in PhP</b>		<b>Values in US\$</b>	
FNPV	ENPV	FNPV	ENPV
21,014,835	49,650,057	399,066	942,842

<sup>43</sup> The aggregate hectares for each commodity were assumed at the following levels: rice (50 percent of the total land destined for parcelization under SPLIT - 684,441.50 ha), yellow corn (30 percent of the total - 410,664.90 ha), and coconuts (20 percent of the total, 273,776.60 ha).