



FOR OFFICIAL USE ONLY

Report No: 153504-VN

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROJECT APPRAISAL DOCUMENT

ON AN

EMISSION REDUCTION CREDITING PROJECT

IN THE AMOUNT OF US\$51.5 MILLION

FROM THE

CARBON FUND OF THE FOREST CARBON PARTNERSHIP FACILITY

TO THE

SOCIALIST REPUBLIC OF VIETNAM

FOR THE

VIETNAM NORTH CENTRAL REGION EMISSION REDUCTIONS PROGRAM

October 9, 2020

Environment, Natural Resources & The Blue Economy Global Practice
East Asia And Pacific Region

This document has a restricted distribution and may be used by recipients only in the performance of their official duties. Its contents may not otherwise be disclosed without World Bank authorization.

CURRENCY EQUIVALENTS

(Exchange Rate Effective {October 9, 2020})

Currency Unit = Vietnamese Dong

VND 2XXXX = US\$1

FISCAL YEAR

January 1 - December 31

Regional Vice President: Victoria Kwakwa

Country Director: Carolyn Turk

Regional Director: Benoit Bosquet

Global Director: Karin Kemper

Practice Manager: Mona Sur

Task Team Leaders: Lan Thi Thu Nguyen, Alexander Lotsch

ABBREVIATIONS AND ACRONYMS

ACMA	Adaptive Collaborative Management Approach
BAU	Business-As-Usual (scenario)
BSP	Benefit Sharing Plan
CFM	Community Forest Management
CSO	Civil Society Organization
DARD	Department of Agriculture and Rural Development (at the Province)
DONRE	Department of Natural Resources and Environment
DPC	District People's Committee
DPI	Department of Planning and Investment
EMP	Environmental Management Plan
EMPF	Ethnic Minority Planning Framework
ER	Emission Reduction
ER-PD	Emissions Reduction Program Document
ER-PIN	Emissions Reduction Program Identification Note
ERPA	Emission Reductions Payment Agreement
ERR	Economic Rate of Return
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental Social Management Framework
FCPF	Forest Carbon Partnership Facility
FGRM	Feedback grievance and reporting mechanism
FIPI	Forest Inventory and Planning Institute
FLA	Forest Land Allocation
FREL	Forest Reference Emission Level
FSDP	Forest Sector Development Project
FSSP	Forest Sector Support Program
GAP	Gender Action Plan
GHG	Greenhouse Gas
GoV	Government of Vietnam
GSO	General Statistics Office
NDC	Nationally Determined Contribution
IRR	Internal Rate of Return
LULUCF	Land Use, Land Use Change and Forestry
LUP	Land Use Plan
LURC	Land Use Right Certificate ("Red Book" in Vietnam)
M&E	Monitoring and Evaluation
MARD	Ministry of Agriculture and Rural Development
MOF	Ministry of Finance

MONRE	Ministry of Natural Resources and Environment
MPI	Ministry of Planning and Investment
MRV	Measurement, Reporting and Verification
MTR	Mid-Term Report
NCB	Non-Carbon Benefits
NCR	North Central Region
NCR-JERP	North Central Region Jurisdictional Emission Reduction Program
NFDS	National Forest Development Strategy
NFI	National Forest Inventory
NFIMAP	National Forest Inventory, Monitoring and Assessment Program
NGO	Non-Government Organization
NRAP	National REDD+ Action Programme
ODA	Overseas Development Assistance
PFES	Payment Forest Environment Services
PFMB	Protection Forest Management Board
PPC	People's Provincial Committee
PPMU	Provincial Program Management Unit
PRAP	Provincial REDD+ Action Plan
PRSC	Provincial REDD+ Steering Committee
R-PP	Readiness-Preparation Proposal for the FCPF REDD readiness funding
RL	Reference Level
SEDP	Socio-Economic Development Plan
SESA	Strategic Environmental and Social Assessment
SFC	State Forest Company
SFE	State Forest Enterprise
SFM	Sustainable Forest Management
SUF	Special Use Forest
tCO ₂ e	Ton of Carbon dioxide equivalent
UNFCCC	United Nations Framework Convention on Climate Change
VNFF	Vietnam Forest Protection and Development Fund
VNFOREST	Vietnam Administration of Forestry
VRO	Vietnam REDD Office
WB	World Bank

**TABLE OF CONTENTS**

DATASHEET	1
I. STRATEGIC CONTEXT	5
A. Country Context.....	5
B. Sectoral and Institutional Context.....	6
C. North Central Region Jurisdictional Emission Reduction Program (NCR-JERP).....	8
D. Relevance to Higher Level Objectives	10
II. PROJECT DESCRIPTION.....	11
A. Project Development Objective	11
B. Project Components	12
C. Carbon Finance Aspects.....	13
D. Project Beneficiaries.....	15
E. Project Cost and Financing.....	15
F. Lessons Learned and Reflected in the Project Design	16
III. IMPLEMENTATION ARRANGEMENTS	17
A. Institutional and Implementation Arrangements	17
B. Results Monitoring and Evaluation Arrangements.....	17
C. Sustainability.....	18
IV. PROJECT APPRAISAL SUMMARY	19
A. Technical, Economic and Financial Analysis	19
B. Fiduciary.....	20
C. Safeguards	21
V. GRIEVANCE REDRESS SERVICES	27
VI. KEY RISKS	28
VII. RESULTS FRAMEWORK AND MONITORING	32
ANNEX 1: Implementation Support Plan	33
ANNEX 2: Vietnam's Participation in the FCPF	35
ANNEX 3: Drivers of Deforestation and Forest Degradation in the NCR.....	37
ANNEX 4: Summary of the SESA Stakeholder Consultations.....	38
ANNEX 5: NCR-JERP Actions and Measures.....	42
ANNEX 6: NCR-JERP Implementation Arrangements.....	46
ANNEX 7: Financial Management and Disbursement Arrangements	58



ANNEX 8: NCR-JERP Costs and Sources of Finance	60
ANNEX 9: Expected Emission Reductions.....	63
ANNEX 10: Responsibilities for ER Monitoring	64
ANNEX 11: Location of the North Central Region.....	66



DATASHEET

BASIC INFORMATION				
Country	Project Name			
Vietnam	North Central Region Emission Reductions Program			
Project ID	Financing Instrument	Environmental Assessment Category		
P162605	Emission Reduction Crediting (ERC)	B-Partial Assessment		
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"/> Disbursement-linked Indicators (DLIs)	<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			
06-Oct-2020	31-Dec-2025			
Bank/IFC Collaboration				
No				
Proposed Development Objective(s)				
The Development Objective of the Project is to make payments to the Program Entity for measured, reported and verified Emissions Reductions (ER) from reduced deforestation, forest degradation and enhancement of forest carbon stocks (REDD+) in the North Central Region of Vietnam and to distribute ER payments according to an agreed benefit sharing plan.				



Organizations

Borrower: Socialist Republic of Vietnam
Implementing Agency: Ministry of Agriculture and Rural Development

PROJECT FINANCING DATA (US\$, Millions)

[]	Loan	[]	IDA Grant	[]	Guarantee
[]	Credit	[]	Grant	[X]	Other: Emission Reductions Payment Agreement (ERPA)
Total Project Cost:		51.5		Total Bank Financing:	51.5
Financing Gap:		0			

Financing Source	Amount
BORROWER/RECIPIENT [and other sources]	
Forest Carbon Partnership Facility Carbon Fund	51.5
Total	51.5

INSTITUTIONAL DATA

Practice Area (Lead)	Contributing Practice Areas
Environment, Natural Resources & the Blue Economy	Social Development, Agriculture, Climate Change, Gender

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

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

**COMPLIANCE****Policy**

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

[] Yes [X] No

Does the project require any waivers of Bank policies?

[] Yes [X] No

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	✓	
Performance Standards for Private Sector Activities OP/BP 4.03	✓	
Natural Habitats OP/BP 4.04	✓	
Forests OP/BP 4.36	✓	
Pest Management OP 4.09	✓	
Physical Cultural Resources OP/BP 4.11	✓	
Indigenous Peoples OP/BP 4.10	✓	
Involuntary Resettlement OP/BP 4.12	✓	
Safety of Dams OP/BP 4.37	✓	
Projects on International Waterways OP/BP 7.50	✓	
Projects in Disputed Areas OP/BP 7.60	✓	

**Legal Covenants**

Name	Recurrent	Due Date	Frequency
Program Entity shall monitor and report to the Trustee on the implementation of the Safeguards Plans during Reporting Periods			Annually
The Program Entity shall monitor and report to the Trustee on the implementation of the Benefit Sharing Plan			Six (6) months after receipt of the first Periodic Payment and annually thereafter

Description of Covenant

In addition to Section 5.01(b)(i) of the ERPA General Conditions, the Program Entity shall monitor and report to the Trustee on the implementation of the Safeguards Plans and Benefit Sharing Plan during Reporting Periods. The Program Entity shall monitor and report to the Trustee on the implementation of the Safeguards Plans annually after the date of this Agreement. The Program Entity shall first monitor and report to the Trustee on the implementation of the Benefit Sharing Plan six (6) months after receipt of the first Periodic Payment and annually thereafter. The Program Entity may coordinate the annual monitoring and reporting of the Safeguards Plans and the Benefit Sharing Plan, provided that the Program Entity notifies the Trustee and the Trustee accepts such coordinated timelines. The Trustee reserves the right to initiate a separate monitoring of the implementation of the Safeguards Plans and/or the Benefit Sharing Plan annually after the date of this Agreement by an independent Third Party monitor. Sections 9.01(g) and (k) as well as Section 9.05(d) of the General Conditions shall apply to such Third Party monitor mutatis mutandis.

Conditions of Effectiveness**Description of Condition**

- i. Submission of a final Benefit Sharing Plan which, based on the advance draft version of the Benefit Sharing Plan provided by the date of this Agreement, takes into account specific guidance to be provided by the Trustee, following consultations with Tranche B Participants, on the outstanding issues that need further clarification in the final version of the Benefit Sharing Plan, as well as the Benefit Sharing Plan Operational Manual, as may be updated from time to time with prior agreement of the Trustee;
- ii. Submission of evidence demonstrating the Program Entity's ability to transfer Title to ERs, free of any interest, Encumbrance or claim of a Third Party.



I. STRATEGIC CONTEXT

A. Country Context

- 1. Vietnam has experienced rapid and inclusive economic growth since the early 1990s.** The political and economic reforms (Doi Moi) launched in 1986 have transformed the country from one of the poorest in the world, to lower middle-income status within a quarter of a century¹. Vietnam's per capita Gross Domestic Product (GDP) growth since 1990 has been among the fastest in the world². Vietnam's economy has weathered recent turbulence in the external environment, reflecting resilient domestic demand and robust performance of export-oriented manufacturing. As of 2019, the population of Vietnam was 96.2 million people and the GDP was US\$ 255 billion (General Statistics Office, 2019). Social outcomes have improved dramatically across the board, with the fraction of people living in extreme poverty dropping from more than 50 percent in the early 1990s to 3 percent today³. Despite considerable economic progress, high levels of poverty are concentrated in the forest areas where livelihoods depend on natural resources for subsistence. Ethnic minority groups make up 15 percent of the population, but account for more than half of all poverty.
- 2. The forestry sector timber industry plays an important socioeconomic role in terms of job creation, income generation, and livelihood support for about 24 million people, especially poor and ethnic minority populations living in and around forests in Vietnam.** Forestry wages are an important income source in rural Vietnam⁴ employing about 300,000 persons full-time in the forestry sector⁵ and about 3,000 mostly small- and medium-sized wood processing enterprises⁶. In addition to timber, forest resources and the services they provide are critical to the livelihood of many rural Vietnamese by helping to provide incomes, serving as a safety net during times of crises by contributing significant proportions of food and nutrition, and reducing environmental risks such as flooding and erosion.
- 3. Forests are at the core of Vietnam's international climate change commitments.** Vietnam's Nationally Determined Contribution (NDC) was submitted to the United Nations Framework Convention on Climate Change (UNFCCC) in 2015. It entails an eight percent reduction of GHG emissions by 2030 (and 25 percent with external support) compared to the Business-As-Usual (BAU) scenario and an increase of forest cover to 45 percent. Commitment to addressing climate change and environmental protection is enshrined in the national constitution and has the support of the Communist Party and the Prime Minister. Climate change is mainstreamed into national development plans, which strongly promote the reduction in emissions from deforestation, forest degradation and enhancement of forest carbon stocks (REDD+), which is part of the National REDD+ Action Program 2017-2030. For land use, land use change and forestry (LULUCF), the scheme targets 20 percent reduction in greenhouse gas (GHG) emissions (compared to 2005 levels). Vietnam is the first country in Asia to implement a national payment for forest environmental services (PFES) program.

¹ Per capita income increased from around USD 100 in the 1980s to USD 2,180 by the end of 2016.

² Averaging 5.5 percent per year since 1990, and 6.4 percent per year in the 2000s

³ Using the USD 1.90 2011 purchasing power parity line

⁴ Vietnam Household Living Standard Surveys 2010, 2012 and 2014

⁵ With the majority working on rubber plantations, followed by forestlands with private ownership.

⁶ FAO, Food and Agricultural Organization of the United Nations. 2016. Food and Agriculture data. October 01. Accessed October 20, 2016. <http://faostat.fao.org>



B. Sectoral and Institutional Context

4. Vietnam has moved away from a period of forest conversion and towards forest protection and sustainable forest use. Between 1943 and 1993 much of the country's forests were cleared, with forest cover declining from an estimated 43 percent to 28 percent. Since then forest cover has increased to 41.6 percent (13.8 million hectares (ha)) of the total land area in 2012. Plantations (3.4 million ha)⁷ and natural regeneration (10.4 million ha) have helped to increase the total forest, with the 5-million-hectare forest program promoted by the central government significantly contributing to increase in forest cover by 2.45 million ha between 1998 and 2010⁸. The forests are predominantly in the central highlands and northern mountains, and are classified into production, protection and special use forests.

5. The focus on afforestation mainly for wood supply, however, meant that while total forest extent increased, forest quality declined, and mangrove forests decreased⁹. Primary forest is estimated to account for only 7 percent of total forest areas¹⁰. Degraded secondary forests, which are extremely prone to fires, account for nearly 70 percent of the total forest area. Deforestation of mangrove and coastal forests over the past six decades, for land for shrimp production, infrastructure development and agricultural expansion, has deteriorated natural coastal defenses including mangroves and coastal forests with resulting implications for the effectiveness of dykes and reduction of coastal resilience. The ability of forest-dependent communities and other sectors of the economy to harness ecosystem services for livelihoods and incomes has declined.

6. Vietnam's 2006–2020 Forestry Development Strategy articulated a broader vision for forests that focuses on delivering a wider set of ecosystem services that promotes sustainable development, livelihoods and growth. With this strategy, the Government has set objectives to increase the contribution of forestry to GDP from 1.2 percent in 2005 to between 2 and 3 percent by 2020, generate two million more forest-related jobs, and

⁷ The Vietnamese forest industry produced about 10.75 million m³ of logs in 2014, which is mainly used by the domestic industry. Wood sourced from the Vietnamese forests originates often from plantations, also because of the logging and export bans which are in place. Vietnam is one of the world's largest exporting countries of wooden furniture and parts, with exports valued at USD 4.38 billion in 2013, whereas the exports of primary timber products are valued at 769.8 million USD in 2014 (ITTO, 2015).

⁸ The increase in forest cover has been driven by a few major forest development programs and some fundamental changes in the forestry sector with respect to management systems, business and service systems, and key mechanisms since the 1950s. Reforms under the Doi Moi promoted decentralization in the forest sector and led to improved land access for households, individuals, and communities, and a shift in authority and responsibility from the center to the provinces, and by extension to the districts and communes through provincial peoples committees (PPCs) and commune people's committees (CPCs). By the late 1980s and continuing to present households, individuals, and communities in Vietnam have been increasingly involved in production forest use and management; extent of forest land owned by the public almost doubled between 1990 and 2010.

⁹ Vietnam's forest policy framework placed significant focus on afforestation and timber production. The Law on Forest Protection and Development supported national investment programs for forest rehabilitation, which supported the increase in forest cover since the 1990, along with the establishment of institutional and technical capacity. The increase in forest cover over the past three decades has allowed Vietnam to expand its timber industry and increase its timber product exports, and the government is actively promoting production of saw-timber.

¹⁰ FAO, 2012



improve forest-based incomes. The Government in its 2016-2020 Socio-Economic Development Plan adopted a forest area target of 45 percent (15.1 million hectares) by 2020, which, if achieved, would support the aforementioned objectives. There is notable room for improvement in the performance of the forest sector of Vietnam in terms of governance and socioeconomic development. There have also been growing efforts to decentralize forest management, including through policies allocating forest land to households and individuals.

7. A Forestry Law passed in November 2017 contains several elements that are crucial for the effective implementation of REDD+. The new forestry law reflects changes in forest management to help address Vietnam's increasing forest degradation and decline in numbers of wild species of fauna and flora. This has made revisions in the following areas: 1) strict management of conversion of natural forests except for security purposes (e.g., the Prime Minister will make the decision on any case of conversion - in the past, Provincial People's Committee could make this); 2) logging in natural forests can only be permitted if forests are certified sustainable forest management (SFM); 3) focus of forestry as environmental services and limited logging from natural forests; 4) promotion of forestry business; 5) improve forest tenure to clearly identify forest owners/users; 6) national forestry planning; and 7) control of forest products through voluntary partnership agreement, forest law enforcement, governance and trade and multi-sector engagement.

8. The 2017 Forestry Law provides for strengthened forest governance and clearer laws on how to deal with deforestation with more emphasis on involving local communities in protection. It supports the Vietnam Timber Legality Assurance System and includes the issuance of the criteria, processes, procedures and competence on classification of the enterprises engaged in the harvesting, transportation, consumption, processing and checking of the legality and origin of forest products. It also stresses that forest ownership institutions must more closely follow the Civil Code 2013 (the constitution) and forests can now be preferentially allocated to ethnic minorities, households, individuals and communities with manner, customs, culture, beliefs and traditions which are closely attached to forests with more emphasis on sustainable forest management. The Law will help State Forest Companies (SFCs) improve their forest management tasks. With the Government's roadmap to restructure these SFCs, some 500,000ha of forests as the result of restructuring will be re-allocated to households (Government Decree 118).

9. The National Target Support Program on Sustainable Forest Development is one of the country's key national target support programs approved by the Prime Minister. The program aims to improve the capacity and quality and uphold the value of each forest category, contributing to reducing natural disasters, protecting the ecological environment, responding to climate change, creating jobs and increasing incomes, reducing poverty and improving livelihood for local people. The program is implemented during the 2016-2020 period with three key tasks, including protection of forest and preservation of nature; development and improvement of forest capacity and quality; and enhancement of value-added forestry products. Combined, these tasks have contributed to achieving the program's forest cover and forestry production value targets. It also promotes the establishment of the Vietnam Forest Certification Scheme Program. Some 15 percent of the degraded forest ecosystem will be recovered and preserved. With Government's committed budget of over US\$410 million in capital investment over the period of 2016-2020, the program aims to increase the forestry production value from 5.5 to 6 percent per year, the national forestry coverage of 42 percent, the forest area of 14.4 million ha, the value of timber and forest exports of US\$ 8-8.5 billion and maintain 25 million jobs.

10. Forests in Vietnam have the potential to support livelihoods, enhance resilience to climate change, and contribute to Vietnam's commitments to reduce GHG emissions. The wood industry in Vietnam contributed about 3 percent to national GDP in 2013 and can be a significant source of revenue to provinces.



Trade of non-timber forest products can also be a key source of income for rural communities with recent analysis showing about 10 percent of income is derived from forests. Vietnam has demonstrated potential to generate finance from ecosystem services under PFES schemes. PFES helps finance watershed protection to support hydropower, clean water supply and to maintain landscapes that support tourism. From 2011 to the mid-2014, provincial level forest funds for PFES received around US\$ 157 million. A co-benefit of improved forest management is a reduction in Vietnam's GHG emissions (measured in tons of carbon dioxide equivalent, tCO₂e). Vietnam's NDC estimates that forest land can be a major sink for carbon with emission reductions of 53.1 million tCO₂e by 2030. The approach of managing forests for a diversity of services supports low carbon livelihood development and positions forest as an integral component of Vietnam's green resilient growth and development objectives.

C. North Central Region Jurisdictional Emission Reduction Program (NCR-JERP)

11. As part of the national REDD+ strategy, and to leverage international climate finance, the Government has prioritized the North Central Region (NCR) for the implementation of a comprehensive Jurisdictional Emission Reduction Program (JERP). The NCR has an area of land totaling 5.1 million ha (16 percent of the total land area of Vietnam) and is administered as six provinces – Thanh Hoa, Nghe An, Ha Tinh, Quang Binh, Quang Tri and Thua Thien Hue – with a population of about 10.5 million people (12 percent of the total population of Vietnam). The NCR contains most of the country's remaining broadleaf evergreen forest and is home to 13 ethnic minority groups. It is prioritized due to its critical biodiversity importance and socio-economic status – it encompasses five internationally recognized conservation corridors and has the highest and deepest rates of poverty per capita in the country: 29 percent of the people living in the landscape are living below the national poverty line. The region is hilly and mountainous and representative of other regions in the country and the need to promote sustainable development, based on sustainable forest management, rehabilitation and protection.

12. Forest area in the NCR is characterized by degraded natural forests, most of which is managed by the State, local communities, and significant share of timber plantations. Annual forest cover data indicate that 57 percent (2.9 million ha) of the area was forested in 2015; about 74 percent of which, was natural forest. Over half (1.7 million ha) of the region's forestland is under the management of the State, and nearly one third (0.9 million ha) has been allocated to individual households or village communities. Natural forest covers 2.1 million ha, which is 42 percent of the total accounting area. Most of this is evergreen broadleaf forest.

13. While the total area of forest in the NCR significantly increased over the past decade, there was a marked shift toward poor degraded forests and to plantations. Spatial analysis shows a net increase in natural and planted forest area due to afforestation and that most of the gross loss of natural forests was in the poor evergreen broadleaf forest (62,201 and 95,139 ha were deforested between 2005–2010 and 2010–2015, respectively).

14. The dominant driver of permanent loss of forest in the NCR is related to agricultural expansion, the establishment of plantations in degraded forest areas and infrastructure development, while degradation of existing forests is linked to local encroachments and local timber exploitation. Deforestation in the NCR has been the result of i) the expansion of rubber and cassava; ii) timber plantations that replace remnants of natural forest; iii) localized and small-scale encroachment with significant cumulative impact on forest cover and forest quality; iv) infrastructure projects, and in particular hydropower projects with localized but often severe impacts of forest; v) logging in form of 'legal exploitation' of natural forests by government-licensed, large-scale



commercial logging operations, and smaller-scale ‘informal’ logging without government permission or licenses and is therefore considered illegal, and vi) inadequate implementation of policies related to forest protection (see Annex 3).

15. Behind these direct drivers lie a variety of social, economic, political and cultural factors that influence resource use decisions at the national and local levels. These factors act in complex ways and require the adoption of a comprehensive interventions to address them. Although there are numerous underlying and interrelated factors, three key areas stand out: conversion of depleted forest land to higher-value land uses, lack of support for sustainable forest management and inadequate implementation of policies to protect natural forests. Major barriers to REDD+ are identified as forest tenure and governance, persistent poverty for forest dwelling communities and land scarcity. There are also barriers to maximizing the carbon enhancement benefits from tree planting and rehabilitation. Barriers to sustainably managed plantations and accessing higher value markets include poor production practices, limited financing and ineffective governance and extension support. Barriers to enhancement and restoration of natural forests include a lack of technical investment and a lack of incentives for communities to engage beyond the provision of paid labor.

16. The programmatic approach pursued by the Government in the NCR comprises a combination of priority policy actions, improvements in forest management practices and measures to reduce pressure of forests from other sectors, notably agriculture. The specific program activities are largely financed through long-standing Government programs and include several donor-financed projects. The Bank – through the payments provided through the operation described in this appraisal document – will provide complementary financing on the basis of verified reduction of emissions. The Government’s program works across key land use sectors to address the drivers of deforestation and forest degradation and encourages forest rehabilitation and sustainable forest management. The overall approach is to build on and support implementation of national and sub-national policies and initiatives in the NCR while applying an Adaptive Collaborative Management Approach (ACMA)¹¹ at the site-level (see Annex 5).

17. MARD has been supported through strategic grant resources from the Forest Carbon Partnership Facility (FCPF) to put in place a framework for the NCR-JERP. The Government has utilized grant resources provided by FCPF to develop a strategic approach to REDD+, strengthen national systems (notably forest monitoring and safeguards), broaden the engagement of stakeholders (including civil society, ethnic minorities, private sector) and to develop a comprehensive jurisdictional-level approach to reduce emissions in the provinces of the NCR (see Annex 2). With the technical assistance provided by two readiness preparation grants (TF013447 and TF0A1122), the Government was in a position to submit one of the first jurisdictional program proposals (Emission Reduction Program Document, ER-PD) to the FCPF Carbon Fund, which is designed to be a strategic pilot fund for REDD+ that allows countries to leverage climate finance under the UNFCCC and potentially carbon markets going forward. The NCR-JERP could potentially generate a third of the emission

¹¹ ACMA is a process which supports a collaborative process approach that is managed by a Forest Management Council (FMC). The FMC is tasked to develop sustainable forest management involving the different Forest Management Entities (FME) and communities that live within and around the boundaries of the FME (these include Special Use Forests - protected areas in Vietnam, Protection Forest Management Boards and State Forest Companies). The ACMA is set up to specifically involve poor forest dependent communities, baselines and information on the status of the communities is collected through: A REDD Needs Assessment (RNA), A Social Screening Report (SSR), and an updated management plan. ACMA is described in the ER-PD and ESMF.



reductions targeted as part of the NDC¹². MARD has been the implementing agency of the FCPF grant resources and was the leading and facilitating Ministry of the ER-PD that was accepted by the FCPF Carbon Fund in February 2018. Going forward – as part of the operation described in this appraisal document, MARD will be the Program Entity that is responsible for the implementation of the NCR-JERP and the transactions with the Carbon Fund.

D. Relevance to Higher Level Objectives

18. Vietnam's REDD+ agenda and its participation in the FCPF Carbon Fund are fully in line with the World Bank Country Partnership Framework (CPF) 2018-2022¹³. The CPF is fully aligned with the Government of Vietnam's (GoV) 2010–20 Socio-Economic Development Strategy and the recent 2016–20 Socio-Economic Development Plan (SEDP). Specifically, the overall objective of reducing emissions from forests hinges on policies and measures that the GoV is promoting with the NCR-JERP. These align with the CPF objectives to ensure environmental sustainability and resilience (focus area 3), to enable inclusive growth and private sector participation (focus area 1) and governance (cross-cutting area). It also contributes to achievement of the World Bank Group's twin goals – to end extreme poverty and to boost shared prosperity - with environmental, social, and fiscal sustainability, by addressing the problems of costs of natural resource degradation and the threat of climate change.

19. Vietnam's REDD+ agenda is fully aligned with Vietnam 2035, which lays out a vision and framework for long-term development and priorities identified in the Systematic Country Diagnostic (report number 108348). Given the confluence and alarming pace deteriorating natural resources and environmental quality, threats from climate change; and rapidly growing energy consumption, Vietnam is at a juncture where the right choices can help it avoid the irreversible environmental degradation and major environmental remediation costs facing some other countries. A low-carbon growth path prioritizes investments that take account of environmental costs and results in inclusive and resilient growth and is a more sustainable and affordable long-run option. It requires strong institutions to monitor and enforce plans, policies, and regulations for sustainable natural resources and environmental management, including stopping deforestation and forest degradation.

20. The World Bank has a long history of working in the forestry sector in Vietnam. This includes support to forest plantation and certification, coastal forest protection and development, sustainable forest management and forest governance, biodiversity conservation, piloting community forest co-management and co-benefits, and the reform of State Forest Companies. The series of Development Policy Operations which support policy actions on coastal forest development and forest carbon action plans will help promote the aforementioned activities by strengthening the planning, governance, and management of forest resources in a manner that promotes inclusion of local government and communities in forest management. Investment in coastal forest development under the Bank-supported Forest Sector Modernization and Coastal Resilience Enhancement Project aims to improve the content and quality of planning of coastal areas in their spatial plan and to ensure that the various sectoral plans are well integrated. The component focused on coastal forests will provide assistance to provinces

¹² Total potential GHG mitigation generated by LULUCF for 2015-2030 is 82 Mt CO₂e (or up to 175 Mt CO₂e with international support). Within this period, the NCR JERP is, by design, generating a total GHG mitigation amount of 26 Mt CO₂e, accounting for approximately a third of national GHG mitigation in the LULUCF sector.

¹³ Report No. 111771-VN dated May 17, 2017



to better integrate the management and use of coastal forests to reduce (directly and indirectly) exposure to climate change into their spatial plans.

21. Finally, the Government's NCR-JERP and the support from the Bank through carbon finance, is in line with the World Bank Group's Climate Change Action Plan and the Forest Action Plan for FY16-20. Consistent with these plans, the proposed operation represents an integral part of a programmatic engagement on forests in Vietnam. It builds on activities funded by the FCPF Readiness Fund, which have principally supported the formulation of an enabling policy framework for REDD+ at the national level and broad-based implementation plan at the sub-national level (see Annex 2 for the status of Vietnam's readiness). Carbon payments from the FCPF Carbon Fund complement other forest sector investments and are provided to incentive the implementation of policies and actions by the Government of Vietnam. These include direct investments that reduce deforestation and forest degradation and promote sustainable forest management as well as actions that strengthen the institutional and policy framework for forests. The proposed financing described in this appraisal document complements and leverages other Bank operations as well as development partner finance.

II. PROJECT DESCRIPTION

A. Project Development Objective

PDO Statement

22. The Development Objective of the Project is to make payments to the Program Entity for measured, reported and verified Emissions Reductions (ER) from reduced deforestation, forest degradation and enhancement of forest carbon stocks (REDD+) in the North Central Region of Vietnam and to distribute ER payments according to an agreed benefit sharing plan.

PDO Level Indicators

23. The achievements of the PDO will be measured through the following set of indicators:

- a) Volume of CO₂ Emission Reductions measured and reported by the Program Entity, verified by a Third Party, and transferred to the FCPF Carbon Fund (tCO₂e);
- b) Payment by the FCPF Carbon Fund for CO₂ Emission Reductions generated by the NCR-JERP (US\$); and,
- c) Emission Reductions payments distributed in accordance with agreed Benefit Sharing Plan (Yes/No).

24. The indicators are designed to reflect the main stages of providing incentives to beneficiaries through ER payments. That is, the volume of ERs measured and reported (indicator (a)) is the aggregate result of the effort made by beneficiaries to reduce emissions; the payment for ERs (indicator (b)) is made on the basis of the ERPA commercial terms, which were agreed with the Program Entity following consultations with program partners and beneficiaries; lastly, the distribution of ER payments (indicator (c)) follows an agreed BSP that is designed to provide incentives to program beneficiaries to implement REDD+ activities. In other words, the combination of these steps – verification, payment and benefit distribution – form an incentive structure to reduce emissions. It



is also important to note that all three steps are consulted and agreed with program stakeholders and beneficiaries (i.e. the conditions for verification, the terms of the payment and the allocation of benefits), thus establishing a connection between actions and payments.

B. Project Components

25. Given that this operation provides results-based payments, it does not have components as investments operations. Rather it is organized as a process that includes (A) Verification of and payment for measured and reported ERs generated by the Government's NCR-JERP; and (B) Distribution of the ER payments according to a BSP. Specifically:

(A) Verification and Payment for Measured and Reported ERs. The basis for payments under the ERPA are verified ERs reported by the Program Entity. In the ER-PD accepted by Carbon Fund Participants in February 2018, Vietnam detailed an approach to measure emissions in the NCR. This approach is consistent with how baseline emissions were estimated and was rigorously assessed by an independent Technical Advisory Panel against the requirements stipulated in the Carbon Fund Methodological Framework. The Program Entity agreed to submit three ER Monitoring reports during the term of the ERPA, which will trigger an independent verification using the same agreed technical standards in the Carbon Fund Methodological Framework, respectively. The verified volume of ERs, combined with the unit price agreed in the ERPA, will then translate into corresponding payments. As noted above, as part of this transaction ERs will be transferred from the Program Entity to the FCPF Carbon Fund via a centralized carbon registry (Carbon Assets Trading System) managed by the World Bank, acting as Trustee of the FCPF Carbon Fund.

(B) Distribution of ER Payments According to the BSP. The proceeds from verified ER payments will be shared according to an agreed BSP, designed based on the criteria in the Carbon Fund Methodological Framework and in a manner that is acceptable to the Bank. This BSP is based on the principles described in the ER-PD accepted by Carbon Fund Participants and describes distribution mechanism, funds flow and rules of allocation of proceeds to agreed beneficiaries. An advanced draft BSP submitted by the Government and was found acceptable by Carbon Fund Participants (November 2019). A final BSP is required prior to the first payment and is to be submitted within twelve months from the signature of the ERPA. As per the ERPA General Conditions¹⁴, the Program Entity shall share a significant part of the monetary and non-monetary benefits achieved in connection with the implementation of the NCR-JERP with relevant stakeholders.

26. These two steps are repeated for each of the three reporting periods agreed in the ERPA and in parallel to the implementation of activities in the NCR-JERP, which are designed to reduce emissions over time. The Government's NCR-JERP comprises a combination of policy actions, improvements in forest management practices and measures to reduce pressure of forests from other sectors, notably agriculture. The specific program activities are largely financed through long-standing Government programs and include a number of donor-financed projects. The Bank – through the ER payments – will provide complementary financing. The NCR-JERP will work across key land use sectors to address the drivers of deforestation and forest degradation and encourage forest rehabilitation and sustainable forest management.

¹⁴ <https://www.forestcarbonpartnership.org/erpa-general-conditions>



27. The NCR-JERP will support a combination of enabling conditions and sector and cross-sectoral activities, with a focus on the forest and agriculture sectors. The four inter-related components of the NCR-JERP are:

- 1) Strengthening enabling conditions for REDD+;
- 2) Promoting sustainable management of forests and carbon stock enhancement;
- 3) Promotion of climate-smart agriculture and sustainable livelihoods for forest dependent people; and
- 4) Program management and emission monitoring.

A detailed description of the NCR-JERP is presented in Annex 5.

C. Carbon Finance Aspects

28. The terms of this project are defined in an Emission Reduction Payment Agreement (ERPA)¹⁵. Specifically, the World Bank as the trustee and implementing agency of the FCPF Carbon Fund pays for ERs that meet a set of standard technical requirements defined in the Carbon Fund Methodological Framework and are consistent with international good practice. As per the international framework for REDD+ agreed as part of the Paris Climate Agreement, Vietnam has proposed an emissions baseline based on estimates of observed change in forest cover and quality and intends to use national systems (national forest inventory and satellite-based forest mapping) to measure and report future emissions during program implementation. Payments under the ERPA will be made upon the independent verification of ERs, and confirmation that safeguard instruments and the BSP are implemented as agreed. The ERPA defines the agreed commercial terms of the payment for ERs, including volume, price, conditions of effectiveness and reporting periods¹⁶. ERPA General Conditions were approved by the FCPF Participants Committee on November 1, 2014. The ERPA terms for Vietnam's program were agreed during negotiations and subsequently approved by Carbon Fund Participants on a no-objection basis in August 2020.

29. For this operation, the geographic area of the six provinces in the NCR is the Accounting Area over which the change in the rate of emissions will be estimated during the ERPA term. Accordingly, Vietnam has estimated a Reference Level (RL) that corresponds to this jurisdiction. The RL is the historical average of net emissions from deforestation and forest degradation as well as removals (sequestration of carbon) from reforestation and enhancement of forest carbon stocks, observed during the 2005-2015 reference period, equaling 4.6 MtCO₂e/year

¹⁵ The ERPA is structured as two separate legal agreements, one for each of the two tranches of the FCPF Carbon Fund. For simplicity, this document refers to both agreements jointly as 'ERPA'. Specifically, tranche A is designed to be a commercial window that transacts on tradeable carbon assets, whereas tranche B is designed to provide incentive payments for recipient countries (tranche B has approximately 95% of the current fund capitalization). It is important to note that most commercial terms, notably the term and reporting period for the ERPA, are the same for both ERPAs and verification follows the same process. A key difference is whether ERs are retained by the Program Entity (e.g., to be accounted for as part of the NDC) or the Carbon Fund (for possible transaction in the future).

¹⁶ The first Reporting Period starts with the acceptance of Vietnam's ER-PD at the 17th meeting of the Carbon Fund Participants in February 2018. Carbon Fund Participants agreed to make payments for ERs achieved prior to ERPA signature at their 20th meeting in July 2019. The necessary conditions for such payments were met by the Program Entity, including the demonstration of safeguards compliance.



($\pm 26\text{--}35\%$)¹⁷. The approach used for the RL in the NCR is consistent with Vietnam's national Reference Level submitted to the UNFCCC¹⁸.

30. MARD is the Program Entity to sign the ERPA. As per the ERPA General Conditions, the Program Entity needs to be authorized by the Government to implement the program and enter into an ERPA with the World Bank. The MARD submitted to the Office of the Government (OOG) the official letter no. 1985/TTr-BNN-TCLN dated March 19, 2020 and OOG responded under official letter no. 2471/VPCP-QHQT dated March 31, 2020 on MARD's negotiation and signing of the ERPA with the World Bank.

31. As per the ERPA General Conditions, Vietnam needs to have the ability to transfer the legal title to ERs to the Carbon Fund. The state is the owner of land in Vietnam, and as such, has rights to the environmental service derived from it¹⁹. However, the specific environmental service of reducing emissions and the relation to land use rights has not been explicitly defined by Vietnamese law. A Prime Minister's Decision to be issued once the ERPA is signed will establish this relationship for the purpose of the NCR-JERP and MARD's ability to transfer ER title to the Carbon Fund. An accompanying legal assessment will describe the legal and regulatory basis for Vietnam's approach and is to be confirmed (as required by the Carbon Fund) by the Ministry of Justice through the consultation and review process for the Prime Minister's Decision. A draft Decision and legal assessment have been reviewed by the Carbon Fund's legal team and were considered adequate to advance to approval. However, since the legal documentation will not be complete and final, the ERPA contains a condition of effectiveness for MARD to submit the final documents. The transfer of ERs occurs through the centralized carbon registry (managed by the World Bank) upon verification. MARD has agreed with the Carbon Fund that the ERs paid for under Tranche B of the ERPA will be retransferred back to Vietnam so Vietnam can use the retransferred ERs for reporting purposes under the NDC only.

32. In addition, the NCR-JERP is expected to yield, directly and indirectly, multiple non-carbon benefits. The program generates a number of priority non-carbon benefits that can be grouped into socio-economic (maintaining sustainable livelihood, culture and community; valuing forest resources; income generation and employment), environmental (promotions of climate-smart agriculture; conservation and protection of biodiversity and ecosystem services) and governance (strengthening of village-level socially inclusive governance; forest governance and management; improved land tenure; participatory land use planning) benefits. These are detailed in the ER-PD and will be monitored as part of the monitoring and evaluation system developed for the NCR-JERP.

¹⁷ The RL is the net sum of *average annual emission is 10.8 MtCO₂e and average annual removal is – 6.2 MtCO₂e*. The results of the uncertainty assessment for emissions and removals show that overall weighted uncertainty of emissions and removals varies from 26–35 percent.

¹⁸ The Reference Level for the NCR can be considered as a part of Vietnam's national Reference Level for the UNFCCC, based on aggregated emissions and removals estimated for eight agro-ecoregions.

¹⁹ In Vietnam, all land is constitutionally the property of the State, but exclusive use rights are given to individuals under a contractual arrangement with the state. Land Use Right Certificates (LURCs) can be issued on production and protection forest land, signifying formal state recognition of a user's rights, and are necessary for secured tenure, formal land transactions, access to formal credit and legal protection of land-use rights. For the purpose of the NCR-JERP, the State will have the ability to transfer the Title to ERs to the FCPF Carbon Fund (as the owner of land).



D. Project Beneficiaries

33. **The beneficiaries** receive ER payments and are local forest-dependent communities, forest management entities as well as provincial district people's committees, commune people's committees and mass organizations which play a role in the management of the commune and the use of the land and forest resources. They are:

- a) Policy making and enforcement stakeholders: these include organizations and individuals who implement activities under NCR-JERP component 4 (program administration) and component 1 (monitoring and governance). These are typically stakeholders from government (or contracted on behalf of the government, including local communities, civil society organizations (CSOs) and non-government organization (NGOs)).
- b) Local communities and their partners that implement NCR-JERP components 2 (sustainable forest management) and 3 (climate-smart agriculture): these include local communities, SFCs, FMB as well private sector beneficiaries (companies and cooperatives), CSOs and NGOs that are either engaged through the ACMA process (see paragraph 16) or are selected on competitive basis to perform activities.
- c) Service providers that are contracted by beneficiaries under the two categories above to support the implementation of NCR-JERP activities. These include organizations and individuals such as public service providers, financial institutions, private sector, CSOs and NGOs who provide technical and other services.

Details on the component activities of the NCR-JERP are in Annex 5. Benefits, beneficiaries and benefit sharing arrangements are provided in the BSP (a separate document that forms an integral part of the ERPA)²⁰.

E. Project Cost and Financing

34. **By design, the financing of the ERPA is *ex post*.** That is, upon independent verification of reported ERs, payments are made to the Program Entity. MARD has agreed to submit an ER monitoring report three times during the term of the ERPA and, as a result, would receive respective payments if the performance of the program is positive (i.e. if the rate of emissions was reduced relative to the Reference Level). The financing for interventions that contribute to the reduction of emissions in the NCR comes from a variety of sources, largely long-standing government investment programs as well as donor-financed projects. The payments generated through the ERPA would provide MARD a revenue stream to continue investing in emission-reducing interventions (as defined in the BSP based on extensive stakeholder consultations). The NCR-JERP and the schedule of ERPA payments is fully integrated into the governmental 5-year planning and budgeting cycles (2016-2020 and 2021-2025, respectively).

35. **The estimated volume of ERs** to be generated in the NCR during the 2018-2025 period is $32.09 \text{ MtCO}_2e^{21}$, of which Vietnam conservatively agreed to transfer 10.3 MtCO_2e to the Carbon Fund during the term of the ERPA.

²⁰ Carbon Fund Participants have accepted an advanced draft BSP prepared by MARD, which has been disclosed by MARD and on the World Bank external website (report number SFG5140). This document will be finalized by MARD following the signing of the ERPA.

²¹ As the NCR-JERP is linked to national policies and will be integrated into the overall NRAP plan to implement REDD+, the



As Carbon Fund payments are results-based, the actual performance determined after ER reporting and verification may be higher or lower than estimated. Further details on the expected volume of ERs are provided in Annex 9. At a carbon price of US\$ 5/tCO₂, total ER payments would amount to US\$ 51.5 million paid upon independent verification for each of three agreed reporting periods.

F. Lessons Learned and Reflected in the Project Design

36. The Bank has a long-standing experience in working with MARD in the forest and agriculture sectors, including Coastal Wetlands Protection and Development Project, Forest Sector Development Project, Agriculture Competitiveness Project, Coastal Resources for Sustainable Development Project, Mekong Delta Integrated Climate Resilience and Sustainable Livelihoods Project and Forest Modernization and Coastal Resilience Enhancement Project. The Bank brings significant value to support the Government in the implementation of the NCR-JERP given its current engagement in Vietnam's forest sector through the several mentioned forest development projects and as delivery partner under the FCPF Readiness Grants (TF013447 and TF0A1122).

37. The NCR-JERP design has also benefitted from the early experiences with the ACMA, which forms the backbone of the benefits sharing plan. Also, the BSP reflects lessons from a number of pilot payment projects managed by NGOs, including that: i) the benefit sharing mechanism from the forest protection efforts needs to be discussed before the communities make the decision to participate in the program; ii) communities need to be fully informed and share experience from similar programs or projects in order for them to make decision on the benefit sharing mechanism; iii) communities should be trained to participate in carbon monitoring and iv) long-term forest allocation to communities for protection and management is key to success.

38. One of the key lessons is the importance of linking forest protection with rural livelihood development to have effective protection of critical forest areas. Delivering this, however, often requires a complex program design and strong local implementation capacity. Accordingly, time and resources have to be allocated to effectively deliver rural livelihood benefits. The NCR-JERP has internalized this lesson by having a dedicated component on climate-smart agriculture to help generate economic benefits from a forest landscape management approach for local stakeholders.

39. The lesson on adopting well-tested implementation arrangements is reflected in the program design. Most of the program activities are implemented by the provincial government. The program implementation arrangements for these activities uses a well-tested implementation model that involves various local program management units such as provincial, district and commune levels, with a particularly important role of the communities being in the form of Forest Farmers' Groups (in the Bank funded Forest Sector Development Project) or Common Interest Groups (in the Northern Mountains Poverty Reduction Project) which are similar to Livelihood Enhancement Groups (in the Central Highland Poverty Reduction Project) or co-management modality under the Coastal Resources Sustainable Development Project. The coordination function is led by the central unit. The program management units at the provincial and district levels will have fiduciary and safeguard responsibility. Technical assistance is provided at the subnational level to enhance capacity.

40. The design of this operation has benefitted from other similar jurisdictional programs in other regions that seek results-based financing from the FCPF Carbon Fund. These include ERPAs being prepared in Chile, Costa

activities will extend beyond the ERPA period. The economic model assumes a 20-year program period which corresponds to the long-term perspective of successive NFDS with which the program is aligned.



Rica, the Democratic Republic of Congo, Fiji, Ghana, and Mozambique. The experience of these programs and the active exchange of lessons across task teams has resulted in a degree of consistency in how *ex post* ER payments relate to underlying investments, the results and monitoring framework and the approach to safeguards and benefit sharing. The measurement and reporting of ERs, which is a principal responsibility of the Program Entity, and the independent verification by the Bank, follows a rigorous and internationally accepted methodological framework, which was designed with the input of many countries participating in the FCPF and on the basis of their experiences and capacities in monitoring forests.

III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

41. As the Program Entity, the MARD will be leading the implementation of the NCR-JERP. MARD has extensive experience in implementing IDA-financed projects since 1995. MARD will work in close collaboration with relevant Ministries and agencies to implement the program in the NCR. Program implementation will be guided by a Steering Committee, consisting of, at the central level, representatives of key Ministries such as MPI, MOF, MONRE, OOG, MARD, VRO, Provincial People's Committees and others as relevant, that will be responsible for facilitating the coordination among the key stakeholders, providing guidance, and ensuring alignment with the national policy framework.

42. VNFF was assigned by the MARD to be in charge of the distribution mechanism for future ERPA payments at central level with the role and accountabilities specified in the Program Operation Manual (POM). Key tasks include also providing technical support to program implementation such as forest inventory, environmental and social safeguards, benefit sharing and forest enrichment for carbon sequestration among others during the 2018-2025 implementation period. The VNFF will establish a Central Program Management Board to help coordinate with the provinces to implement the program.

43. Implementation of the program will be overseen by the Provincial People's Committees (PPCs) who will be facilitating the coordination among the key stakeholders and providing guidance for program implementation in its respective province. The Provincial Departments of Agriculture and Rural Development (DARD) are in charge of the implementation and have rich experience in implementing projects and programs in the forest sector funded by Government's budget or donors. Organizational charts are presented in Annex 6 and detailed in the POM which will be finalized in consultation with stakeholders. The POM is subject to Bank's review and clearance and approved by the MARD and adopted by the NCR-JERP provinces.

B. Results Monitoring and Evaluation Arrangements

44. The monitoring and evaluation of results will be performed as follows:

- a) **Reporting Periods.** The Program Entity will coordinate measurement and reporting of ERs and submit ER Monitoring Reports during regular Reporting Periods specified in the ERPA. The agreed Reporting Periods are 2018-2019²², 2020-2022 and 2023-2024, followed by verification and

²² The first Reporting Period starts in February 2018. The required due diligence for ERs achieved prior to ERPA signature was performed and found acceptable by the Bank.



respective ER payments. That is, the actual disbursement of ER Payments would occur in the year following the respective reporting period (2021, 2023, 2025).

- b) **ER Monitoring Reports.** ERs generated through the implementation of the NCR-JERP will be measured in tCO₂e/year and represent the key metric for receiving results-based payments under the ERPA signed with the Carbon Fund, coinciding with the main PDO indicator. The baseline for the indicator, against which results will be measured, will be the Reference Level endorsed by CFPs. ERs will be monitored through the measurement, collection, compilation and recording of all relevant data and parameters necessary for estimating ERs in the Accounting Area, as described in an ER Monitoring Plan and in accordance with the Carbon Fund Methodological Framework. The Monitoring Plan is included as Annex 10.
- c) **Verification.** All ERs generated in the Accounting Area during each Reporting Period are subject to Verification by an Independent Reviewer. The World Bank, acting as Trustee of the FCPF Carbon Fund, in consultation with MARD, arranges for such Verification and contracts an Independent Reviewer for Verification purposes.
- d) **ER Transaction Registry.** Each ER transaction between the Program Entity and the World Bank, as the Trustee of the FCPF Carbon Fund, will be registered in a centralized ER transaction registry to avoid double counting and/or claiming of the transacted ERs. The functions of the registry are to document and record, among others, the issuance, serialization, acquisition, holding, retirement, cancellation and/or transfer of ERs generated by Vietnam.
- e) **Interim Progress Reports.** The progress made with the operational implementation of NCR-JERP, including performance indicators for each mitigation measure, implementation of Safeguards Plans, and implementation of the BSP will be monitored through regular Bank supervision missions (at least every semester) and will be documented in Interim Progress Reports, in form and substance satisfactory to the Bank. Preliminary performance indicators for the mitigation measures are included in Annex 10.
- f) **Non-Carbon Benefits.** The Program Entity shall provide information on its efforts to generate and/or enhance Priority Non-Carbon Benefits as part of each ER Monitoring Report and Interim Progress Report.

C. Sustainability

45. The ERPA provides co-financing to support the NCR-JERP in delivering on the Government's objective reduce emission in the land use sector. GoV's interventions put emphasis on ensuring the investments made in addressing the key drivers of deforestation and forest degradation, including policies enhancement, multi-sectoral coordination, sustainably protecting the existing natural forests and improving carbon sequestration of improved plantation. The program also supports well-tested and effective implementation arrangements (such as the ACMA) with communities being the central of any intervention implementation and a well-developed BSP and monitoring system.



46. The implementation arrangements include opportunities for local stakeholders to participate in the program directly. While elements of the design are aimed to promote sustainability, the success and sustainability of forest systems can only be assessed over the long term. The GoV therefore relies on including the long-term community-based protection forest management plans and supporting policy enhancement for better forest management and sustainable use of forest products.

47. The Bank brings significant value given its previous engagement in the forest sector in the country, building on several previous Bank IPF operations that supported forest plantation and certification, sustainable forest management and forest governance, biodiversity conservation, community forest co-management and co-benefits, the reform of State Forest Companies and policy support. The Bank has also been the Delivery Partner for Vietnam under the FCPF with two REDD+ Readiness grants that were used to prepare the NCR-JERP.

48. The sustainability and replicability of the NCR program measures is strengthened by the following: (i) alignment with national sectoral policies (i.e., Forestry Development Strategy and Socio-Economic Development Plan) and international commitments (NDC); (ii) a highly participatory process with major forest stakeholders at the national and provincial levels throughout the preparation and validation process; (iii) alignment of national and sub-national policies and initiatives in the NCR; (iv) leveraging of collaborative management to promote ownership (which goes beyond simply incentivizing individuals and communities to sustainably manage and protect their forests.)

IV. PROJECT APPRAISAL SUMMARY

A. Technical, Economic and Financial Analysis

(i) Technical

49. The design of the NCR-JERP complies with the requirements of the Carbon Fund Methodological Framework, as well with the UNFCCC REDD+ framework. The Methodological Framework includes a series of technical criteria (38) and indicators (78) built around five sections, namely: (i) level of ambition; (ii) carbon accounting; (iii) safeguards; (iv) sustainable program design and implementation; and (v) ER transactions. The UNFCCC REDD+ framework includes a set of interrelated decisions that are reflected in the Paris Climate Agreement.

50. As part of the FCPF Carbon Fund business process, a Technical Assessment Panel (TAP) assessed Vietnam's ER-PD against the Methodological Framework's criteria and indicators. The assessment process included several desk reviews, initiated in July 2016 with a country visit. In addition, the Carbon Fund Participants also conducted a desk review of the Vietnam ER-PD and provided their comments. The TAP assessment process was completed in January 2018, concluding that the technical design fully met 61 assessment criteria and indicators, while one was not met (an additional 16 are not applicable at this stage as they mostly relate to verification and transactions during the ERPA). The sole indicator that has not been met relates to the Government's ability to transfer title to ERs, which will be established with the above-noted Prime Minister Decision after ERPA signature.

(ii) Economic and Financial Analysis

51. Since the ERPA provides payments for verified ERs on an ex post basis, a traditional economic and financial analysis is not applicable. Nonetheless, the MARD performed an analysis of the activities included in the



NCR-JERP design to assess the economic benefits and financial viability and estimate the payments that need to be leveraged from the ERPA. This analysis found that the NCR-JERP will cost US\$ 312.8 million over the timeframe 2018-2025 and will generate economic benefits worth US\$ 1.24 billion (see Annex 9). The necessary resources to cover the costs of the program have been identified and secured as part of the current budget cycle (until 2020) and the Prime Minister has committed to allocate a commensurate amount through Government programs after 2020²³.

52. Forest product value from natural forests and plantations, including timber and non-timber forest products, will amount to US\$ 246.6 million over 8 years for the NCR-JERP. Benefits from improved livelihoods and climate-smart agriculture in mountainous and coastal forests is estimated at USD 72.3 million after 8 years and USD 151 million after 12 years. The economic value of benefits from reduced sandstorm erosion through coastal sand forest protection will accumulate to US\$ 7.8 million after 8 years; and double to US\$ 15 million after 12 years. The social value of carbon will amount to US\$ 919.5 million and account for 74 percent of the total economic benefits attributable to the NCR-JERP. Furthermore, the economic benefits are likely to be significantly higher, as the NCR-JERP interventions under its Component 1 (enabling condition for REDD+) and climate-smart agriculture are scaled beyond the 1.05 million ha of natural forests and 60,300 ha identified, respectively. In addition, several other non-carbon environmental benefits have not been quantified in the economic analysis.

53. The economic analysis for the NCR-JERP results in a net present value (NPV) of US\$ 678 million and economic rate of return (ERR) of 585.3 percent after 8 years. This demonstrates the significant economic benefits to the national economy and justifies investment in the program from an economic perspective. The financial rate of return is projected to become positive after 8 years (1.4 percent) but results in a negative NPV of US\$ -24.8 million. The financial rate of return and NPV improve after 10 and 12 years to 16 percent (NPV: US\$ 15.2 million) and 23.8 percent (NPV: US\$ 68.9 million) when the program becomes financially profitable. This analysis indicates that the financial returns from the program investment are only justified in the long-term (more than 10 years). This is consistent with the overall 20-year program period in the National REDD+ Action Plan with which the NCR-JERP is aligned.

B. Fiduciary

(i) Financial Management

54. A financial management (FM) capacity assessment of the Vietnam Forest Protection and Development Fund (VNFF) showed that VNFF has limited accumulated FM experience from management of World Bank funded projects, though its parent fund (Trust Fund for Forests) has managed large funding resources from the pool of donors supporting the sector including EU, Netherlands, Finland, Switzerland, FAO, Sweden, GIZ and others.

55. Consequently, a number of FM actions are required following ERPA signature (and prior to the submission of the first ER Monitoring Report): (i) formalize VNFF's role as the distribution mechanism for future ER payments, including funds flow arrangement; (ii) assign key FM staff at both central and local levels; (iii) develop a FM manual, to be a chapter in the POM, clearly specifying all the finance, accounting, auditing and internal control procedures (the FM manual is subject to the Bank's review); (iv) install relevant accounting software to manage the program funds at both central and local levels; (v) develop an audit TOR (both internal and external) and send to the Bank for review and; (vi) FM staff to attend relevant Bank trainings on FM and

²³ As per the Prime Minister's Decision that authorizes the NCR-JERP, establishes the Government ability to transfer ERs and commits resources to the financing of the program activities.



disbursements. A draft POM, including FM manual has been developed during the project preparation and will be finalized after signing of ERPA. The remaining required FM actions will be immediately started right after the signing of ERPA.

(ii) Procurement

56. ERPAs involve the delivery of and payment for ERs and are not subject to the World Bank Procurement Framework that applies to IPF operations. This exclusion is not a waiver or exception but reflects the fact that these emission reductions are not “procurement activities” such as goods, works, non-consulting services and consulting services financed by the World Bank through IPF operations.

C. Safeguards

57. The following operational (safeguard) policies apply: Environmental Assessment (OP/BP 4.01), Natural Habitats (OP/BP 4.04), Forests (OP/BP 4.36), Pest Management (OP 4.09), Physical Cultural Resources (OP/BP 4.11), Indigenous Peoples (OP/BP 4.10) and Involuntary Resettlement (OP/BP 4.12).

(i) Environmental Safeguards

58. **This transaction is classified as Category B since it mainly consists of actions and measures aimed at reducing the rates of deforestation and degradation to protect and conserve forests in the areas of intervention.** Any potential environmental impacts and risks stemming from the implementation of on the ground activities are expected be moderate, localized, short-term, and manageable.

59. **The purpose of the NCR-JERP is to promote a reduction in the rates of deforestation and degradation by the measures to protect and conserve forests; therefore, the impacts are expected to be mostly positive.** As forest cover improves so too will the associated benefits associated with forests, including healthier natural habitats. Not only as a sink for carbon but also for the many environmental services forests provide such as watershed protection, provision of important habitats, sustainable source of NTFP and other forest-based livelihoods. However, there would be potential negative impacts associated with implementation. The Strategic Environmental and Social Assessment (SESA) prepared for the NCR-JERP has identified the following main potential environmental impacts: i) soil erosion on sloping areas, and from poor maintenance tracks; ii) loss of soil fertility due to removal of biomass in harvesting; iii) increased risk of pest and disease due to monoculture plantations; iv) health risks associated with the use of pesticides and herbicides; v) loss of biodiversity and habitat fragmentation due to conversion of natural forests into plantations of Acacia by SFCs or Protection Forest Management Boards (PFMBs); and vi) possible invasive plants if agroforestry or NTFP species are introduced without guidance. Nevertheless, these impacts are localized, short term, moderate and can be mitigated with the readily designed mitigations measures.

60. **An Environmental and Social Management Framework (ESMF), a main output from the SESA, has also been prepared to ensure that activities to be financed under the NCR-JERP would not create adverse impacts on the local environment and local communities, and that the residual and/or unavoidable impacts will be adequately mitigated.** The ESMF establishes the requirements for subproject safeguard screening, impact assessment and development of mitigation measures, and an Environmental Code of Practice (ECOP) for construction activities. It also includes guidance on safeguard documentation preparation and clearance, safeguard implementation, supervision, monitoring, and reporting. The SESA and ESMF have been reviewed by the Bank and found to be satisfactory. The environmental safeguard instruments for the program activities during implementation will be prepared following the ESMF guidelines.



61. Guidelines will be used to support the development of plantations which will promote good practice in the location, planning, establishment and management of plantations which can lead to improved plantation success and ensure the maintenance and where possible enhancement of high conservation values and environmental services. Specific measures to avoid fragmentation and conversion of natural forests include support for mapping of remaining forest areas, awareness and capacity building, linking plantation development to independent forest certification, and tying benefit sharing to the protection of natural forests. Through regular reporting on ERs, any natural forest that is converted to plantations across the entire accounting area will be identified and quantified.

62. Scope of safeguards application. Bank's safeguards policies apply to all activities that are part of the NCR-JERP, irrespective of financing source. Since the ESMF and other safeguard frameworks provide clear guidance on how to comply with the safeguards of the program, the future projects that are financed by bilateral donors and are located within the program area and contributing to the program objectives need to adopt and follow the safeguards of the program. This can be done by signing a memorandum of understanding (MOU) between MARD as the Program Entity and the project owner before approval of the bilateral donor's project. The MOU will cover background of the NCR-JERP and the project, comment objective, commitment to compliance with the safeguards of the program, implementation arrangement, and monitoring, evaluation, and reporting. Alternatively, if bilateral donors' safeguards are used for their respective activities contributing to the objectives of the NCR-JERP, MARD will conduct a due diligence to assess if the safeguards of the respective donor at the program level are consistent with the ESMF and are properly applied. If the due diligence concludes that the bilateral donors' safeguards are consistent with the Bank Safeguards policies and that they apply their safeguards policies properly, ER benefit from these interventions can be included in the BSP. Other projects taking place in the accounting area, even if they may also contribute to emission reduction, will not be within the scope of the program safeguard requirements.

63. Safeguard implementation, monitoring, and capacity building. As the Program Entity, MARD, through its Central Project Management Unit (CPMU) supported by the Provincial Project Management Units (PPMUs), the Special Use Forest Management Boards (SUFMB), the PFMBs) and the SFCs, will be responsible for implementing and monitoring the program safeguard instruments (ESMF, Resettlement Policy Framework (RPF), Ethnic Minority Planning Framework (EMPF), Process Framework PF). MARD will be responsible for self-reporting of the compliance with the safeguard instruments, accompanied by independent third-party monitoring. At the program level, safeguard staff of CPMU will review the safeguard implementation progress, take actions as necessary, and report the results as part of the Program safeguard monitoring report to be submitted to WB on a 6 months and yearly basis. The Program Steering Committee (PSC) and/or the Provincial People Committee (PPC) will be responsible respectively for taking policy actions related to safeguard issues at Program level and subproject levels. Close consultation with WB on specific issues will be maintained. At the field level the ACMA process will be instrumental in coordinating and contributing to implementation collaborative approaches to forest land management, forest protection and biodiversity conservation and reporting. ACMA process is described in the ERPD and ESMF and is summarized in footnote 11. At subproject/activity level, the subproject/ activity safeguard staff of the subproject/activity owner (PPMUs) will be responsible for monitoring and monthly reporting. Third-party monitoring consultant will be mobilized by MARD and will be retained until the end of the program. During implementation, appropriate trainings will be provided to CPMU, PPMUs, consultants, local community representatives, and other program stakeholders on the safeguard instruments to be applied to the program.

64. Public consultation and information disclosure. During preparation of the ER-PD, SESA, ESMF, RPF, EMPF, PF, relevant stakeholders (VNFOREST staff, agriculture, forestry, environment, ethnic minority staff at provincial,



district and commune levels, staff in SUFMBs and PFMBs, heads of villages and local people of different ethnic groups, NGOs, mass organizations) have been consulted. The ESMF, RPF, EMPF, and PF were prepared based on the results of the ER-PD and the consultations involved in that process and the SESA process which included extensive qualitative and quantitative consultations. Stakeholders from the household level to the national and international level have been consulted on the SESA. These consultations commenced in October 2015 although for the past three years there have also been consultations of an iterative nature. Additional consultations on the RPF, EMPF, PF, and the ESMF were conducted in May-June 2017 and August-September 2018. The feedbacks from the consultations have been incorporated into the program design and the final draft of the program safeguard instruments. The final environmental and social safeguards instruments were disclosed both locally at the PPMUs and program areas on January 28, 2019, and on the World Banks external site on January 31, 2019. The Appraisal Stage Integrated Safeguards Data Sheet of the project was disclosed at the World Bank's external site on June 4, 2020.

(ii) Social Safeguards

65. The NCR is characterized by a concentration of ethnic population -- the six largest ethnic minority groups constitute about 11.5 percent of the total population, although in forested areas of upland districts the percentages are much higher (up to 95 percent of the population). The main social concerns relate to security of land tenure, access to resources and improvement of livelihoods, lack of recognition of usufruct rights for agricultural and forest land and gender issues. A participatory SESA was carried out in compliance with OP/BP 4.01 "*Environmental Assessment*" to integrate environmental, social and gender considerations at an early stage of program design. A rigorous socio-economic quantitative survey based on 102 high forest cover communes with a high proportion of ethnic minorities households and detailed consultations were done to analyze potential social, environmental and gender risks. The livelihood activities proposed in Component 3 of the NCR-JERP are linked to the forest-dependent communities and this linkage is facilitated by the FMC. The livelihood activities are designed to help improve crop production to reduce the impacts of encroachment on natural forest and to introduce new or improved climate smart techniques. They are not seen as replacement income for small scale local logging for household needs such as house building, which allowed for locally by agreement for. It is also not seen as a replacement for income from illegal logging but would help reduce the economic necessity for such practices.

66. Some of the notable social impacts include (Environmental and social risks analyzed in the SESA are summarized in Annex 4):

- a) *Restriction of Access:* The activities for strengthening and implementing policies controlling conversion of natural forests and forest governance and law enforcement may have the potential for reduced access to forest and non-timber forest products (NTFP) resources for forest-dependent communities through improvements to forest governance; possible short-term reduction in volume of NTFPs may result in food insecurity or less income for NTFPs that are sold; some possible impacts on livelihoods i.e. improved governance may not include unfettered or continued access to all forest areas. OP4.12 is triggered and a Process Framework is prepared to mitigate any potential access restriction.
- b) *Land tenure insecurity:* Conservation and reforestation interventions in the NCR-JERP could lead to ethnic minority households and communities experiencing involuntarily resettlement issues, lose productive land (particularly lands which are customarily used) and/or access to natural resources. In addition, ethnic minority ancestral or other socio-cultural traditions related to land



are not given constitutional or statutory recognition, making their tenure rights insecure in many areas where statutory rights have not been formally recognised. The lack of recognition of customary land rights is considered a safeguard issue.

- c) *Clarification of forest and land boundaries through demarcation:* NCR-JERP activities that support clarification of land boundaries could adversely impact ethnic minorities and reduce their ability to use land on an ongoing basis. Land boundary and usage of land could result in disputes and could also affect land tenure arrangements OP 4.10 is triggered and an EMPF is prepared to mitigate adverse impacts on EMs.
- d) *Polices, Laws and Regulations Framework:* There is no definition of customary rights, limited recognition of community rights and any special rights for ethnic minority peoples and different socio-cultural relations to forest and land management although the 2013 Land Law and the 2018 Forest Law is making good progress in recognizing some of these customs. OP 4.10 is triggered and EMPF is prepared to mitigate impacts on ethnic minorities.
- e) *Livelihoods and Forest Dependency:* Food security, especially rice, is becoming increasingly problematic and the GoV programs to overcome food insecurity by providing rice for ethnic minority households create passivity and dependency. There is also a high degree of cash income poverty among such households. Their livelihoods are highly land-dependent which is exacerbated by limited access to forest land resources. There is no system of compensation payable for restricting people's access to forest land resources. Firewood from the forests is still a major source of fuel for both most rural households and even many urban households. OP 4.10 is triggered and EMPF is prepared to mitigate impacts on ethnic minorities.
- f) *Gender and Social Exclusion:* The NCR-JERP could impact on women in terms of access to NTFP, access to land, participation in program implementation and lack of consultations. Women are disadvantaged on access to and use of forest land and their land rights are less secure than those of men. In particular, ethnic minority women have greater need for common property resources, especially related to forests. Their access to information is less than men's and are less likely to be actively involved in consultations. Poor persons irrespective of gender or ethnicity are less likely to receive adequate information. OP 4.10 is triggered and EMPF is prepared to mitigate impacts on ethnic minorities.
- g) *Cultural heritage:* Activities of the NCR-JERP could indirectly affect areas containing sites with physical cultural resources. Ethnic minority people often have close connection with forest areas, including spiritual connections, it is possible that in isolated cases REDD+ activities could interfere with villager defined sacred forest sites. OP4.11 is triggered and mitigation measure are in place to address impacts.
- h) *Effective consultation and outreach:* Lack of meaningful consultation and outreach could seriously impacted negatively on ethnic minorities active participation NCR-JERP, and monitoring. There is no legal provision for BDC/FPIC with adequate numbers of local people, especially ethnic minority people. There has been a lack of "clarity" and some "disinformation" and there are very few CSOs that exist that can offer an independent voice and those that do exist do not employ many



ethnic minority people. OP 4.10 is triggered and EMPF is prepared to mitigate impacts on ethnic minorities.

67. The NCR-JERP was broadly consulted in all six provinces (including targeted consultations with ethnic minority groups). Participation methods included village-level meetings of households, focus group discussions, workshops, participatory forest transects, natural resource assessments and interviews of key informants. Detailed stakeholder analysis was conducted as part of developing the consultation and participation plan to identify the relevant stakeholders that might gain or lose from the program. Stakeholders included sectors engaged in land use management at provincial, district and commune levels, provincial levels private sector, farmers unions, ethnic minorities and forest communities, CSOs and academia. The consultation and participation plan was utilized during the preparation of the ER-PD. The SESA consulting team together with the PMU communication specialist carried out targeted and extensive free, prior and informed consultation with ethnic minority communities in a culturally-sensitive manner. Consultation was carried out through focused groups. The participants expressed their aspirations and concerns on potential risks, opportunities and constraints arising from forest and land resource access and use, including possible land use conflicts, and the security of their livelihoods. Consultations resulted in broad program support, especially in relation to the participatory ACMA approach to benefit sharing mechanism. During implementation, ethnic minorities will continue to be consulted in all the sub project activities and they would be engaged in the planning, design, implementation and monitoring of sub project activities to include activities related to the ACMA in order to help increase the benefits from the project and to avoid negative impacts.

68. The Government's NCR-JERP is designed to mainstream gender issues to ensure gender differential impacts are addressed. A gender analysis was conducted and a gender action plan (GAP) with specific results indicators for monitoring was completed. The GAP will promote gender equality impacts as well as mitigate possible risks and negative impacts through (1) opportunities for strengthening the role of women in program activities; (2) availability of sustainable livelihoods and gender equality in livelihood opportunities, and (3) support to monitoring and dissemination of information about environmental sustainability and social risks to men and women.

69. The overall activities promoted by Government in the Accounting Area are not expected to cause significant negative impacts in terms of loss of access to land or other resources. Where such restrictions occur, they are addressed through the ESMF, process framework and the Resettlement Policy Framework, in addition to the safeguards measures embedded in the ACMA. The program also includes several pragmatic measures which are expected to strengthen individual and collective ethnic minority tenure rights and effectively safeguard ethnic minority communities from negative impacts in terms of their access and use of customary lands and resources captured in the Process Framework and the Ethnic Minority Planning Framework.

70. The safeguards approach reflects that the specific activities of the NCR-JERP are largely financed through long-standing Government programs and bilateral donors (USAID, KfW, JICA). The World Bank finances a small portion of the program through coastal reforestation activities linked to the Forest Sector Modernization and Coastal Resilience Project (FMCR). For program activities financed by the World Bank (i.e. by the FMCR), the World Bank will be responsible for supervising and ensuring compliance of the activities with the applicable safeguards instruments developed under this project (e.g., existing impact assessments, ESMF, ESIA, and other safeguards frameworks and plans) and adequate mechanisms for safeguard management and monitoring and the Bank will retain full responsibility for safeguards compliance and oversight for these projects. For program



activities financed by other donors, MARD has conducted a due diligence to confirm that the safeguards of the respective donor are consistent with the ESMF and are properly applied. The World Bank is not responsible for any prior review, clearance, or supervision of such activities. For activities in the provinces of the NCR which may contribute to emissions reductions in some way but are not mentioned in the ERPD, they will be deemed to be not part of the program, and the World Bank does not bear any responsibility for review or oversight.

71. On bi-yearly supervision missions' basis, the Bank will conduct direct supervision of the activities implemented as part of the NCF-JERP and include system-level reviews and field-based spot checks on the implementation of how the safeguards for the environmental and social risks are working. The Bank's primary responsibility for oversight would be to assess whether the environmental and social management systems established by the Program Entity address and respect all aspects of the safeguard plans that apply to the NCR-JERP.

72. MARD is responsible for safeguard implementation, monitoring and training related to the NCR-JERP. A national level multi-sectoral body REDD+ Steering Committee is in place and would coordinate all activities relating to program implementation and monitoring. In addition, the CPMU is already in place and will serve as the body responsible for managing the implementation and oversight of the safeguard instruments, and in turn would be supported by the Provincial Project Management Units (PPMUs) districts and the forest management boards (SUFMB and PFMBs) and the SFCs at the field level. Since the NCR-JERP is implemented at sub-national levels, Provincial REDD+ Steering Committees under Department of Agriculture and Rural Development (DARD are also in place throughout the Accounting Area). Site-level activities will mainly be implemented through the Protection Forest Management Boards (PFMBs), Special Use Forest Management Board (SUFMB) and State Forest Companies (SFCs). The PPMUs will work closely with Ministry of Natural Resources and Environment (MONRE) and Department of Natural Resources and Environment (DONRE) for implementing safeguards. Safeguards specialists both social and environment will be hired at subnational levels (located at PPMUs) to support the implementation of safeguards.

73. Capacity Development: As part of the FCPF readiness preparation grant, **a series of training on safeguards instruments for the national level environment and social safeguards staff within the CPMU is underway to build safeguard implementation capacity.** These trainings will be extended to the provincial and district levels. In addition, training will be extended to the forest management boards and SFC management to include awareness raising on REDD+ and sensitization to socio-economic and environmental and biodiversity issues. It is expected that specific training on the project's safeguard instruments will be focused on staff and other stakeholders at the local level where most decisions on resource management are taken.

74. Furthermore, during implementation of the program, in addition to safeguard training, technical assistance will be provided both for staff of PPMUs and CPMU by consultants hired by the CPMU. During the first 3 years CPMU will conduct at least two safeguard training workshops (one on environment and one on social) per year for PPMUs focusing on the contents of ESMF and requirements for preparing safeguard documents, especially the Environmental and Social Management Plan (ESMP), ECOP, Resettlement Action Plan (RAP), Ethnic Minority Development Plan (EMDP). Technical training on issues related to safeguard issues and other related aspects including field trip will also be carried out at least once per year for the first three years. The program for capacity building on safeguards is included in Sub-sections 7.2 and 7.3 of the ESMF. The objective of safeguard training and technical assistance is to ensure that staff and local communities have adequate knowledge and understanding on Government regulations as well as safeguard requirements and take actions timely. The CPMU will mobilize consultants to provide training on safeguard policy, and to monitor and report on performance of



safeguards implementation to the World Bank. The CPMU will also mobilize an independent monitoring consultant to supervise the implementation of RAP (if needed). PPMUs will also mobilize safeguard consultants (individual or organizations) to support them in the implementation of safeguard measures for the subproject. The safeguard staff and consultant will ensure that safeguard measures (ESMP, RAP/EMDP) will be fully integrated into the subproject planning and implementation cycle as well as helping CPMU/PPMUs to prepare safeguard monitoring reports as required. The consultants will also ensure that technical assistance on environment and social safeguards is provided to local communities so that they could perform their function effectively.

75. Vietnam already has good grievance and redress mechanisms in place from the lowest administrative commune, district, and provincial levels to the central level. In relation to disputes and grievances in the NCR, there are established mechanisms that commence at the rural village or urban neighborhood level whereby all grievances are resolved at this level on an informal basis. If the aggrieved party cannot resolve their grievances at this level, they can then take their grievance to the Commune People's Committee, the District People's Committee, the Provincial People's Committee, or finally seek recourse in a Court of Law. However, an effective feedback grievance redress mechanism has been designed for the ERPD and is described in the safeguards instruments. It is expected that this system would be used during implementation to address any issues/conflict that may arise as a result of program implementation

76. Benefit sharing. The program is designed to address development needs and poverty reduction principally through collaborative forest management and benefit sharing. The ACMA process is proposed as the basis for developing a dialogue on forest management and also a benefit sharing mechanism for REDD+ implementation. The BSM is being operationalized by the proposed Forest Management Councils (FMCs). The FMC, which has been trialed in a number of areas is expected to an effective framework to improve forest management and will ensure that activities are inclusive and pro-poor. Livelihood programs, which are developed based on consultation with local communities and implemented by the Government's own resources, will seek to provide alternative sources of income to local households. Through a small-grant mechanism, the Government plans to provide key services to smallholders to improve their livelihoods through projects that are compatible with forest protection and biodiversity conservation.

(iii) Other Safeguards

77. No other World Bank safeguard policies are triggered. However, Vietnam will also report on the UNFCCC Cancun safeguards for REDD+ (Dec.1/CP16) through its National Communications, based on a safeguards information system which is under development. This system will provide useful information for subsequent inclusion in the summary of information required for UNFCCC reporting.

V. GRIEVANCE REDRESS SERVICES

78. 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 World Bank'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 Grievance Redress Service (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.

VI. KEY RISKS

79. The overall risk rating for the proposed operation is Substantial. Vietnam has made important progress in relation to REDD+ through piloting key elements of the approach (e.g., benefit sharing) and intervention models (e.g., plantation management). Vietnam has also established adequate and effective engagement and consultation of stakeholders at the national and sub-national level. This will help ensure that the policy actions and activities the NCR-JERP will have positive social and environmental co-benefits. Given that the NCR-JERP focuses on six provinces and a jurisdictional stand-alone ERPA is a novel financing instrument, key risks arise from reliance on Government systems to (a) perform repeated and consistent measurements of emissions across the entire Accounting Area, (b) ensure that identified resources allocated by Government programs and are used to implement the activities laid out in the program design, (c) ensure compliance with environmental and social requirements at the jurisdictional level and for results-based payments, and (d) monitor the effective, transparent and timely distribution of ERPA proceeds to beneficiaries. Specifically:

Technical design. Considering the multiple technical issues of the large-scale jurisdiction program, the residual risk arising from the complex technical design of the program is rated *Substantial*.

- The Carbon Fund has adopted a Methodological Framework that stipulates a set of technical and program design requirements. All programs that receive payments by the FCPF Carbon Fund must comply with this framework. Among other things, the Methodological Framework stipulates how the Reference Emission Level needs to be constructed and how future emissions are to be measured and reported. It also makes provisions to mitigate certain risks, such as statistical bias in emission estimates or reversal of emissions reductions (e.g., as a result of fires). Such provisions are essential to ensure the environmental integrity of the results. The Methodological Framework is consistent with the guidance on REDD+ under the UNFCCC and has been adopted by several other international initiatives. As part of the Carbon Fund business process, the FCPF Management Team tasks a Technical Advisory Panel (TAP) consisting of several international experts to perform a comprehensive assessment of the technical program design on basis of the Methodological Framework. Vietnam's ER-PD met the high technical program design standard and on that basis was included by in the Carbon Fund's portfolio (seventh meeting of the Carbon Fund in February 2018).
- While Vietnam's program received a very positive technical assessment, there are still considerable risks given that a jurisdictional ERPA has never been implemented in the country. A major technical design risk is the effectiveness and performance of interventions of the NCR-JERP to reduce emissions. To mitigate this risk, the empirical evidence on the effectiveness of the interventions proposed has been reviewed as part of preparation (e.g., the experience of the Adaptive Collaborative Management Approach to implement afforestation and reforestation activities). Additionally, the program activities are expected to be monitored on a continuous basis through monitoring system to enable necessary improvements to implementation of interventions.
- The conversion of forest to other land uses is a potential risk to achieve the objectives of the program



(emission reductions). However, Vietnam has a strong legal framework that strictly limits the conversion of forest land and forests into different land uses (no conversion of natural forest into plantation). The new Forestry Laws issued in December 2017 re-enforces this strict conversion. While this is largely a technical and environmental risk factor, it becomes a political economy issue when law enforcement is insufficient. The program design includes activities with focus on law enforcement accordingly.

- An important part of the technical design is a mechanism to manage the risk of ER reversal (or non-permanence) that could arise from natural calamities (e.g., fires, typhoons). This ER reversal risk management mechanism sets aside a portion of ERs upon verification to ‘insure’ against potential calamities that might occur during implementation. The magnitude of this set-aside was determined based on a systematic reversal risk assessment which forms part of the Carbon Fund Methodological Framework.

Institutional capacity. The institutional capacity risk is rated as *Substantial* although MARD and targeted provinces have prior experience in implementing projects financed by the World Bank and other development partners.

- The NCR-JERP requires a cross-sectoral cooperation to promote an integrated approach to reduce emissions in target areas. Such an approach can be challenging to implement with the administrative systems in Vietnam. To mitigate this risk, MARD has assigned VNForest and VRO to fully engage in the Program preparation and closely coordinate with other ministries and agencies. VNForest and VRO have shown sufficient capacity for the implementation of their various programs at the national level and have been leading the revision of the NRAP which is geared towards more multi-sectoral engagement. MARD is the recipient and implementing agency of the main REDD readiness programs including the FCPF Readiness grants and UN-REDD Programme.
- Also, the design of the program requires periodic reporting of measured emissions against Reference Level emissions. While Vietnam has a solid track record in implementing forest inventories and the analysis of satellite imagery to track forest cover change and quality, the methodological requirements stipulated by the Carbon Fund require more frequent monitoring than previously performed in Vietnam, with higher technical standards and in a transparent (i.e. verifiable) manner. This requires the involved institutions to further enhance their technical capacity. To mitigate this risk, technical assistance is being mobilized to fill any technical capacity gaps in the institutions involved in future reporting of emission as part of the program, including at the provincial level.
- The Benefit Sharing Plan relies on multiple institutions at the national, provincial and sub-provincial level. While the BSP was carefully designed and broadly consulted, the involved institutions will require support during implementation. To mitigate this risk, the team will support the Client in finalizing the BSP prior to the first payments, including through sharing of good practices from other similar jurisdictional programs in other regions.

Financial Management. Financial Management (FM) risk is considered *Substantial* due to the decentralized implementation which requires greater capacity and accountability on the part of the provinces in terms of financial management responsibilities.

- The implementation of a jurisdiction-scale ERPA and the management of ER payments is new and complex. In addition, VNFF has limited FM experience for World Bank-funded Project. For the program to effectively incentive low-carbon investments, it is essential that ER payments are



managed effectively and that there sound fiduciary oversight. Accordingly, key risks arise from the necessary coordination between the VNFF at central and participating provinces, and related government agencies during implementation. For implementation, it is important that a Project financial management system will be maintained and is acceptable to the Bank and provides reasonable assurance that the Bank funds are used for intended purposes.

Environmental and Social. The overall environmental and social risk is *High*.

- The interventions that are promoted to reduce emissions, if successful, will have positive environmental and social benefits from improved management of forests. However, there are challenges in cross-sectoral cooperation to promote an integrated approach to improving ER performance in target areas to implement the agreed-upon environmental and social measures at the national and provincial levels. Another principal risk would arise if the interventions to be implemented under the NCR-JERP fail to achieve their objectives and create unexpected indirect adverse impacts, including potential social tensions or conflict around forest boundaries, lack of meaningful engagement of ethnic minorities, and conversions of natural forest into plantations leading to possible restrictions access at the implementation stage. This could occur, for instance, if PES schemes failed to provide sufficient monetary incentives to retain areas under forest cover. Similar risks could occur for example if lack of land tenure security were to undermine commitments to maintain land under forest cover for long time periods. In addition, the technical and procedural challenges may cause a disproportionately higher demand for Bank supervision and support to the client during implementation. Key social and environmental risks and potential impacts associated with program actions and specific activities, as well as mitigation measures, and monitoring and reporting, are built into the ESMF and EMPF.

Stakeholders. The stakeholder risk is considered *Substantial* as it involves a diverse and geographically dispersed group of actors.

- Given the overall positive impacts of the NCR-JERP, key stakeholders expressed support for its objectives at consultations held during preparation. Nonetheless, engaging the local stakeholders throughout implementation and monitoring poses a challenge. The preparation process has included consultation and confirmation of Free Prior and Informed Consultation being implemented. The design included a consultation plan, a grievance redress mechanism and a benefit sharing mechanism was developed to allow for better engagement, handling of complaints and ensuring local people benefiting from the program.

Financial. Given the program's reliance largely on Government budget for implementation, financial risk is considered *Substantial*.

- While the resources to cover the costs for the implementation of the NCR-JERP have been secured for the current budget cycle, the GoV has decided in the recent years to cut in public spending, which may pose a risk for the program's financing after 2020. At the same time, given the deep engagement with the provinces during preparation and the international commitments made by Vietnam, the necessary budget is expected to continue at the same level in the subsequent cycle (2020 onwards). While the implementation is only partially dependent on ER payments, these play an important



strategic role as they support management and coordination structure and operational costs (e.g., for ER monitoring) of the program. With resources from ER payments, crucial elements to engage forest managers (e.g., through the ACMA) would help accelerate and scale up the impact of the Government's program.

- The sources of funds are indicative and will require additional consultation and commitment of donor organizations and the government of Vietnam and are subject to some uncertainty. The information on sources of financing is expected to be clear prior to the start of the Program. It is proposed to actively manage the financing risk through active engagement with GoV and by seeking additional sources of funding from other sources.
- Annex 8 shows that the available sources of financing – including the expected ER payments - cover the estimated costs of the program overall. However, the program may have negative cash flow during the first half of implementation due to the phasing of various financing sources and the incremental costs associated with the ERPA itself (e.g., strengthen ER monitoring, safeguards management or engagement with stakeholders). To mitigate this risk, the Government has agreed on an ER payment schedule that would provide the first tranche of payment 2021, which would largely eliminate the cash flow risk.

**VII. RESULTS FRAMEWORK AND MONITORING****Results Framework****COUNTRY:** Vietnam

North Central Region Emission Reductions Program

Project Development Objectives(s)

The Development Objective of the Project is to make payments to the Program Entity for measured, reported and verified Emissions Reductions (ER) from reduced deforestation, forest degradation and enhancement of forest carbon stocks (REDD+) in the North Central Region of Vietnam and to distribute ER payments according to an agreed benefit sharing plan.

Project Development Objective Indicators

Indicator	Unit of Measure	Baseline Value	Target Values (cumulative)							Frequency	Data Source	Institution
			2019	2020	2021	2022	2023	2024	2025			
I. Volume of CO ₂ e Emissions Reductions that have been measured and reported by the Program Entity, verified by a Third Party, and transferred to the FCPF Carbon Fund.	tCO ₂ e (million)	Reference Level		3.0		4.0		3.3		3x (2020, 2022, 2024)	MRV System	MARD
II. Payment by the FCPF Carbon Fund for CO ₂ Emission Reductions generated by the NCR-JERP.	US\$ (million)	0			15.0		20.0		16.5	3x (2021, 2023, 2025)	ER Registry	WB
III. ER payments distributed in accordance with agreed Benefit Sharing Plan.	Yes/No	No			Yes		Yes		Yes	Annual	Progress Report	MARD

**ANNEX 1: Implementation Support Plan****Strategy and Approach for Implementation Support**

1. The task team has been supporting Vietnam's REDD+ efforts since 2012, initially through a US\$ 3.8 million Recipient-Executed REDD+ Preparation Support grant, followed by Additional Funding (US\$ 5 million) in 2016 which is being implemented through June 2020, as well as a US\$ 650,000 Bank-Executed grant supporting ERPA preparation.
2. Going forward, following ERPA signature, the task team's focus will shift to ensuring that the Program Entity meets the requirements of the ERPA, most importantly the periodic measuring and reporting on emissions on the basis of the agreed technical standard (Carbon Fund Methodological Framework). The FCPF Readiness Fund has allocated resources for Bank-Executed Technical Assistance to support the Program Entity in putting the necessary procedures and capacities in place.
3. The task team will include technical specialists with expertise in a range of areas, drawn from within the institution. World Bank safeguards specialists will be available to provide close support and detailed, hands-on guidance to their counterparts during the initial months following approval. Technical specialists with highly technical expertise may be recruited externally, as necessary. Particular attention will be on providing the adequate support to strengthen the VNFF to receive and manage the first ER payments.
4. The frequency of supervision missions may be higher at the beginning of implementation (possibly up to three per year) to ensure that conditions of effectiveness are met in a timely manner and will decrease to the usual two missions per year after the Program reaches a good implementation pace. Field visits will focus on compliance with safeguards operational policies. The Implementation Support Strategy will be revisited regularly, taking into account implementation progress and continuous risk assessment.

Implementation Support Plan

5. Implementation support will be supported by an annual budget provided by the FCPF Secretariat. The main focal areas of expected implementation support activities are summarized in Table 1. The required skills for the implementation support effort are illustrated in Table 2. Implementation support is expected to be particularly intense during the first 12 months of implementation. Implementation support missions will be reduced from three to two in the years following the first year, although support provided remotely by the task team will remain continuous. Table 3 lists the partners that will support the implementation support effort through related initiatives.

Table 1. Main focal areas of implementation support activities

Time	Focus	Skills Needed	Resource Estimate
<i>First twelve months</i>	<ul style="list-style-type: none">• Benefit Sharing Plan establishment• Program Implementation Plan• Institutional arrangements• Preparedness for ER Monitoring and Reporting	<ul style="list-style-type: none">• Project planning and management• Safeguards• Legal aspects• Carbon finance• Carbon accounting	<ul style="list-style-type: none">• 3 implementation support missions• Remote support from HQ office
<i>12-48 months</i>	<ul style="list-style-type: none">• Program Implementation Plan• Carbon accounting	<ul style="list-style-type: none">• Project planning and management	<ul style="list-style-type: none">• 2 implementation support missions



	<ul style="list-style-type: none"> • Monitoring and Reporting 	<ul style="list-style-type: none"> • MRV • Safeguards • Carbon finance 	<ul style="list-style-type: none"> • Remote support from HQ office
Years 4-onwards	<ul style="list-style-type: none"> • Program Implementation Plan • Monitoring and Reporting 	<ul style="list-style-type: none"> • Project planning and management • MRV • Safeguards • Carbon finance 	<ul style="list-style-type: none"> • 2 implementation support missions • Remote support from HQ office

Table 2. Required skills

Skills Needed	Number of Staff Weeks	Number of Trips
Task Team Leader	<ul style="list-style-type: none"> • 12 weeks per year (Year 1) • 8 weeks per year (Year 2 onwards) 	<ul style="list-style-type: none"> • 3 in Year 1 • 2 in Year 2 onwards
Social Specialist	<ul style="list-style-type: none"> • 6 weeks per year (Year 1) • 4 weeks per year (Year 2 onwards) 	<ul style="list-style-type: none"> • 3 in Year 1 • 2 in Year 2 onwards
Environmental Specialist	<ul style="list-style-type: none"> • 6 weeks per year (Year 1) • 4 weeks per year (Year 2 onwards) 	<ul style="list-style-type: none"> • 3 in Year 1 • 2 in Year 2 onwards
Carbon Finance Specialist	<ul style="list-style-type: none"> • 4 weeks per year (Year 1) • 2 weeks per year (Year 2 onwards) 	<ul style="list-style-type: none"> • 3 in Year 1 • 2 in Year 2 onwards
Methods Specialist	<ul style="list-style-type: none"> • 4 weeks per year (Year 1) • 2 weeks per year (Year 2 onwards) 	<ul style="list-style-type: none"> • 2 in year 1 • 2 in year 2 onwards
Legal specialist	• 2 weeks per year	• 1 per year
Financial Management Specialist	• 2 weeks per year	• 1 per year
Operations Specialist	• 4 weeks per year	• 1 per year

Table 3. Team composition

Bank Staff			
Name	Role	Title / Specialization	Unit
Lan Thi Thu Nguyen	Team Leader/ADM	Sr. Environmental Economist	SEAE2
Alexander Lotsch	Team Leader	Sr. Carbon Finance Specialist	SEAE2
Rama Chandra Reddy	Team Member	Sr. Carbon Finance Specialist	SCCFM
Haddy Sey	Social Specialist	Sr. Social Development Specialist	SEAS1
Son Van Nguyen	Environmental Specialist	Sr. Environmental Specialist	SEAE2
Ha Thuy Tran	Financial Management Specialist	Sr. Financial Management Specialist	EEAG2
Thang Toan Le	Procurement Specialist	Procurement Specialist	EEAR1
Dung Thuy Vu	Team Member	Program Assistant	EACVF



ANNEX 2: Vietnam's Participation in the FCPF

1. The FCPF is a global partnership of countries, business and civil society with the objective to help build the capacity in IBRD and IDA member countries in the tropics to reduce emissions from deforestation and forest degradation, forest carbon stock conservation, the sustainable management of forests, and the enhancement of forest carbon stocks (commonly referred to as REDD+). The Facility was announced at the 13th Conference of the Parties (COP) to the UNFCCC in Bali in December 2007 and became operational in June 2008. The World Bank is the Facility's Trustee as well as one of its Delivery Partners. It also houses the FCPF Facility Management Team (FMT) that is responsible for the operation of the Facility. The FCPF currently comprises 46 partner developing countries (17 in LAC, 18 in Africa, and 11 in the Asia-Pacific Region) and 17 financial contributors from both the public and private sectors.
2. The FCPF has two separate yet complementary funding mechanisms - the Readiness Fund and the Carbon Fund.
 - a. The **Readiness Fund** supports developing countries in preparing themselves to participate in a future, large-scale, system of positive incentives for REDD+. This includes: adopting national REDD+ strategies; developing forest reference emission levels (FRELs); designing measurement, reporting, and verification (MRV) systems; and setting up REDD+ national management arrangements, including proper environmental and social safeguards.
 - b. The **Carbon Fund** supports performance-based payments for REDD+ interventions at the jurisdictional level in countries that have made significant progress in their REDD+ readiness investments. Such payments are made based on the level of reduction of carbon emissions generated through REDD+ interventions. The FCPF Charter stipulates that a country needs to have its Readiness-Package (R-Package) endorsed by the Participants Committee of the FCPF (PC) before the country can submit an ER-PD to the Carbon Fund for its consideration. The R-Package thus is a major milestone under the FCPF process and comes at the transition from REDD+ readiness to piloting performance-based activities.

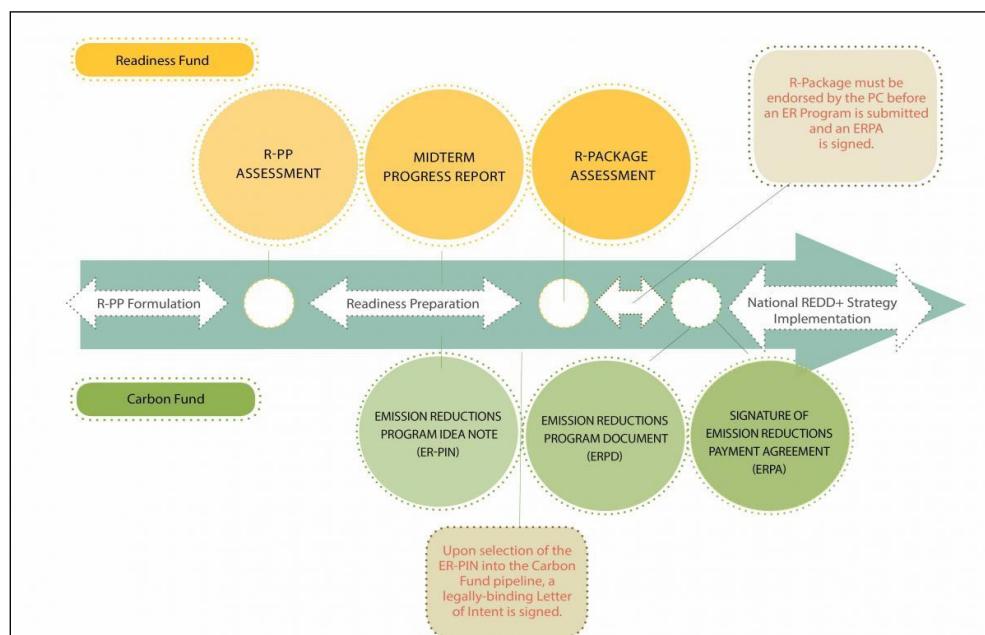


Figure A2.1: Milestones under the FCPF Readiness and Carbon Funds



3. Vietnam submitted a Readiness Preparation Proposal (R-PP) to the FCPF in March 2011, identifying a broad set of activities aimed at strengthening the technical and institutional capacities of a variety of stakeholders for enabling the country to participate in a future REDD+ mechanism. The overall financial envelop for carrying out these activities was estimated at approximately US\$ 15.5 million, supported by several multilateral and bilateral financing arrangements in addition to the Government's own contribution. Following a due diligence process by the World Bank as the Delivery Partner, Vietnam signed a first Readiness Preparation Grant Agreement in January 2013, in the amount of US\$ 3.6 million.

4. Shortly after submitting its R-PP, Vietnam expressed its interest in participating as a pilot country in the FCPF Carbon Fund and submitted an Emissions Reduction Project Idea Note (ER-PIN) in June, 2014. After addressing feedback provided by Carbon Fund Participants, Vietnam's ER-PIN was included in the Carbon Fund pipeline through a Letter of Intent (LOI) signed with the World Bank (represented by the Country Director) on January 2015, for a Maximum Contract Volume up to 10.3 million tCO_{2e} and received a (Bank-executed) US\$ 650,000 preparation grant. Consistent with this two-phase structure of the FCPF, the readiness preparation process has been executed in parallel with the preparation of the proposed program for the Carbon Fund.

5. In April 2015, Vietnam presented a Mid-Term Report (MTR) on the progress made with its readiness activities to the FCPF, acknowledging that there was still a financial gap to fully implement its REDD+ readiness phase. Accordingly, the Participants Committee of the Readiness Fund decided to allocate an additional funding of US\$ 5 million to Vietnam. Following the World Bank due diligence process, Vietnam signed an additional Readiness Preparation Grant Agreement in November 2016, in the amount of US\$ 5 million.

6. In September 2016, Vietnam's R-Package was approved by the FCPF PC at its 22th Meeting in Ghana.

7. Vietnam's final ER-PD was submitted on December 2017 and was presented and approved during the 17th Meeting of the FCPF Carbon Fund Participants in February 2018. The ER-PD describes in detail the NCR-JERP technical design, operational and financial planning, stakeholder consultation, methodological aspects, safeguards application, benefit sharing arrangements, and institutional arrangements. As part of the review process agreed by Carbon Fund Participants, the ER-PD was assessed by an independent Technical Advisory Panel (TAP).

8. The complete documentation related to Vietnam's MTR, R-Package and ER-PD, can be found at: <https://www.forestcarbonpartnership.org/vietnam>



ANNEX 3: Drivers of Deforestation and Forest Degradation in the NCR

1. While the total area of forest in the NCR increased since 2005, there has been a marked shift towards poorer forests and to plantations. Spatial analysis shows a net increase in forest area due to afforestation and reforestation. Gross deforestation, between 2005 and 2015, across all 6 provinces was 318,218 ha and offset by afforestation and reforestation of 758,224 ha. Thus, the net change in forest area (including both natural forests and plantations) was positive, and the total increase was 440,006 ha. Of the three evergreen broadleaf forest classes, poor forest class increased by 288,382 ha; medium forests decreased up to 2010 and then increased between 2010-2015. Rich forests decreased between 2005 and 2010 and then further by 2015. A significant part of the recorded afforestation and reforestation was from timber plantations which had grown to 749,627 ha by 2015. Forest degradation occurred on 292,469 ha and was only partially offset by forest enhancement of 151,020 ha, leaving net degradation at 141,449 ha.

Table A3.1: Forest cover (ha) in the NCR in 2005, 2010 and 2015

Land uses	2005	2010	2015
Natural forest	2,041,721	2,133,894	2,187,012
Evergreen broadleaf forest - rich	240,687	214,449	167,988
Evergreen broadleaf forest - medium	498,340	465,277	526,394
Evergreen broadleaf forest - poor	1,153,757	1,315,413	1,339,694
Other Forest	148,937	138,755	152,936
Plantations	454,912	637,654	749,627
Total Forest Cover (ha)	2,496,633	2,771,548	2,936,639

Table A3.2: Deforestation and forest degradation (ha) in the NCR, 2005-2015

Province	Deforest- ation	Afforest- ation	Net Forest Area Change	Degra- dation	Enhance- ment	Net Degrada- tion
1. Thanh Hoa	64,601	192,012	127,411	54,877	23,177	31,700
2. Nghe An	97,117	267,003	169,886	76,444	51,469	24,975
3. Ha Tinh	33,706	84,833	51,127	48,273	4,157	44,116
4. Quang Binh	48,256	74,545	26,289	66,991	36,587	30,404
5. Quang Tri	34,617	57,146	22,529	18,956	24,908	-5,952
6. Thua Thien Hue	39,921	82,685	42,764	26,928	10,722	16,206
Total region	318,218	758,224	440,006	292,469	151,020	141,449

2. The main identified drivers of deforestation and forest degradation in the NCR are (i) planned conversion of mainly poor natural forests to rubber and other agricultural land uses, (ii) planned conversion of mostly poor natural forests to tree plantations; (iii) unplanned conversion of forests due to encroachment; (iv) impacts from hydropower and infrastructure development, and (v) illegal and legal logging.

3. At the province level, there is broad consistency concerning the main drivers in the NCR, with three drivers consistently in the top three spots for both deforestation and forest degradation: the expansion of plantations (rubber and acacia), the encroachment of agriculture, and the development of hydropower. Illegal logging is perceived as the main driver of forest degradation in Thua Thien Hue and shares the second place with the expansion of agriculture and forest fire in Nghe An.



ANNEX 4: Summary of the SESA Stakeholder Consultations

Topic	Risks and/or challenges	Potential solutions/ mitigations
Land	Little to no recognition of customary or community property rights for agriculture or forest land;	Changes to PLRs governing forest and land; Assist local communities to establish forest associations or cooperatives
		Change PLRs to give recognition to local communities' common property rights and management;
	Unallocated (forest) land still with CPCs;	Accelerate or catalyze FLA (but mechanisms to do this are so far limited and it tends to be done sporadically);
	"Wrong" land allocated with inadequate process in some provinces;	FLA (not only will this help ensure better quality FLA, will also reduce disputes);
	Slow re-allocation of land from large forest owners to communities, individuals, HHs;	FLA
	Inadequate upland production land (reducing with implementation of agriculture and forest zones around villages);	Improve participatory land use planning (PULP) and SFM
	No participatory land use planning (PLUP);	Improve PULP
	Land conflicts between different parties;	Support for mediation, FGRM
	Natural forest land no longer allowed to be allocated to any parties except organizations.	Support Circular 38 with adequate resources for Re-assess agricultural and forest land zoning in upland areas so that farmers have adequate agricultural land of sufficient quality
Livelihoods and forest dependency	Food (rice) security becoming problematic; GoV reaction to provide rice for EM HHs creates passivity and dependency	Much improved extension system required (but limited mechanisms, capacities);
	EM livelihoods highly land-dependent	Models suitable for upland farming systems need to be developed with small farmers, especially EM farmers;
	Remote upland areas with few alternatives to current limited set of livelihoods activities;	Action research on value chain development with focus on uplands;
	Limiting access to forest land resources;	Increased support for forest co-management models so that small farmers continue to have adequate access to forested areas;
	No system of compensation for limiting or cutting off people's access to forest land resources;	Resettlement safeguard must also include compensation for limiting access to forest resources (i.e., NTFPs, cattle grazing areas, etc.); It will be necessary to identify sustainable income generation activities that enable affected persons to be



Topic	Risks and/or challenges	Potential solutions/ mitigations
		at least no worse off as a result of limiting access to forest resources and ideally better off. Should be change in PLRs to assist local communities claim against forest owners and others that limit their access to needed resources;
	Cash poverty among semi-subsistence small farmers;	Cash poverty intractable problem in the short run.
	Heavy reliance throughout rural (and rural-urban) Vietnam on firewood	Promotion of community woodlots with suitable species, promotion of alternative energy sources, fuel efficient stoves;
		More awareness needed of SFCs/LLCs so that they ensure biodiversity in their areas for local HHs;
Potential to benefit from forest land	Limited investment options for allocated forest land;	Change rules on large forest owners' re-allocation of land to communities (if poor quality, they have to co-invest with small holders, or it has to be of certain minimum quality before handover);
	Allocated forest land of low quality in terms of forest;	
	Limited inputs of poor quality available (e.g. lack of good quality seedlings and other agricultural inputs);	Good quality seedlings must be certified by a competent seed certification agency such as the National Centre of Plant Variety or the Crop Department of DARD at the provincial level and Plant Protection Level at the district level in accordance with Seed Ordinance No15/2004/PL-UTBVQHH dated 24/03/2004. A community-based cooperative may be able to have more purchasing power.
	Upland plantations often perform poorly, and farmers get a poor income;	More site specific agro-forestry model development in the uplands with local farmers' participation (mechanisms need to be developed for this);
	PLRs (see below) do not promote smaller holder chances to benefit from forest;	Improve PLRs
	Timber harvesting only allowed under limited circumstances;	Development of sustainable forest management models based on community-based forestry with simplified regulations;
Gender/ Social Exclusion	Women disadvantaged on access and use of land;	Any solution has to be long term, wanted by society and promoted by government (major challenge);
	Women's rights to land less secure than men's;	Red Books need to be updated to reflect women's rights to land (should be done as part of overhaul of land use rights registration), is clearly a long-term solution
	Ethnic minority women have greater need for common property rights, especially related to forest;	Ensure that information is available in local languages and orally (use of radio and TV in local languages); where possible and practical. Some of the Mon-Khmer languages spoken by ethnic minority groups in Quang



Topic	Risks and/or challenges	Potential solutions/ mitigations
		Binh, Quang Tri and Thua Thien Hue and the Hmong language do not readily lend themselves to written translation.;
	Women's access to information less than men's;	More attention to targeting women by facilitating if deemed necessary separate consultations with village women facilitated by a female facilitator in the language of women's choice;
	Women's active involvement in consultations less than men's;	More attention to times of meetings
	Poor persons (women and men) less likely to receive adequate information;	More attention to targeting and focusing on involvement of poor households using the data supplied by DOLISA and the survey findings of the SESA;
Institutional Framework	Extension services for forestry and upland agriculture very weak;	Long-term program to overhaul extension systems to reach uplands areas that are evidence driven and based on the specific needs of different localities;
	Limited exposure to participatory approaches;	Overseas Development Assistance (ODA) required to impart participatory approaches/techniques and/or work with local applied social research institutes that either have a demonstrated track record in participatory approaches or have signaled their ability and willingness to be involved with such approaches;
	Limited staffing and budgets;	Staffing and budgeting another intractable issue (relates to larger civil service reforms, quotas, etc.);
	Wrong models for wrong areas;	Action research by university centers on participatory model development in uplands;
	Lack of transparency in decision-making and little downward accountability;	Major restructuring needed of monitoring and evaluation systems to improve data collection, analysis and reporting that must also be highly sensitive to the disaggregation of date by gender, ethnicity and poverty;
	Accurate data, adequate monitoring and evaluation processes still limited (negative impact on further decision-making for programming);	Changing administrative behavior to embrace the concepts of transparency and downward accountability requires major will be to reform on part of GoV (not just MARD and DARDs, for example) and include cc to PPC (and DPC) PPC is the important actor and coordinator.
	Local planning may be one-sided in promoting economic development without adequate consideration for environmental aspects (Green growth on paper);	Awareness creation for development planners to understand the implications of their planning decisions for the environment (should be done according to Green Growth Strategy: 1393/2012/QD-TTg).
Consultations	How to do FPIC with adequate numbers of local communities, especially with ethnic minority people (no legal provision for FPIC in PLRs);	Training and involvement of students and youth (especially from ethic minority groups and especially of younger women) to help provide information and undertake at least some consultations;
		Always ensure translators are present at meetings with ethnic minority groups that do not speak Viet languages
	REDD is seen as a risky approach. The overall approach of REDD+ itself makes consultations and FPIC difficult	A BSM embedded in an Adaptive Collaboration Management Approach has been proposed. While it would be seeking to leverage REDD+ there are many



Topic	Risks and/or challenges	Potential solutions/ mitigations
	– seen as a PFES scheme - that may or may not make payments after several years of activities. This is not a realistic plausible way to convince smallholder farmers of any ethnicity or gender to participate;	activities such as reducing conflict and sharing information between owners and managers of forest and local communities that are not contingent in REDD+. The ACMA is seeking to downplay cash payments that may or may not flow from the Carbon Fund. Inherent problem with REDD+
	What type of opportunity-cost information to provide is unclear (tendency towards one-sided “everything will be perfect” disinformation);	ACMA is premised on joint learning outcomes. The SESA was unable to capture such outcomes during the actual quantitative surveys, but the village-level consultations have indicated that information needs to be shared: scientific and technical versus customary and traditional and that in fact these information bases are not mutually exclusive. Improve information; but also, an inherent design problem with REDD+ may be better options available but difficult to promote
	CSOs are few in Vietnam, and small and seldom include ethnic minorities among their staff;	Despite small size and few in number, CSOs should be facilitated to participate in REDD+ (including capacity building for them), but only in limited areas (ex. trainers for students to do consultations);
		Train VWU to help facilitate women only meetings in the villages; Already happening training will help but quality is an issue.
PLR Framework	No real definition of custom; No recognition of customary rights anywhere in PLRs and limited recognition of community rights;	Need to revise key PLRs and ensure that adequate implementation circulars are issued;
	Little recognition of any special rights for ethnic minorities and different socio-cultural relations to land and forest management; The new Land Law makes good progress in recognizing customs;	Vietnam is party to International Convention on the Elimination of Racial Discrimination; thus, domestic laws must be brought in line with international convention, however, Vietnam's Constitution is generally considered one of the more progressive constitutions in the region when it comes to ethnic minorities;
	Fragmentation in the PLR framework: very many nationally issued legal documents that need to be “re-interpreted” in the provinces for implementation;	The fragmented and complex PLR framework cannot be easily reformed under the current system (beyond the forestry sector and REDD+). Can only ensure that most important
	Overlapping and possibility for vagueness (opens loopholes) in legal provisions;	PLRs adequately reflected in the provinces; Loopholes related to forest conversion, for example, should be “plugged.”
	Carbon rights not yet included in the PLRs; Carbon title may be an individual title attached to land	Carbon rights required; Individual rights



ANNEX 5: NCR-JERP Actions and Measures

1. While the total area of forest in the NCR has increased, there has been a marked shift towards poorer forests and to plantations. Deforestation was primarily driven by planned and unplanned conversion of forest land, particularly poor-quality forest land, to agriculture. The goal of the Government's program is to directly respond to this challenge and work across key land use sectors to address the drivers of deforestation and forest degradation and encourage forest rehabilitation and sustainable forest management. The program has strategic importance as the first jurisdictional scale program supporting integrated forest and land use practices which address the agriculture-deforestation nexus while addressing poverty. This region and the land use dynamics it contains represents forest transition the country is going through in the mountainous regions and therefore provides a blueprint for how the country should transition in mountainous areas in the future.
2. The overall approach is to build on and support implementation of the current ambitious national and sub-national policies and initiatives while at the site-level, an Adaptive Collaborative Management Approach (ACMA) is promoted. At the site-level, interventions focus Special Use Forest Management Boards (SUFMBs), Protection Forest Management Boards (PFMBs), and State Forest Companies (SFCs) and also targets smallholders, village, legal entities of local forest-dependent households and communities as well as the large forest management entities. This is a realistic approach as the Management Boards and SFCs manage a significant portion of the forest land and provide a suitable entry point for site-level approaches to address many of the drivers of deforestation.
3. To achieve emissions reductions, the programmatic approach by the Government in the NCR encompasses a combination of enabling conditions and sector and cross-sectoral activities, with a focus on the forest and agriculture sectors. The four inter-related components of the program are: (1) Strengthening forest governance and law enforcement; (2) Promoting sustainable management of forests and carbon stock enhancement; (3) Promotion of climate smart-agriculture and sustainable livelihoods for forest dependent people; and (4) Program management and emission monitoring.
4. **Component 1: Strengthening forest governance and law enforcement.** This component includes actions to strengthen the enabling conditions for emissions reductions and enhancing removals by sinks and includes
 - i. **Strengthening policies controlling the conversion of natural forests**, including adopting a legal framework to control conversion of natural forest; support cross-sector coordination; and improve public access to information related to conversion of natural forests.
 - ii. **Strengthening forest governance and law enforcement**, including the development of stakeholder capacity to monitor and report on violations of forest law, implementation of an independent forest monitoring system and strengthening regional collaboration with Lao PDR to reduce the risk of displacement of emissions.
5. **Component 2: Promoting sustainable management of forests and carbon stock enhancement.** This component forms the core of the programmatic interventions and focuses on supporting ongoing forest sector restructuring. It builds on efforts in the NCR to meet national forest targets for:
 - **Conservation of existing natural forests** to support the development and operation of the adaptive collaborative management of natural forests involving forest management entities and



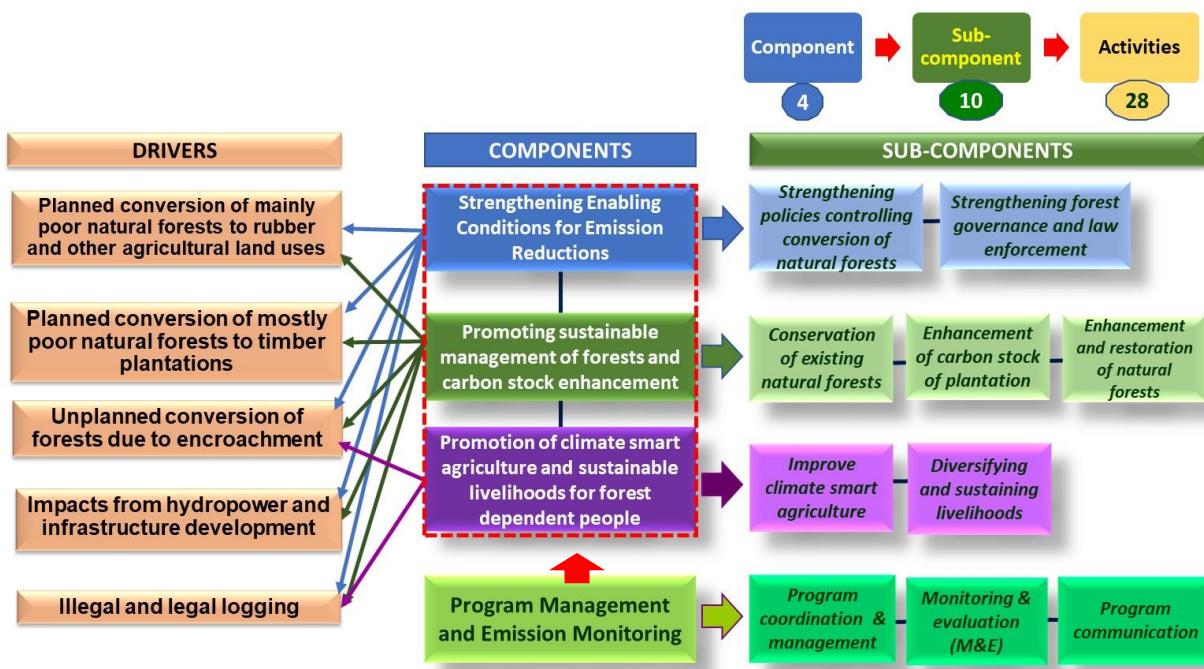
communities. It is expected that about 884,215 ha of existing natural evergreen forest and 33,017 ha of coastal/sandy forests will be protected from deforestation and forest degradation.

- **Enhancement of carbon stock of plantations** to improve productivity and long rotation forest plantations. This will include the transformation of 37,515 ha from short to long-term rotation of plantations and planting of 27,750 ha of long-rotation plantations. This also includes technical support and capacity development for forest certification and plantation management.
- **Enhancement and restoration of natural forests** focusing on regeneration and restoration of natural forests. About 91,915 ha of evergreen natural forests will be regenerated or reforested with native tree species, and about 11,348 ha coastal sandy inland forests will be regenerated and restored.

6. **Component 3: Promotion of climate-smart agriculture and sustainable livelihoods for forest dependent people.** The interventions under this component focus on the adoption of improved agricultural practices and diversification livelihoods of forest dependent people. Specifically,

- A. **Promotion of climate-smart agricultural practices** on about 60,300 ha of agricultural land through improved extension services and training of households in proximity to the deforestation and forest degradation hotspots and strengthening cooperatives that engage in deforestation free commodity value chains.
- B. **Livelihood development activities in the coastal areas** implemented as part of the WB supported Forest Sector Modernization and Coastal Resilience Enhancement Project. This component proposes collaborative approaches to forest management, coupled with support to diversifying and sustaining livelihoods for forest dependent people. These activities are determined as part of Adaptive Collaborative Management Approach (ACMA) and set out in the Benefit Sharing Plan (BSP).

7. **Component 4: Program coordination and management.** This includes coordination and management of programmatic action and measures at the national and provincial levels, as well as measurement, monitoring and reporting the emissions reductions, compliance of safeguard policies and oversight of the BSP.

**Figure A5.1: Programmatic Interventions in the NCR by components and sub-components****Table A5.1 Sub-components activities**

Sub-components	Key activities
1.1. Strengthening and implementing policies controlling conversion of natural forests	1.1.1. Adoption of legal framework to control the conversion of natural forests to rubber and infrastructure development 1.1.2. Enhancing cross-sector coordination of the Steering Committees for the National Program on Sustainable Forestry Development/REDD+ at central and provincial levels 1.1.3. Develop regulations on publication and access to information on conversion of natural forests and environmental impact assessment reports
1.2. Strengthening forest governance and law enforcement	1.2.1. Dissemination of legal guidelines on controlling conversion of natural forests by local authorities, forest entities, local communities and other stakeholders 1.2.2. Improve capacity of stakeholders to monitor the conversion of natural forests, verification of timber legality and activities to address violations of forest law 1.2.3. Implement independent monitoring of forest conversion by local communities and civil society organizations 1.2.4. Strengthening regional collaboration among provinces in the NCR and with Lao PDR on effective measures to control illegal logging and manage legal timber trade
2.1. Conservation of existing natural forests	2.1.1 Clarification of land and forest boundaries among the forest entities (FMBs, SFCs) in hotspots areas 2.1.2. Implement collaborative management of natural forests between FMBs, SFCs and communities 2.1.3. Promote implementation of community-based forest management 2.1.4. Implement sustainable management of natural forests by FMBs and SFCs



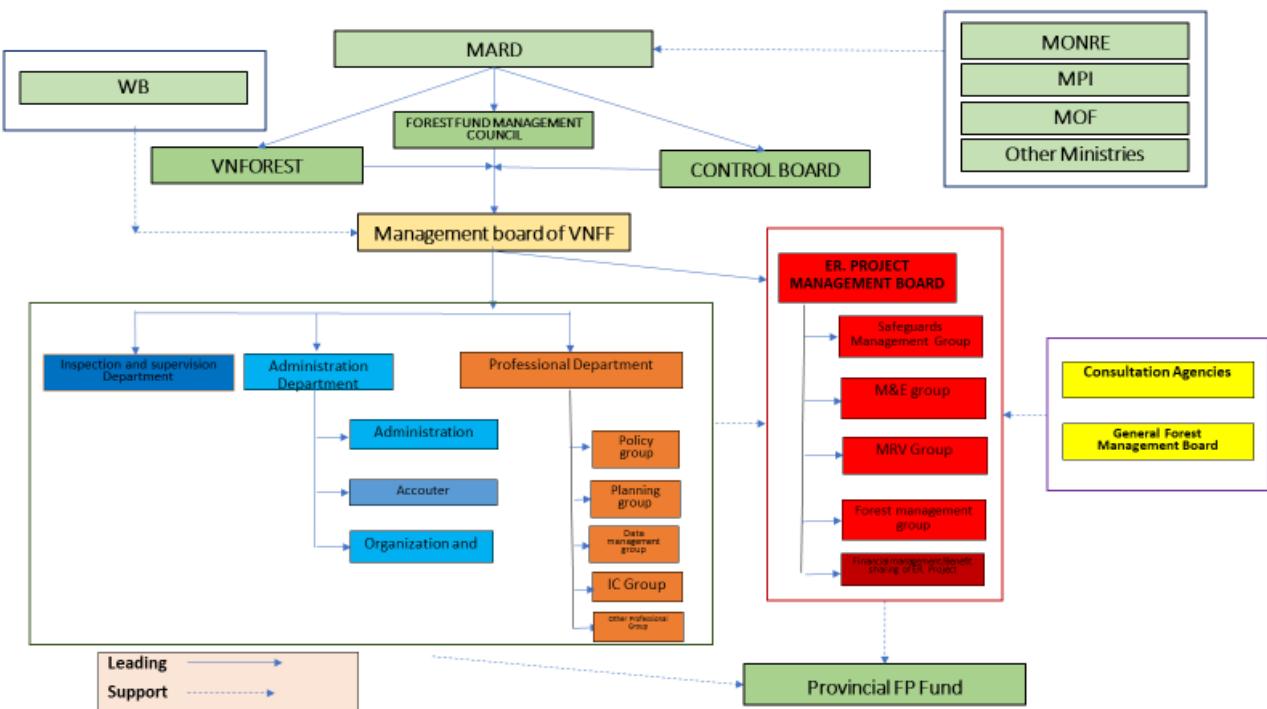
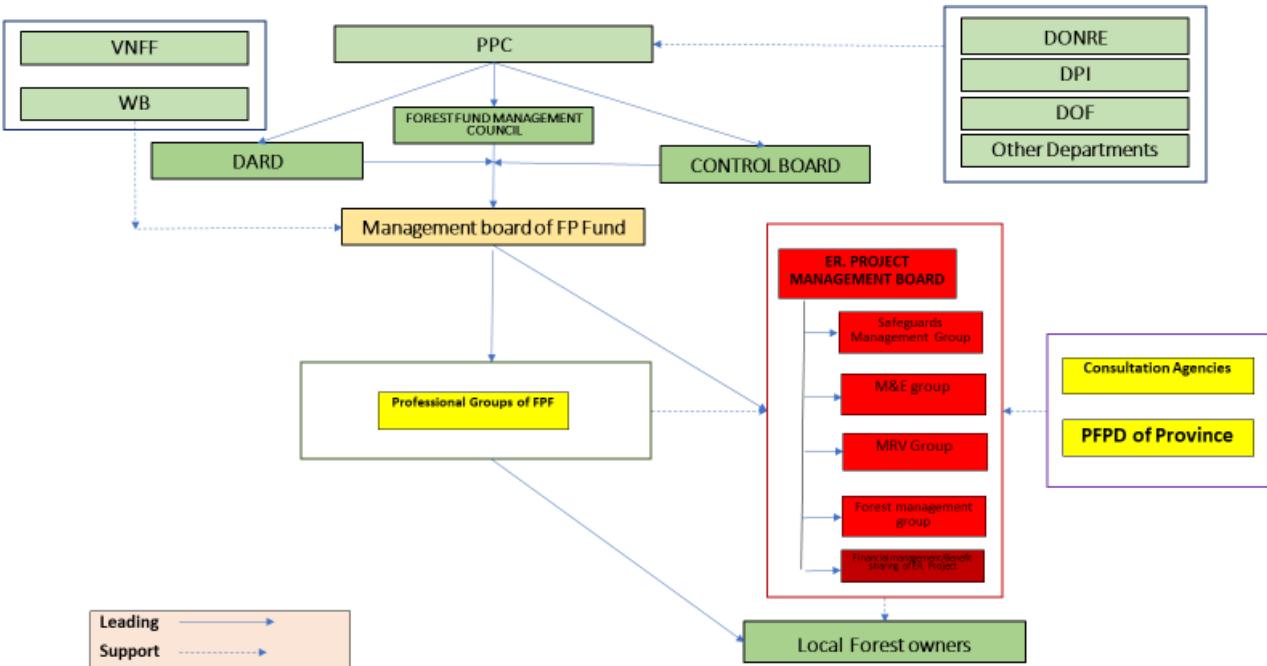
2.2. Enhancement of carbon stock of plantation	2.2.1. Investment in transformation of short-rotation plantations to long-rotation plantations for sawn timber supply 2.2.2. Investment in reforestation of long rotation plantations
2.3 Enhancement and restoration of natural forests	2.3.1. Investments in assisted natural regeneration (no supplemental planting)
	2.3.2. Investment in enrichment planting for poor natural forests
	2.3.3. Investment in reforestation of coastal protection forests (mangrove and sand break forests)
	2.3.4. Investment in reforestation of protection and special use forests in mountainous areas
3.1 Improve climate smart agriculture	3.1.1. Implementation of climate-smart agriculture and agroforestry through the ACMA in deforestation and forest degradation hotspots
	3.1.2. Support to deforestation free agricultural value chains
	3.2.1. Promotion of sustainable use and development of NTFPs in the forest areas
3.2. Diversifying and sustaining livelihoods for forest dependent people	3.2.2. Improve alternative off-farm income for forest dependent people
4.1. Program coordination and management	4.1.1 Management and coordination of implementation across levels
	4.1.2. Provision of operating costs for program implementation
4.2. Monitoring and evaluation (M&E) incl. monitoring of safeguards and improving forest information	4. 2.1 Implementation of M & E
	4.2.2 Measurement, Reporting and Verification (MRV)
4.3. Program communication	4. 3.1 Information dissemination

**ANNEX 6: NCR-JERP Implementation Arrangements**

The institutions for forestry and agriculture sector management are arranged from the central down to provincial and district level. At the central level, MARD takes overall responsibility for state management of agriculture, forestry, fishery, livestock and rural development. VNFOREST under MARD is responsible agency to respond to forest management while Department of Crop Production of MARD is responsible for agriculture sector. At the provincial level, Department for Agriculture and Rural Development (DARD) is the agency to take responsibility for management of agriculture, forestry, fishery etc. At the district level, forest management and agriculture production are led and directed by the District Forest Protection Station and Division of Agriculture and Rural development respectively.

VNFF was assigned by the MARD to be in charge of the distribution mechanism for future ERPA payments at central level with the role and accountabilities specified in the Program Operation Manual (POM). Key tasks include also providing technical support to program implementation such as forest inventory, development of RELs, environmental and social safeguards, benefit sharing and forest enrichment for carbon sequestration among others of the Program implementation during 2018-2025. The VNFF will establish a Central Program Management Board to help coordinate with the provinces to implement the Program.

Implementation of the program will be overseen by the Provincial People's Committees (PPCs) who will be facilitating the coordination among the key stakeholders and providing guidance for program implementation in its respective province. The Provincial Departments of Agriculture and Rural Development (DARD) who are in charge of the implementation have rich experience in implementing projects and programs in the forest sector funded by Government's budget or donors. Organizational charts are presented in Annex 6 and detailed in the POM which will be finalized in consultation with stakeholders. The POM is subject to Bank's review and clearance and approved by the MARD and adopted by the Program provinces.

**Figure A6.1: Organizational structure for program implementation at central level****Figure A6.2: Organizational structure for implementation at provincial level**

**Table A6.1: Main responsibilities of ministries and management entities**

Ministry or management entity	Main responsibilities
The Ministry for Agriculture and Rural Development (MARD)	MARD is responsible for rural development and the promotion of agriculture, fisheries, forestry and irrigation in Vietnam. For the program in the NCR, MARD is accountable to the Government of Vietnam for: (i) issuing of Decisions to organize the program implementation; (ii) approval of master plans for implementation; synthesis and approval of the annual work programs and implementation plans; (iii) issuing of guidelines for the procedures for procurement in accordance with the current law on procurement; (iv) organization of monitoring and evaluation of the program implementation; (v) management and use of ODA funds and preferential loans under its management; and (vi) tasks and rights in accordance with the current law, implementation of international conventions; ODA agreements and preferential loan.
Vietnam Forestry Administration (VNFOREST)	VNFOREST is tasked with advising and supporting the minister in managing the country's forests. Responsibilities include implementation of regulations issued by the Government; monitor natural forest resources and forest inventory; guide integrated production of agriculture, forestry, socio-economic development; improve forestry and forestry product exploitation; and prevention of forest fires and other disasters. VNFOREST is the focal agency for REDD+ and is responsible for coordinating all efforts and activities among government agencies, private organizations, NGOs, CSOs and international development partners in REDD+ implementation. VNFOREST reports to the National Steering Committee on the progress of REDD+ activities. VNFOREST coordinates and works with MONRE to prepare national reports on Climate Change (national communication to the UNFCCC) and directly assists MARD in the development of policies related to the authorization of NCR-JERP. VNFOREST supports the Management Board of Forestry Projects to update the annual database, coordinating the forest monitoring system of the provinces to ensure that it is consistent with the and the national forest monitoring system.
Ministry of Natural Resources and Environment (MONRE)	MONRE has the primary responsibility for the oversight and facilitation of environmental quality standards, land administration and sustainable natural resources use and conservation, including land use planning and is responsible for preparing the 10-year strategy and 5-year action plans for natural resources and environment protection. MONRE has the principality forcing responsibility for managing the response to climate change and is the national focal point to the UNFCCC. MONRE will support the process of forest land allocation and land use planning.
The Ministry of Planning and Investment (MPI)	MPI is responsible for mainstreaming sustainable development and climate change into Vietnam's strategies and development plans. MPI and MONRE are supporting the mainstreaming of sustainable development and climate change responses in the formulation of the five-year SEDP and budget estimates (post-2015 climate change and green growth financing response). The SEDP places "response to climate change, natural resources management, and environmental protection" as a prioritized objective and requires that consideration of sustainable development, climate change, and green growth be integrated into the preparation, appraisal, and



Ministry or management entity	Main responsibilities
	approval of investment programs that are funded by the state budget'. It will direct all sectors and provinces to develop their development plans and make budget allocations to operationalize these priorities.
National Steering Committee on Sustainable Forest Development and REDD+ (NCSFR)	This National Steering Committee on Sustainable Forest Development and REDD+ replaces the National Steering Committee on Forest Protection and Development Plan 2011 – 2020. A key responsibility of NCSFR, chaired by the Vice Prime Minister, is to facilitate cross-sectoral coordination among the ministries, agencies and localities in implementing effectively sustainable forestry development program (decision 886) and NRAP. The committee's members include MARD, MONRE, MPI, Ministry of Education, Ministry of Transport, Ministry of Labor, Invalids and Social Affairs, Ministry of Public Security, Committee of Ethnic Minority Affairs, State Bank of Vietnam and VNFOREST. Each Ministry is responsible for development and management of relevant networks under the government administrative areas of that ministry. Participating ministries and agencies are embedded in the formal decision-making processes for forest protection and development and REDD+, which stimulates inter-ministerial communication and allows sectoral perspectives and interests to be integrated into the right direction. This Committee plays an important role in highlighting the role of drivers of deforestation, for example infrastructure and/or agriculture on forest targets and the need to introduce new national policies. The Province REDD+ Steering Committees (PRSCs) informs the National Steering Committee.
Management Board for Forestry Projects	The Management Board of Forestry Projects ensures program management and implementation in accordance with Decisions of MARD. It has the following responsibilities: manage and utilizes ODA funds and preferential loans, program counterpart funds; submit to MARD the overall plan and annual plans; implements procurement in accordance with the current regulations on procurement; negotiates, signs, monitors the implementation of the contracts and addresses the problems arising in accordance with the authorization; miscarries out monitoring and evaluation of the program in accordance with the legal requirements and regulations; guides the Central Program Management Unit (CPU) to prepare final reports, outputs and program liquidation reports in accordance with the legal regulations.
Vietnam REDD Office (VRO) and Sub Technical Working Groups	The VRO is located in VNFOREST and was established in 2011 to coordinate and manage the design of the tools and processes to implement the National REDD+ Program of Vietnam. The VRO is responsible for strategic development and daily management of the NRAP. The VRO is also responsible to help in coordinating and promoting REDD+ activities at the central and provincial level and in providing support for the implementation of the program. This includes five supporting Sub-Technical Working Group.



Ministry or management entity	Main responsibilities
Central Program management unit (CPMU)	<p>The CPMU for the program has the following tasks including: (i) assisting the Program Owner to prepare the overall planning and annual detail work plans; (ii) assisting in preparation and implementation of the program; (iii) assisting in procurement and contract management; (iv) assisting and in managing disbursement and financial and asset management; (v) setting up and in managing the monitoring and evaluation of the program and monitoring and reporting on implementation status; (iv) in preparing completion reports and the final report and liquidation reports forth program; (v) other tasks as agreed within the Program.</p> <p>The CPMU works as a focal point to support the Steering Committee and the Management Board of Forestry Projects in managing and organizing the implementation of the program to comply with the objectives and regulations in the program document, laws, regulations and donor policies.</p>



Table A6.2: Indicators and implementation agencies for components 1, 2, 3 and 4 of NCR-JERP

Key Activities	Indicators	Key Agency to implement
Component 1: Strengthening Enabling Conditions for Emission Reductions		
Sub Component 1.1: Strengthening and implementing policies controlling conversion of natural forests		
1.1.1. Adoption of legal framework to control the conversion of natural forests to rubber and infrastructure development	<ul style="list-style-type: none"> • 1 Decree (legal guideline) for implementing resolution 71 on controlling conversion of natural forests to other land use purposes • 6 NCR provincial reports on implementation of Resolution 71 • 6 NCR meetings/workshops on implementation of issued the Decree on controlling conversion of natural forests • Updates to 6 NCR provincial social-economic development plans updated 	<i>Lead Agency:</i> VNFOREST <i>Collaborators:</i> Provincial People Committee, research organizations, forest entities, NGOs, CSOs
1.1.2. Enhancing cross-sector coordination of the Steering Committees for the National Program on Sustainable Forestry Development/REDD+ at central and provincial levels	<ul style="list-style-type: none"> • Cross-sector coordination mechanisms established and operating at central and provincial level to control conversion of natural forests • Biannual meetings of the Provincial REED+ Steering Reports on monitoring and assessment of conversion of natural forests (and other cross sectoral issues) 	<i>Lead Agency:</i> VNFOREST <i>Collaborators:</i> PPC; Committees for NTP-SFD, PRSC
1.1.3. Develop and implement regulations on publication and access to information on conversion of natural forests and environmental impact assessment reports	<ul style="list-style-type: none"> • Regulation on publication and access to information on conversion of natural forests and EIA of forest conversion • Open database with information on conversion of forests. • Increase number of forest owners, NGOs, SCOs etc. accessing this information • Integration of data and information on forest conversion into FORMIS and other portals at regular intervals 	<i>Lead Agency:</i> VNFOREST <i>Collaborators:</i> MONRE; PPC, NGOs, CSOs
Sub Component 1.2: Strengthening forest governance and law enforcement		
1.2.1. Implementation of the Decree and legal guidelines on controlling natural forests by local authorities,	<ul style="list-style-type: none"> • At least 60% of local communities with access to legal guidelines for controlling conversion of natural forests 	<i>Lead Agency:</i> Provincial DARD <i>Collaborator:</i> NGOs; CSOs; local communities



Key Activities	Indicators	Key Agency to implement
forest entities, local communities and other stakeholders	<ul style="list-style-type: none">Collaboration mechanism among local agencies on implementation of legal guidelines formulated and is operational	
1.2.2. Improve capacity of stakeholders for monitoring the conversion of natural forests, timber legality verification and address violations of forest law in hotspots	<ul style="list-style-type: none">Monitoring of hotspots is operationalMeetings/workshops on measures toMonitoring reports of local authorities on law enforcement results at the identified hotspotsInspection and validation reportsSpatial data on forest conversion collected and reported	<i>Lead Agency:</i> Provincial DARD <i>Collaborator</i> NGOs; CSOs; local communities;
1.2.3. Implement independent monitoring of forest conversion by local communities and civil society organizations	<ul style="list-style-type: none">Independent monitoring system on the violations of forest law covers the number of cases of encroachment, conversion of natural forests, timber legality and trade formulated and implemented	<i>Lead Agency:</i> VNFOREST <i>Collaborators:</i> NGOs/CSOs, Local communities; Forest Management Entities
1.2.4. Strengthening regional collaboration among provinces in the NCR and with Lao PDR on effective measures to control illegal logging and manage legal timber trade	<ul style="list-style-type: none">Endorsement of a common approach and plan to address displacement risk of illegal logging and trade in NCR provincesMonitoring of timber legality and chain of custody operational for timber trade between Vietnam and Lao PDRPercent of cases of illegal timber trade between Vietnam and Lao PDR prosecuted and convicted.Percent change in customs revenue from improved forest law enforcement, governance and trade implementation	<i>Lead Agency:</i> VNFOREST <i>Collaborators:</i> PPC; Custom Dept, Forest Ranger, line departments of Lao P.D.R
Component 2: Sustainable Management of Forests and Enhancement of Carbon Stock		
Sub Component 2.1: Conservation of existing natural forests		
2.1.1 Clarification of land and forest boundaries among the forest entities (FMBs, SFCs) in hotspots areas	<ul style="list-style-type: none">Forest boundary conflicts identified and boundary conflicts resolved by FMBs and SFCs with local communitiesForest boundaries of Forest Management Entities clarified on maps and recognized in the field.Financing sources	<i>Lead Agency:</i> PPC <i>Collaborators:</i> DARD, DONRE; FMEs and local communities



Key Activities	Indicators	Key Agency to implement
2.1.2. Implement collaborative management of natural forests between FMBs, SFCs and communities	<ul style="list-style-type: none">At least 70% local communities engaged in collaborative forest management in FMBs and SFCs;Agreed mechanisms for benefit sharing and use right over the forests between FMBs, SFCs and local communities.	<i>Lead Agency:</i> DARD <i>Collaborators:</i> FMBs, SFCs and local communities and households; environmental services users
2.1.3. Promote implementation of community based forest management	<ul style="list-style-type: none">884,215 ha of forests are allocated and effectively managed by community and/or groups of householdsPlans for community based forest management implementedAt least 5 technical guidelines	<i>Lead Agency:</i> District People Committees (DPCs) <i>Collaborators:</i> District Forest Protection Division, Commune People Committees, Communities, CSOs and Households.
2.1.4. Implement sustainable management of natural forests by FMBs and SFCs	<ul style="list-style-type: none">60 business plans for SFCs and PFMBs implemented and revenue mobilized from sustainable forest management884,215 ha (evergreen natural forest) and 33,017 coastal forests covered under sustainable natural forest management practices	<i>Lead Agency:</i> DARD <i>Collaborators:</i> FMBs, SFCs, local communities, wood industry
Sub Component 2.2: Enhancement of carbon stock of plantation		
2.2.1. Investment in transformation of short-rotation plantations to long-rotation plantations for sawn timbers supply	<ul style="list-style-type: none">At least 1 incentive policy issued and implementedAt least 1 technical guideline issued and implementedAt least 37,515 ha of existing acacia plantations transformed for sawn timber supply;At least 50% of households with access to loans and other forms of credit implementing plantations	<i>Lead Agency:</i> VNFOREST <i>Collaborators:</i> Forest Management Entities; wood industry enterprises; Vietnam Bank for Social Policy
2.2.2. Investments in reforestation in long rotation plantations	<ul style="list-style-type: none">At least 50% ha of plantations with improved provenances and planting stock	<i>Lead Agency:</i> VNFOREST <i>Collaborators:</i> Forest Management Entities; wood industry enterprises;



Key Activities	Indicators	Key Agency to implement
	<ul style="list-style-type: none">At least 25,000ha of long rotation plantations established for sawn timber supply27,750 ha of plantation certified for sustainable forest managementList of proposed germplasms for long-term plantation developmentAt least 50 trainings organized to promote long rotation plantations investments	Vietnam Bank for Social Policy
Sub Component 2.3: Restoration and enhancement of natural forests		
2.3.1. Investments in assisted natural regeneration (no supplemental planting)	<ul style="list-style-type: none">At least 56,500 ha of forests regenerated by natural regeneration;At least 50 trainings organized to promote assisted natural regeneration	<i>Lead Agency:</i> DARD <i>Collaborators:</i> FBMs, SFCs, communities; local people
2.3.2. Investment in enrichment planting for poor natural forests	<ul style="list-style-type: none">At least 24,785 ha of forests enrichedAt least 2 technical guidelines issued and implementedAt least 50 trainings organized in promote enrichment planting in natural forests	<i>Lead Agency:</i> DARD <i>Collaborators:</i> FBMs, SFCs, communities; local people
2.3.3. Investment in reforestation of coastal protection forests (mangrove and sand break forests)	<ul style="list-style-type: none">At least 6,925 ha of coastal protection forests enriched and 4,423 ha reforestedPlanting density and survival (number of plants per ha) in reforested areasNumber of tree species used in enrichment planting to improve biodiversity	<i>Lead Agency:</i> DARD <i>Collaborators:</i> FBMs, SFCs, communities; local people
2.3.4. Investment in reforestation of protection and special use forest in mountainous areas	<ul style="list-style-type: none">At least 13,150 ha of protection and special use forests reforestedImproved planting density and survival (number of plants per ha) in reforested areasIncrease in number of tree species used in enrichment planting to improve biodiversity	<i>Lead Agency:</i> DARD <i>Collaborators:</i> FBMs, SFCs, communities; local people



Key Activities	Indicators	Key Agency to implement
Component 3: Promotion of Climate Smart Agriculture and Sustainable Livelihoods of Forest Dependent People		
Sub Component 3.1 Improve climate smart agriculture		
3.1.1. Implementation of incentives to promote climate-smart agricultural and agroforestry through the ACMA in deforestation and forest degradation hotspots (based on activity 2.1.2)	<ul style="list-style-type: none">Funding allocated to extension agencies to promote climate smart interventions.Monitoring and reporting of climate smart interventions implemented by agricultural extension agenciesRevolving fund set up and operated and disbursements madeTypes of climate smart agricultural practices implemented by householdsAt least 50% of households applied better agricultural practices (be assessed under M & E)	<i>Lead Agency:</i> Extension Agencies; <i>Collaborators:</i> Agricultural cooperative; communities; households
3.1.2. Support to deforestation free agricultural value chains	<ul style="list-style-type: none">At least 5 deforestation free production models introduced;At least 50,000 ha of agricultural area with deforestation free productionRevenue per ha from improved and deforestation free value chains	<i>Lead Agency:</i> DARD <i>Collaborators:</i> Extension agencies; agricultural cooperative; private sectors; communities; households
Sub Component 3.2. Diversifying and sustaining livelihoods for forest dependent people		
3.2.1. Promotion of sustainable use and development of NTFPs in the forest areas	<ul style="list-style-type: none">List of NTFPs species supported under management plan for sustainable useAt least 500 ha of forests managed for NTFPs developmentAmount of NTFP revenue realized per ha of forests managed for NTFP	<i>Lead Agency:</i> DARD <i>Collaborators:</i> Medicinal enterprises; CSOs; extension agencies; local communities and households
3.2.2. Improvement of off-farm income and alternative livelihoods of forest dependent people	<ul style="list-style-type: none">Identification and demonstration of off-farm production modelsAt least 10% poverty rate reduced (to be assessed under M & E)Improved off-farm income per average household	<i>Lead Agency:</i> DARD <i>Collaborators:</i> Department of Industry and Trade; Department of Labour, War Invalids and Social Affairs; private



Key Activities	Indicators	Key Agency to implement
		sector; CSOs; extension agencies; local communities and households
Component 4: Program Management and Emissions Monitoring		
Sub component 4.1: Program coordination and management		
4.1.1 Management and coordination of ER- program implementation across levels	<ul style="list-style-type: none">Management structure at national and provincial;Institutional arrangements and reporting operational at national, provincial and local levels	<ul style="list-style-type: none">Institutional setup; coordination mechanism; program implementation manual; trainings; meetingsLead: MARDCollaborators: PPCs
4.1.2. Provision of operating costs for implementation	<ul style="list-style-type: none">Implementation of financial management guidelinesImplementation of Financial due diligenceInternal and external auditsQuarterly, semi-annual and annual financial reports	<ul style="list-style-type: none">Financial management guidelines; training; meetings;Lead: MOFCollaborators: MARD, PPCs
Sub component 4.2: Monitoring and evaluation (M&E) incl. monitoring of safeguards and improving forest information		
4.2.1 Implementation of M & E	<ul style="list-style-type: none">M&E guidelinesReports	<ul style="list-style-type: none">Development of effective M & E system, including safeguards; trainings; data collection; reportingLead: MARDCollaborators: PPCs, DARD
4.2.2 Measurement, Reporting and Verification (MRV)	<ul style="list-style-type: none">MRV plan implemented at national provincial levelsMRV responsibilities of national and provincial agencies clarifiedMRV data and information is periodically reported and updated in FORMISMRV linked with the national GHG inventory	<ul style="list-style-type: none">Development of implementation plan for MRV; trainings; data collection and reportingLead: MARD



Key Activities	Indicators	Key Agency to implement
	<ul style="list-style-type: none">• Database and reporting systems are operational• Annual monitoring reports are prepared	<ul style="list-style-type: none">• Collaborators: PPCs, DARD
Sub component 4.3: Program communication		
4.3.1 Information dissemination	<ul style="list-style-type: none">• Regular update on implementation on MARD website• Dissemination of electronic and paper reports	<ul style="list-style-type: none">• Workshops, meetings; public media• Lead: MARD• Collaborators: PPCs, media agencies;

**ANNEX 7: Financial Management and Disbursement Arrangements**

The Vietnam Forest Protection and Development Fund (VNFF) was assigned by the MARD to be in charge of the distribution mechanism for future ERPA payments. Specific responsibilities of the VNFF include, but are not limited to, the following:

- a) Chair the evaluation of program proposals, proposals for technical assistance of the implementation of NCR-JERP activity package, proposals for development of policies, regulations, technical guidelines and financial management at the central level for benefit sharing;
- b) Develop a financial management manual, M&E Manual and operational manual for the Adaptive Collaborative Management Approach (ACMA) process and the operation of the Forest Management Council (FMC);
- c) Organize the evaluation of the ACMA Agreements and the ACMA Plan to submit for approval, with the support of experts, technical consultants and M&E experts;
- d) Plan, coordinate, monitor and participate in decision-making for benefit sharing disbursements;
- e) Disburse the payments through the banking system from the central to local level, to report and share information as required by VNFOREST/MARD;
- f) Develop an integrated financial plan which combines payment for environmental services and various resources for benefit sharing, development of the M&E framework and general report, forest protection contract form, plan to coordinate the implementation of benefit sharing; participate in disbursement at provincial level;
- g) Participate in evaluating and drawing experiences in integrating resources for implementation of REDD+ benefit sharing.

FM Staffing. There are currently two key finance and accounting staff in the VNFF's accounting department, the Chief Accountant and General Accountant but both of them are more familiar with government finance and accounting procedures than of ODA. All FM staff assigned to the NCR-JERP need to be trained on relevant Bank's FM and disbursement procedures.

Budgeting and counterpart funding arrangement. Since VNFF is an extra budgetary fund and does not receive any government budget, it should make clear counterpart fund contribution, if any, and necessary mechanism to ensure that these are available for program implementation and subsequent operation. In addition, budgeting procedures, including the roles and responsibilities of each concerned party will be described in the FM Manual.

Accounting system, Accounting Software and Financial Reporting

1. A consistent accounting system, based on the accounting policies and procedures under the Accounting System for Administrative Organization (Circular 107 of the Ministry of Finance), will be applied. The chart of account will be modified when necessary to meet Bank FM requirements. Accounting records will be maintained in a computerized accounting system.
2. VNFF can evaluate and select the most suitable computerized accounting software that is being used by other ODA PMUs to modify (or upgrade) and use for the NCR-JERP. The software would be installed at the implementing agency followed by FM staff training to ensure consistency in program accounting and reporting and allow the VNFF to consolidate financial reports more easily.



3. The VNFF will prepare the Semi-annual Interim Financial Reports (IFRs) for monitoring of financial performance of the program in a format agreed between the representative of the GoV and the Bank. IFRs will be based on the AMT, which is regulated under MPI Decision, and will be sent to the Bank within 45 days of the end of the semester. The VNFF will prepare consolidated annual financial statements covering all program components and activities.

Internal Controls. Internal control procedures will be established in the Program FM Manual which will be reviewed and updated regularly to take into account changes in procedures.

External Auditing. The VNFF will appoint independent auditors acceptable to the Bank. The program financial statements will be audited annually in accordance with International Standards on Auditing and terms of reference acceptable to the Bank. The auditors' reports will be made available to the Bank within six months of the close of each fiscal year. The program's audited financial statements will be made available to the public according to the Bank's information disclosure policy.

Specific Measures to address Fraud and Corruption. The implementing agencies will implement strict contract management to avoid overpayment/overrunning contract budgetary allocations. The contract management will be part of IFRs. The following will be carried out to mitigate the risks of fraud and corruption: (a) clear FM responsibilities in the FM Manual; (b) internal and external audits; and (c) enhanced disclosure and transparency of financial information.

Impact of Procurement Arrangements. Procurement procedures for goods and consultant services will be in line with Bank Guidelines. This feature has been considered when designing Financial Management arrangements.

Disbursement Arrangements

Designated Accounts. One Designated Account (DA) in US\$ for the ER payments from the FCPF Carbon Fund for NCR-JERP will be opened either in the Vietnam State Treasury or the commercial banking system. The DA is subject to adjustment following a ceiling set in the Bank disbursement letter, which is equal a quarterly of annual program financial plan. The DA will be managed directly by VNFF at central level. At provincial level, 6 provinces will open secondary program accounts, at their respective provincial state treasury or with a commercial bank. All 7 program accounts, including one program DA at central level and 6 secondary accounts at provincial levels will be in US\$.

Funds Flow Arrangements. The project will follow a World Bank's disbursement policies and procedures, as described in the Disbursement and Financial Information Letter (DFIL) referenced in the ERPA. The World Bank will disburse the ER payments and based on the submitted under ER payment request form included in the ERPA. A DFIL for all carbon fund operations, including this project, will be agreed by Negotiation.

**ANNEX 8: NCR-JERP Costs and Sources of Finance**

1. The Program Entity developed a financing plan for the 2018-2025 period, which includes the ERPA term during which payments from the Carbon Fund would provide additional revenue to finance REDD+ interventions in the NCR. This period aligns with the Government's 5-year development planning cycles (2016 - 2020 and 2021 - 2025). Until 2020, the Government of Vietnam committed budget to the program, while the financing from 2021-2025 is based on a projection.
2. The total program costs over the period 2018-2025 period are estimated at US\$ 312.8 million, of which approximately US\$ 51.4 million is expected to come from the WB loan for the Forest Sector Modernization and Coastal Resilience Enhancement (FMCR) project and US\$ 25.8 million from other ODA projects currently under preparation or implementation.

Table A8.1: Cost summary the Government's NCR-JERP 2018-2025 (million US\$)

Components and sub-components	Total (2018- 2025)
1. Strengthening enabling conditions for emission reductions	6.8
1.1. Strengthening policies controlling conversion of natural forests	2.5
1.2. Strengthening forest governance and law enforcement	4.3
2. Promoting sustainable management of forests and carbon stock enhancement	240.4
2.1. Conservation of natural forests	113.2
2.2. Enhancement of carbon stock in plantations	70.6
2.3. Enhancement and restoration of natural forests	56.6
3. Promotion of climate smart-agriculture and sustainable livelihoods for forest dependent people	60.9
3.1. Improve climate-smart agriculture	56.1
3.2. Diversifying and sustaining livelihoods for forest dependent people	4.8
4. Program Management and Emissions Monitoring	4.7
4.1. Program coordination and management	2.2
4.2. Monitoring and evaluation (M&E) incl. monitoring of safeguards and improving forest information	1.7
4.3. Program communication	0.8
Total uses	312.8

3. Several forestry, agriculture and poverty reduction programs that are in implementation or proposed for implementation commit to provide financing to the interventions of the NCR. Financing support from these investments is instrumental in enhancing the scale and ambition of the program. The sources of funding are categorized into domestic and international sources. About 59% (US\$ 185.1 million) of the total program costs will come from domestic sources while 41% (US\$ 128.1 million) will be financed by existing ODA projects and the ER payments from the Carbon Fund.



Domestic financing sources

4. **National government financing** to the six NCR provinces (US\$ 50.6 million) is the committed Government budget for implementation of the Target Program on SFM during 2018-2020 and 2021-2025. This will mainly finance component 1 in year 2018 and part of the component 2.
5. **Provincial government financing** of the forest sector is closely linked to the state budget related to the Target Program for SFM during 2018-2020 and 2021-2025. Historically this budget has been ranging between 12-15% of the state budget, equivalent to US\$ 6.2 million. The exact budget allocation depends on the province level decision and budget processes. This source will mainly contribute to the financing of the component 2.
6. **Payment for Forest Environmental Services (PFES)** financing source is based on the collection of funds from hydropower and water supply companies in compliance of the decree 147 of the Government of Vietnam. In total, PFES revenues are expected to amount to about US\$ 50 million and are to be distributed among forest owners to compensate for forest protection services. For the purpose of the financial analysis, US\$ 12.6 million of PFES funding is counted as a financing source. This will finance the natural forest management and protection interventions under the component 2.
7. **The credit from financial institutions** is estimated at US\$ 24.6 million will be provided by the Vietnam Bank for Social Policies (VBSP) through several operating credit programs to the rural and ethnic minority households. The credits will be eligible to implement the models for transforming short to long rotation plantations under the component 2; and adoption of climate-smart agriculture under component. These credit programs are strongly subsidized and targeted only to the poorest society groups and ethnic minorities.
8. **The other sources** (US\$ 91.2 million) come from revenue generated from forestry activities by households, state forest companies (SFC) and the protection forest management boards (PFMB) that can be reinvested. This source is part of the financing mix for implementation of the target program for SFM 2016-2020 and 2021-2025. This financing source will be invested in the interventions of the component 2.
9. The domestic financing also seeks to maximize the engagement of participating MBs and SFCs. The work with the MBs and SFC follows a grant-based approach, combined with access to PFES funds and loans through the VBSP, in particular for plantation development. Channeling funding through the MBs and SFCs is expected to streamline the provincial budgets and facilitate the implementation over a large and diverse area affecting different stakeholders. Directly involving the MBs in detailed work-plan budget planning is expected increase their ownership and accountability. The approach also allows flexibility and facilitates specific solutions to management issues with different communities. It is also anticipated that program funding will help MBs and SFCs to leverage public and private finance.

International financing sources

10. The major international financing sources include ODA from bilateral and multilateral sources (US\$ 76.9 million) and results-based payments from ER Payments (estimated US\$ 51.5 million based on agreed commercial terms).
11. **ODA** is mainly estimated from the WB loan for the Forest Sector Modernization and Coastal Resilience Enhancement (FMCR) project, expected KfW loans for the forestry sector to the government of Vietnam and JICA



2 project on restoration and sustainable management project (JICA 2), USAID financed Vietnam Forests and Deltas Program; and KfW-financed Forest Restoration and Sustainable Management in Central and Northern regions of Vietnam. About US\$ 51.4 million of the ODA financing source comes from the WB loan on coastal protection, financing all coastal and sandy forest protection, reforestation (component 2) and the related livelihood development activities under component 3. The remaining US\$ 25.8 million will be covered from the remaining ODA project currently under preparation or implementation.

12. ER payments in 2021, 2023 and 2025 for the respective reporting periods (2018-2019, 2020-2022 and 2023-2024) are shown in Table A8.2 and are expected to contribute US\$ 51.5 million.

Table A8.2: NCR-JERP financing sources and ER Payments (million US\$)

Year	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total uses of funds (costs)	28.20	33.60	37.70	72.50	34.50	27.90	50.80	27.70	312.90
Sources of funds									
1. National									
National governmental financing	7.00	7.50	7.80	6.70	5.90	5.40	5.40	5.10	50.80
Provincial governmental financing	0.80	0.80	0.80	0.80	0.70	0.70	0.70	0.70	6.00
Policy for PFES	1.60	1.60	1.60	1.70	1.50	1.50	1.50	1.50	12.50
National credit sources VBSP	1.10	2.60	2.90	3.40	3.60	3.70	3.70	3.70	24.70
Other legal financing sources	10.30	12.10	12.10	12.50	11.20	11.00	11.00	11.00	91.20
2. International									
ODA	3.30	3.30	3.30	3.40	3.00	2.90	2.90	2.90	25.00
WB Loan - FMCR	4.10	6.80	10.50	15.50	6.00	2.90	2.90	2.90	51.60
Carbon Fund ER Payments				15.00		20.00		16.50	51.50
Total sources (incl. ER Payments)	28.20	34.70	39.00	59.00	31.90	48.10	28.10	44.30	313.30
Total sources – Total uses	0.00	1.10	1.30	-13.50	-2.60	20.20	-22.70	16.60	0.40



ANNEX 9: Expected Emission Reductions

1. The Reference Level is 4.62Mt CO₂e/year, including annual emissions of 2.4 MtCO₂e from deforestation, 8.5 MtCO₂e from forest degradation, and annual removals of -1.5 MtCO₂e from reforestation and -4.8 MtCO₂e from the restoration of forest carbon stocks.

2. The NCR-JERP is expected to generate about **32.09 million tCO₂e** from reduced emissions and increased removals by sinks over the program period of 2018-2025. The ex-ante estimate of reduced emissions and increased removals by sinks amounts to **26 million tCO₂e** over the ERPA period of 2019-2024 (6 years). In this ERPA timeframe, ex-ante estimate of ERs from reduced deforestation and forest degradation amount to 13.26 million tCO₂e which is equivalent to a reduction of 20 percent compared to the RL emissions. The increase in removals by sinks due to carbon stock enhancement amount at 12.7 million tCO₂e which is an increase by 34 percent compared to the RL removals.

3. Excluding the calculated 4 percent uncertainty factor and the 21 percent buffer, the net ex-ante estimated GHG ERs reduces to **19.5 million tCO₂e** over 6 years (2019 – 2024), which excludes **6.5 million tCO₂e** for uncertainty and reversal buffer. All key assumptions are further described in annexes 4, 5, 6 of the ERPD.

	Reference Level (RL)			NCR-JERP Implementation				
	Net Reference Level	Emissions	Removals	Emissions	Removals	Net (E - R)	Set-aside ²⁴	Total Net ERs
<i>Units: million tCO₂e/yr</i>								
2018	4.62	10.90	-6.28	8.69	-6.47	2.22	0.60	1.80
2019	4.62	10.90	-6.28	8.69	-8.23	0.45	1.04	3.13
2020	4.62	10.90	-6.28	8.69	-8.32	0.37	1.06	3.19
2021	4.62	10.90	-6.28	8.69	-8.39	0.30	1.08	3.24
2022	4.62	10.90	-6.28	8.69	-8.44	0.25	1.09	3.28
2023	4.62	10.90	-6.28	8.69	-8.48	0.21	1.10	3.31
2024	4.62	10.90	-6.28	8.69	-8.52	0.16	1.11	3.34
2025	4.62	10.90	-6.28	8.69	-8.57	0.12	1.13	3.38
Total								
2019-2024	27.74	65.40	-37.65	52.13	-50.39	1.74	6.50	19.50
2018-2025	36.99	87.20	-50.21	69.51	-65.42	4.08	8.23	24.68

²⁴ Reflects the level of uncertainty associated with the estimation of ERs during the Term of the ERPA + buffer (25%)

**ANNEX 10: Responsibilities for ER Monitoring****1) Ministry of Agriculture and Rural Development (MARD)**

MARD acts as manager of the Program and organizes a central PMU to manage the implementation

**2) Vietnam Administration of Forestry (VNFOREST)**

The VNFOREST supervises forest monitoring in the Accounting Area, including:

- *Cooperate with the CPMU in selecting suitable national and international consultants;
- *Connect with People's Committees, branches and agencies at provincial level;
- *Organize annual and final quantity and quality checks of the monitoring system ;
- *Updates the central forest database annually.

**3) Central Program Management Unit (CPMU)**

Provide support to MARD in:

- *Approval of the MRV implementation plans in six provinces, and review technical issues, procedures and guidance on field measurement, field data collection, quality control, biomass estimation methods, and technical guidelines of each specific work step.
- *Supports MARD in for the approval of cost estimates and in identification of financial resources.
- *Selects national service providers and national consultant teams for implementing change detection using satellite imagery for the Accounting Area, field verification and update of forest cover maps, accuracy assessment of the land cover change map, calculation of ERs, uncertainty assessment

**4) Provincial People Committees and Provincial Program Management Units**

Provincial People Committees (PPCs) of the six provinces in the Accounting Area are the owner of the provincial program. Each PPC will establish a Provincial Program Management Unit (PPMU). The PPMU:

- *Supports the PPCs in establishing provincial monitoring teams to verify the potential changes identified by remote sensing and update the confirmed changes to the provincial forest database
- *Cooperate with the PMU to develop resource plans for implementation at the provincial level

**5) Forest Inventory and Planning Institute (FIPI)**

FIPI has been implementing the NFIMAP and this data was used to develop the Reference Level for the Accounting Area. It is the main agency to implement the forest inventory step of the National Forest Inventory and Statistics for the period 2011-2016 and has a mandate to implement the improved NFIMAP in the future. FIPI will implement the following work:

- *Develop technical guidelines including a field data collection and survey manual; satellite imagery processing manual; QA/QC guidelines and forms; field data management and processing manual
- *Conduct of forest change detection using remote sensing
- *Organize field inventory and quality control
- *Conduct training and support knowledge transfer to provincial teams on forest monitoring, measurement, field verification and update of activity data and forest cover maps;
- *Provide guidance to national consultants on estimating ERs for the Accounting Area

**6) Support from central specialized agencies**

Central specialized agencies such as Vietnam Academy of Forest Science (VAFS) act as a service provider for the following tasks:

- *Conduct a quality assurance for the field inventory implemented by FIPI
- *Conduct an accuracy assessment of land cover change map 2015-2020 in the Accounting Area
- *Provide national consultants on estimating ER for the Accounting Area, uncertainty assessment

**7) Local communities**

Local communities are expected to participate in the monitoring, pilots are now in place in three provinces in the NCR and they are planned for all provinces to introduce the commune PFMS to mobile and electronic equipment such as tablets for forest monitoring system that will link with FORMIS



ANNEX 11: Location of the North Central Region

