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IMPLEMENTATION COMPLETION AND RESULTS REPORT

TF 15104

ON A

GRANT

IN THE AMOUNT OF US$ 5.86 MILLION

TO THE

CHILEAN AGENCY FOR INTERNATIONAL COOPERATION (AGCI)

FOR THE

SUSTAINABLE LAND MANAGEMENT PROJECT

December 16, 2021

Environment, Natural Resources & The Blue Economy Global Practice
Latin America And Caribbean Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective {Dec 06, 2021})

Currency Unit =	Chilean peso
846 CLP=	US$1
US$ 0.0012 =	1 CLP

FISCAL YEAR
July 1 - June 30

Regional Vice President:	Carlos Felipe Jaramillo
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ABBREVIATIONS AND ACRONYMS

AGCID	Chilean Agency for International Cooperation for Development (*Agencia Chilena de Cooperación Internacional para el Desarrollo*). Formerly known as AGCI.
ASSPP	Agricultural Sustainable Soils Promotion Program
ATR	Regional Technical Support staff (*Asistentes Técnicos Regionales*)
CGAI	Regional Management Committee (*Consejo de Gestión del Área de Intervención*)
CO2eq	Carbon Dioxide Equivalent
CONADI	National Corporation of Indigenous Development (*Corporación Nacional de Desarrollo Indígena*)
CONAF	National Forest Corporation (*Corporación Nacional Forestal*)
COVID-19	Coronavirus pandemic from 2019
CPS	Country Partnership Strategy
EAT	Technical Assistance Teams (*Equipo de Asistencia Técnica*)
ENCCRV	National Strategy for Climate Change and Vegetation Resources (*Estrategia Nacional de Cambio Climático y Recursos Vegetacionales*)
FDSM	Field Datasheets for Safeguards Monitoring
GEF	Global Environmental Facility
GEO	Global Environmental Objective
GoC	Government of Chile
GRM	Grievance Redress Mechanism
ha	Hectare(s)
IFRs	Interim Financial Reports
INDAP	National Institute of Agricultural Development (*Instituto Nacional de Desarrollo Agropecuario*)
IPPF	Indigenous Peoples Planning Framework
IRR	Internal Rate of Return
ISR	Implementation Status and Results
IWM	Integrated Wetlands Management
M&E	Monitoring and Evaluation
MINAGRI	Ministry of Agriculture (*Ministerio de Agricultura*)
MMA	Ministry of Environment (*Ministerio del Medio Ambiente*)
MRV	Monitoring, Reporting and Verification
MTR	Mid-term Review
NDC	Nationally Determined Contributions
NPV	Net Present Values
NRDP	National Rural Development Policy
NTFP	Non-Timber Forest Products
LDDD	Land Degradation, Desertification, and Drought
LDN	Land Degradation Neutrality
ODEPA	Office of Agricultural Studies and Policies (*Oficina de Estudios y Políticas Agrícolas*)
OIRS	Office for Information, Claims and Suggestions (*Oficina de Información, Reclamos y Sugerencias*)
OP/BP	Operational Policies / Bank Policies
PA	Protected Area
PAD	Project Appraisal Document

PDO	Project Development Objectives
PPF	Project Preparation Facility
PIU	Project Implementation Unit
PV	Present Value
REDD+	Reducing of Emissions from Deforestation and Forest Degradation
RF	Results Framework
RPF	Resettlement Policy Framework
RSCR	Regional Safeguards Compliance Reports
SA	Social Assessment
SAG	Agricultural and Livestock Service (*Servicio Agrícola-Ganadero*)
SCD	Systematic Country Diagnosis
SD	Safeguards Datasheet (*Ficha de Salvaguardas*).
SLM	Sustainable Land Management
ToC	Theory of Change
UAIS	Indigenous Peoples Unit (*Unidad de Asuntos Indígenas y Sociales*)
UCCSA	Climate Change and Environmental Services Unit (*Unidad de Cambio Climático y Servicios Ambientales*)
UNCCD	United Nations Convention to Combat Land Desertification
US$	United States Dollar

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DATA SHEET

BASIC INFORMATION

Product Information

Project ID	Project Name
P085621	Sustainable Land Management Project
Country	**Financing Instrument**
Chile	Investment Project Financing
Original EA Category	**Revised EA Category**
Partial Assessment (B)	Partial Assessment (B)

Organizations

Borrower	Implementing Agency
Chilean Agency for International Cooperation (AGCI)	National Forestry Corporation (CONAF)

Project Development Objective (PDO)

Original PDO

The project's Global Environment Objective (GEO) is to develop a national framework for sustainable land management to combat landdegradation, mainstream biodiversity into national policies, and protect forest carbon assets.

FINANCING

	Original Amount (US$)	Revised Amount (US$)	Actual Disbursed (US$)
World Bank Financing			
TF-55521	325,000	281,015	281,015
TF-15104	5,863,636	5,863,636	5,696,293
Total	**6,188,636**	**6,144,651**	**5,977,308**
Non-World Bank Financing			
Borrower/Recipient	58,000,000	17,106,092	30,446,584
Total	**58,000,000**	**17,106,092**	**30,446,584**
Total Project Cost	**64,188,636**	**23,250,743**	**36,423,892**

KEY DATES

Approval	Effectiveness	MTR Review	Original Closing	Actual Closing
07-Jun-2013	02-Sep-2005	09-Jun-2017	15-Aug-2019	30-Jun-2021

RESTRUCTURING AND/OR ADDITIONAL FINANCING

Date(s)	Amount Disbursed (US$M)	Key Revisions
27-Jun-2017	1.76	Change in Results Framework Change in Components and Cost Change in Financing Plan
02-May-2019	4.65	Change in Loan Closing Date(s)
30-Jul-2020	5.89	Change in Loan Closing Date(s)

KEY RATINGS

Outcome	Bank Performance	M&E Quality
Moderately Satisfactory	Moderately Satisfactory	Modest

RATINGS OF PROJECT PERFORMANCE IN ISRs

No.	Date ISR Archived	DO Rating	IP Rating	Actual Disbursements (US$M)
01	12-Apr-2014	Satisfactory	Satisfactory	.28
02	01-Dec-2014	Satisfactory	Satisfactory	.28
03	23-Jun-2015	Satisfactory	Satisfactory	.78
04	18-Dec-2015	Moderately Satisfactory	Moderately Satisfactory	.78
05	30-Jun-2016	Moderately Unsatisfactory	Moderately Unsatisfactory	1.08
06	27-Oct-2016	Moderately Unsatisfactory	Moderately Unsatisfactory	1.16
07	03-Apr-2017	Moderately Unsatisfactory	Moderately Unsatisfactory	1.44
08	18-Oct-2017	Moderately Unsatisfactory	Moderately Unsatisfactory	2.19
09	04-Apr-2018	Moderately Unsatisfactory	Moderately Unsatisfactory	2.97
10	28-Jun-2018	Moderately Satisfactory	Moderately Satisfactory	3.37
11	27-Dec-2018	Moderately Satisfactory	Moderately Satisfactory	4.26
12	26-Jun-2019	Moderately Satisfactory	Satisfactory	4.69
13	18-Dec-2019	Satisfactory	Satisfactory	5.26
14	12-Jun-2020	Satisfactory	Satisfactory	5.69
15	04-Dec-2020	Satisfactory	Moderately Satisfactory	6.10

SECTORS AND THEMES

Sectors

Major Sector/Sector	(%)
Agriculture, Fishing and Forestry	**100**
Public Administration - Agriculture, Fishing & Forestry	20
Forestry	40
Other Agriculture, Fishing and Forestry	40

Themes

Major Theme/ Theme (Level 2)/ Theme (Level 3)	(%)
Social Development and Protection	**0**
Social Inclusion	19
Indigenous People and Ethnic Minorities	19
Urban and Rural Development	**0**
Rural Development	29
Land Administration and Management	29
Environment and Natural Resource Management	**0**
Climate change	26
Mitigation	26
Renewable Natural Resources Asset Management	26
Biodiversity	26
Private Sector Development	**100**
Jobs	100

ADM STAFF

Role	At Approval	At ICR
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I. PROJECT CONTEXT AND DEVELOPMENT OBJECTIVES

A. CONTEXT AT APPRAISAL

Context

1. **Country context:** Chile is comprised of a great variety of ecosystems with high levels of endemism[1]. These extend across a wide diversity of landscapes, ranging from highland (altiplano) wetlands and deserts in the north of the Country, Mediterranean forests and bushes in the center of the country, and temperate rainforests and Patagonian steppes in the south. Many of these ecosystems not only contain exceptional natural beauty and present conservation value, but also overlap with productive landscapes, contributing to Chile's natural resources-based economy. At the time of Project appraisal (2013), industries such as mining, fishing, agriculture, and forestry (which are still heavily dependent on natural resources) provided jobs for 13.2 percent of the national workforce and accounted for 14.6 percent of the Gross Domestic Product (GDP). Despite the strong dependance of the Country's economy on natural assets, Chile faced threats that put the availability and sustainable use of these resources at risk. As result of climate vulnerability of the ecosystems and poor land management, land degradation (including desertification, accelerated soil erosion, and forest degradation) affected approximately 80 percent of lands across the Country. To address these challenges, the Government of Chile (GoC) recognized the need to integrate independent sector efforts for effective sustainable land management (SLM)[2] at the landscapes and producer level.

2. **Sectoral Context:** As consequence of poor agricultural, forestry and grazing practices, at appraisal, soil erosion affected more than 60 percent of the cultivable lands and it was estimated that about half of the national forests were degraded. Moreover, it was noted that climate change conditions, with increasing extreme temperatures and decreasing annual rain rates, further exacerbated the impacts, leading to an accelerated desertification process. In 2013, 1.3 million people lived in areas under desertification, decreasing resilience of these vulnerable communities due to reduced access to water resources, decreased agricultural productivity, and lowered availability of other resources (such as wood, and non-wood forest products).

3. Local biodiversity and rural communities, particularly those dependent on family farming activities, have faced important risks in desertified areas. The GoC recognized that as desertification expands, it reduces the capacity of the land to support rural livelihoods through agriculture and ranching, jeopardizes resource-based industries, and eliminates or degrades natural habitats. The ripple effects of this, led, for example, to human-wildlife conflicts, with animals roaming populated areas in search of food and water (no longer available in their natural habitats because of land degradation), affecting livestock and domestic crops; while it also led to decreased capacity of forests to retain Greenhouse Gas (GHG) Emissions.

[1] Endemism is the state of a species being naturally restricted to a single defined geographic area. 25 percent of Chile's flora and fauna are endemic and was recognized as a global biodiversity hotspot for its Mediterranean and Valdivian rainforest ecosystems.
[2] Sustainable land management was defined in the PAD as: "combines technologies, policies and activities aimed at integrating socio-economic principles with environmental concerns so as to simultaneously: (i) maintain or enhance production/services (productivity), (ii) reduce the level of production risk (security), (iii) protect the potential of natural resources and prevent degradation of soil and water quality (protection), (iv) be economically viable (viability) and (v) be socially acceptable (acceptability)." (FAO, 1993)

4. **Institutional Context:** At appraisal, the GoC had several programs – hosted in diverse agencies of the Ministry of Agriculture (MINAGRI, Ministerio de Agricultura), particularly the National Forestry Corporation (CONAF, Corporación Nacional Forestal), and the Ministry of the Environment (MMA, Ministerio de Medio Ambiente) - to promote agriculture and forestry, including some that supported practices for degraded lands. Nevertheless, these programs did not provide a coordinated approach to SLM, nor were they designed to do so. Sector programs were managed in relative isolation and there was little or no incentive for agencies to work together. Moreover, many of the programs lacked flexibility to respond to the needs and challenges of small and medium producers, who often required tailored support to implement practices for their lands/locales, as well as additional technical capacity and up-front capital needed to complement the government funds. This not only resulted in uncoordinated (and sometimes contradictory) efforts, but also in low implementation and disbursements of the programs on the ground. Recognizing the need for a new, more integrated, approach for landscapes level coordination across sectors (agriculture, forestry, conservation) that could meet the needs of small/medium producers, the GoC sought to implement through this Project a coordinated and effective framework for SLM.

5. At the time of Appraisal, the GoC had committed to achieve the Organization for Economic Co-operation and Development, OECD, standards for environmental management, and was a signatory to the United Nations Convention to Combat Desertification (UNCCD), the United Nations Framework Convention on Climate Change (UNFCCC) and the Convention on Biological Diversity (CBD). The National Biodiversity Strategy 2003 was in place and identified priority conservation areas across Chile, including the Central Andean Dry Puna, the Mediterranean Forests and the Valdivian Forest. The project aimed to target these and other threatened landscapes by introducing integrated sustainable land management practices at the individual farm level, within the context of an overall landscape management strategy.

6. **Rationale for World Bank Support:** World Bank support was provided under the Sustainable Land Management Project. The Project focused directly on preserving and sustaining Chile's natural assets, and underpinned efforts to achieving the Sustainable Development Goals (SDGs), including poverty reduction objectives for rural populations. This operation was financed by the Global Environmental Facility (GEF) and implemented by CONAF. The Country Partnership Strategy (CPS) 2011-2016 had established the "Sustainable Land Use of Natural Resources" as an Institutional level result, with the Project as one of its milestones for achievement. The focus on SLM and the incorporation of biodiversity and climate change considerations, responded directly to several GEF priorities. Improving the provisioning of agricultural and forest ecosystem services through the implementation and piloting of SLM activities on the ground contributed to "Investing in New and Innovative Approaches in Sustainable Land Management" (LD-SP3). Streamlining of sustainable management practices into policy and regulatory frameworks for production incentives specifically targeted GEF "Strategic Priority Strengthening the Policy and Regulatory Framework for Mainstreaming Biodiversity" (BD-SP4), as well as specific CBD 2011-2010 targets[3]. Project activities also focused on promoting carbon sequestration and reducing GHG emissions in productive activities targeted in the GEF Strategic Priority: "Management of Land Use, Land-Use Change and Forestry as a Means to Protect Carbon Stocks and Reduce GHG Emissions" (CC-SP6).

[3] At appraisal, it was identified that the Project contributes to CDB 2011-2020 Strategic Plan and was aligned with several Aichi targets, such as: 2, 4, 5,7, 14, 15 and 18. https://www.cbd.int/sp/targets/

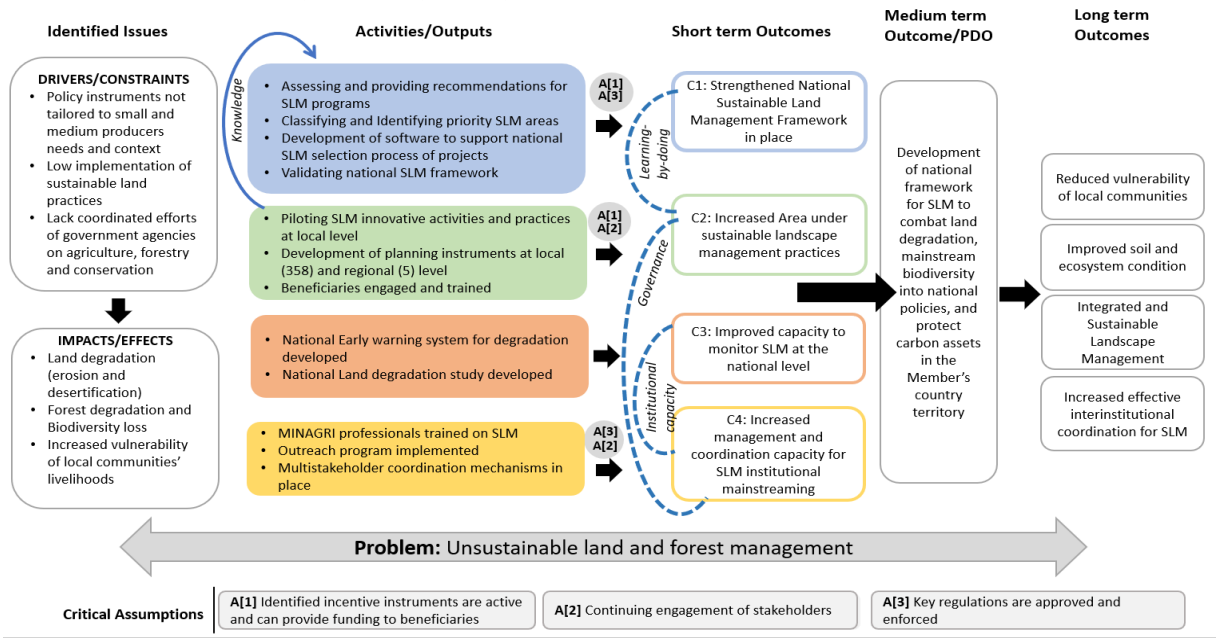
Theory of Change (Results Chain)

7. The Project Appraisal Document (PAD) did not present a Theory of Change (ToC); therefore, a ToC has been developed for the purpose of this ICR (*See Figure 1 below*). The Project design shows that the Project sought to tackle the drivers and constraints linked to land and forest degradation (and the risks these posed to biodiversity and vulnerable communities). The PAD incorporates an approach in which these issues could be addressed by: (i) developing a SLM policy framework and supporting knowledge products, (ii) implementing pilot activities to demonstrate SLM benefits and generating on the ground knowledge and implementation experience, (iii) improving of Monitoring, Reporting and Verification (MRV) systems for SLM, and (iv)promoting the creation of coordinating bodies to enhance governance and effective SLM practices both horizontally (across government) and vertically (between levels of government and rural communities). The integration of these four streams of work (each stream of work is associated with a Project Component and a PDO indicator, as described below) was expected to contribute to the development of a comprehensive and integrated National Framework for Sustainable Land Management (SLM) to combat land degradation, mainstream biodiversity into national policies, and protect forest carbon assets in Chile.

8. In developing an integrated approach to SLM, the project aimed to provide an overarching framework missing from Chile's existing initiatives, policies, and programs. The project sought to put in place this framework and allow more efficient, effective use of financial and human resources to deliver the aggregate impacts of SLM efforts on the ground.

9. Beneficiaries described in the PAD included: (i) the rural poor, including indigenous communities, whose lands are degraded or threatened and can benefit from improvements in soil conservation and improved sustainability of production systems; (ii) private sector producers; (iii) civil society benefitting from an improved landscape that incorporates water, soil, biodiversity, carbon, and other intangibles as values; and (iv) native biodiversity in global priority hotspots. In addition, the Project would aim to bolster the technical capacity and outreach of government institutions (national, regional, and municipal) working in the productive sector, and natural resource management to provide technical, policy, and regulatory leadership.

Figure 1. Theory of Change for the Sustainable Land Management Project



Project Development Objectives (PDOs)

10. The Project Development Objective (PDO)/Global Environmental Objective (GEO) was to *develop a national framework for sustainable land management to combat land degradation, mainstream biodiversity into national policies, and protect forest carbon assets in the Member Country's territory*.

Key Expected Outcomes and Outcome Indicators

11. The PDO captured a single Outcome statement, as the PAD emphasized the interdependence and integration of the elements and contributions of the National Framework for SLM. Four PDO indicators (PDOI), each one of these indicators associated to a Project component, were defined in the PAD to measure the progress towards achieving the PDO:

- **PDOI 1:** Development of an effective national framework to mitigate land degradation, which includes biodiversity mainstreaming and protection of forest carbon assets.
- **PDOI 2 (revised):** Land area under sustainable landscape management practices (Corporate Results Indicator).
- **PDOI 3 (revised):** Improved capacity to monitor SLM at the national level.
- **PDOI 4:** Increased management and coordination capacity for mainstreaming SLM into the institutional architecture of the MINAGRI. Each one of these indicators were associated to a Project component, respectively.

12. During the Project Restructuring process completed in 2017, some PDOI and Intermediate results Indicators and targets were modified, added, or dropped; to see modifications, refer to Section B: Significant changes during implementation, and Annex 8.

Components

13. The Sustainable Land Management Project was comprised of four technical components and one Project management component:

Component 1. National Sustainable Land Management Framework.
Estimated total: US$4,869,221. GEF: US$469,221; Government co-financing: US$4,400,000
Actual cost: GEF US$ 316,512; Government co-financing: US$7,716,111

14. This component sought to develop a policy framework and knowledge products to enable integrated and coordinated implementation of governmental programs and instruments to promote SLM practices. The framework was understood within the Project as the interlinked elements, including national programs, which support the objective of ameliorating land degradation and/or desertification in the Country. As part of the component, and prior to the framework development, the Project planned to assess existing programs on agriculture, forestry, ranching, and conservation to identify gaps and recommendations. In addition, the Project considered the development of a classification for areas vulnerable to land degradation and validated eligibility criteria for beneficiaries. Considering these elements and incorporating lessons that were to be learned from pilot project activities of Component 2, the Project aimed at providing guidelines and recommendations to coordinate efforts and enhance instruments (i.e., by adapting them to local needs) to address land degradation, mainstream biodiversity, and protect forest carbon assets.

Component 2. Sustainable Land Management Pilot Projects

Estimated total: US$39,112,015. GEF: US$3,912,015; Government co-financing: US$35,200,000

Actual cost: GEF: US$3,896,096; Government co-financing: US$11,504,299

15. The Project sought to support the piloting of new practices, training, strategies, and recommendations to demonstrate SLM benefits and contribute with knowledge and recommendations to improve elements of the National SLM framework (component 1) on five strategic pilot areas[4]. It was designed that in each pilot area a participatory Management Committee[5] (CGAI in its Spanish acronym) were to be established, and that technical teams would identify priority areas of intervention. The Project design considered preparing outreach and on the ground demonstrative activities, as well as carrying out training activities on Project key themes[6]. Additionally, the Project aimed to develop participatory Farm-level Plans identifying strategic SLM actions and subprojects, with a lifespan of five-years. These subprojects sought to ensure sustainable use of productive areas, improve degraded lands, and protect natural habitats. To implement the subprojects, the Project would support beneficiaries in: (i) accessing existing government financing, (ii) providing direct financial support to selected beneficiaries with limited access to national programs, and/or (iii) providing incremental financing for aspects not covered by national programs.

16. Informed by implementation experience and knowledge, including the inputs of the Management Committee and institutional regional teams, the Project planned to prepare a five-year Strategic Regional Plan for each pilot area designed to promote sustainable land use planning under a comprehensive, landscapes approach. These Plans were to consider conservation aspects (i.e., development of biological corridors), land use priorities, conditions of the pilot area, as well as identifying sectors for SLM interventions.

Component 3. Sustainable Land Management Monitoring and Evaluation System

Estimated total: US$9,591,600. GEF: US$541,600; Government co-financing: US$9,050,000

Actual cost: GEF: US$620,864; Government co-financing: US$5,375,480

17. This component was designed to improve CONAF's MRV system for SLM and to provide MINAGRI's technical professionals and leadership with early alerts and information to support effective decision-making. The component aimed at providing information on land degradation and desertification drivers and conditions, as well as the impacts of SLM activities on efforts for mitigating degradation. The early warning system was designed to reach national scale and to be integrated into the existing MINAGRI's platforms and systems in the future. To pilot and improve the MRV system, the project aimed to introduce the system at the regional level, focusing on the five priority areas.

[4] The five Project target areas, also referred as pilot areas in the PAD were: (i) Putre (Arica region, Central Andean dry Puna ecosystem); (ii) Combarbala (Coquimbo region, Chilean Matorral ecosystem); (iii) Litueche (which later during implementation added Marchigüe in the O'Higgins region, Chilean Matorral ecosystem); Carahue-Puerto Saavedra (Araucania region, Winter Rainfall forest-Valdivian temperate rainforest ecosystem); and Coyhaique (Aysen region, Patagonian Andes *Nothofagus* forests and steppe).

[5] The PAD defined that regional representative of MINAGRI was the chair the Management Committee, representatives of different agencies of MINAGRI and MMA, municipalities, beneficiaries, and other key stakeholders participated as members.

[6] In order to advance SLM and biodiversity mainstreaming efforts, diverse training activities were conducted for key Project themes, including: (i) Women's Climate Change Conference; (ii) training on safeguards; (iii) improvement of forestry and agricultural practices; (iv) protection of ancestral practices from native people; (v) formulation and application of promotion mechanisms; (vi) plan production techniques, (vii) forest and ecological restoration; and (viii) sustainable water use; among others.

Component 4: Institutional Capacity Building

Estimated total: US$5,413,000; GEF: US$463,000; Government co-financing: US$4,950,000
Actual cost: GEF:US$437,969; Government co-financing: US$4,053,691

18. Through different activities, this component sought to improve capacity and coordination among institutions, enabling integrated implementation and mainstreaming of the National SLM Framework. These efforts focused on strengthening coordination between CONAF, the National Agricultural Development Institute (INDAP, Instituto Nacional de Desarrollo Agropecuario), the Agricultural and Livestock Service (SAG, Servicio Agricola Ganadero), the MMA, and local governments. Capacity building and outreach activities were planned under this component. To complement these institutional strengthening activities, the Project sought to establish institutional arrangements and new coordination mechanisms needed to implement the SLM framework. The Project aimed at ensuring participation of key stakeholders throughout and included in the design the regional Management Committees and a National Advisory Committee on SLM, comprised of representatives from CONAF, INDAP, SAG, MINAGRI's Office of Agricultural Studies and Policies (ODEPA, Oficina de Estudios y Políticas Agricolas) and MMA.

Component 5: Project Management

Estimated total: US$4,877,800; GEF: US$477,800; Government co-financing: US$4,400,000
Actual cost: GEF: US$492,892; Government co-financing: US$1,797,004

19. The component was designed to strengthen the Chilean Agency of International Cooperation for Development's (AGCID, Agencia Chilena de Cooperación Internacional para el Desarrollo, formerly known as AGCI) and CONAF's capacity to carry out the administrative and fiduciary management of the Project. Institutional arrangements established that these tasks were carried out by a dedicated team of fiduciary specialists based on AGCID and CONAF working jointly between both entities in a coordinated manner. Additionally, this component was designed to provide training and financing to staff Project team, CONAF and AGCID, as well as other institutions and subproject executing entities. The component was designed to cover the costs associated with the procurement of goods and services related to Project management, including utilities, communications, minimum operating expenses, and other indirect expenses incurred, as well as all operations support, technical assistance, and PIU coordination and regional teams.

B. SIGNIFICANT CHANGES DURING IMPLEMENTATION (IF APPLICABLE)

20. The project underwent three restructurings, in 2017, 2019 and 2020. The Restructuring 2017 authorized changes to the Results Framework (RF), components costs, financing plan, and Risk assessment, while the 2019 and 2020 restructurings extended the closing date, as described in detail below:

Revised PDOs and Outcome Targets

21. The PDO/GEO remained unchanged during Project implementation.

Revised PDO Indicators

22. As a result of the June 2017 restructuring, the RF was updated to better reflect anticipated results, recalibrating targets to realistic values and better detailing the indicators' definition. The following modifications were made to the PDO indicators, and changes are summarized below in table 1 (more detail is provided in Annex 8, Table A.8.1.):

(i) *Outcome Indicator 1* remained the same, however, changes in the data source and methodology were introduced to better reflect to the Country context at the time. Given the alignment of the National Strategy on Climate

Change and Vegetation Resources (ENCCRV, *Estrategia Nacional de Cambio Climático y Recursos Vegetacionales*, launched in November 2016) with the PDO, the Project recognized it as the National Framework for SLM management. The ENCCRV was designed to address the issues of land degradation and desertification, climate change mitigation in the forestry sector (Reducing of Emissions from Deforestation and Forest Degradation, REDD+), and adaptation, while also promoting biodiversity conservation. The revised target was to be consider completed once the SLM framework (ENCCRV) was presented to and approved by the Ministerial Council on Sustainability[7].

(ii) The original *Outcome Indicator 2* "Reduced land degradation in 5 target areas through the application of restoration and SLM" was revised to "Land area under sustainable landscape management practices (Corporate Results Indicator)" to adjust it to a demand-driven approach. This decision was based on assessments prepared by regional teams considering beneficiaries' interests and a reduced availability of counterpart funding through incentive programs. The revised target was adjusted from 100,000 ha to 30,000 ha of sub-projects on individual or community landholdings in five pilot areas for successful piloting of a demand driven SLM approach for reducing land degradation.

(iii) The original *Outcome indicator 3* "Improved capacity to monitor impacts and results through the development of a decision support system for effective SLM monitoring and early warning system for land degradation (Yes/No)" was revised to be "Improved capacity to monitor SLM at the national level (Yes/No)". The changes were done to improve clarity, as well as to add more detail to the definition to better define measurability. The early warning system was captured as a Project output in a newly introduced intermediate indicator. The target was established to be considered met when the first monitoring reports on land degradation and climate change were made available and shared with relevant decision-making bodies.

(iv) The Outcome indicator 4 remained the same. Nonetheless, the definition, as well as the specific data sources and methodology, were revised to better describe the scope of the component, to improve measurability, and reflect the focus of the Project on the operationalization of inter-institutional coordination arrangements. The target was set to be considered met through the establishment and operation of a National SLM Advisory Group, Regional SLM Management Councils, and other interinstitutional coordination platforms.

Table 1: Revision of PDO Indicators, Restructuring 2017.

Original GEO/PDO Indicator and target (PAD 2013)	Revised GEO/PDO Indicators and target, (Restructuring 2017)	Comments
OI 1 - Development of an effective national framework to mitigate land degradation, which includes biodiversity mainstreaming and protection of forest carbon assets **Target**: Yes	No change	No changes in definition nor the target. The Data sources and Methodology were described as follows: the target will be considered completed once the SLM framework is presented to and approved by the Ministerial Council on Sustainability.
OI 2 - Reduced land degradation in 5 target areas through the application of restoration and SLM **Target**: 100,000 ha	Land area under sustainable landscape management practices (Corporate Results Indicator) Revised Target: 30,000 ha	Revised indicator wording, definition, and target to scale it down, while adjusting the target to a demand-driven approach, based on assessments prepared by regional teams, considering beneficiaries' interest and availability of counterpart funding through incentive programs.

[7] Highest instance for Sustainability and Environmental decision-making in the Country. It incorporates the ministers from Ministries of Economy, Finance, Environment, Agriculture, Health, Public infrastructure, Housing & Urbanism, Transport & Telecommunications, and Mining.

OI 3 - Improved capacity to monitor impacts and results through the development of a decision support system for effective SLM monitoring and early warning system for land degradation **Target**: Yes	Improved capacity to monitor SLM at the national level.	Revised wording, definition, and specify data sources and methodology to better define measurability. The early warning system was captured as a Project output in a new intermediate indicator.
OI 4 - Increased management and coordination capacity for mainstreaming SLM into the institutional architecture of the Ministry of Agriculture. **Target**: Yes	No change	Revised definition and specific data source and methodology to better define the scope of Component, and to improve measurability.

Revised Components

23. Components cost and Financing Plan were revised to reflect the projected government counterpart funding. Counterpart funding was modified from the original US$ 58,000,000 to US$30,446,584 to adjust to the available government resources. At Project design it was assumed that the incentives under the "Afforestation and Reforestation Program (Presidential Decree no. 701)" would be extended; however, this extension was not approved, significantly reducing the funds available for implementation of Component 2 activities. The content and definition of components remained unchanged during the Project implementation; while new regional strategies to speed up implementation of on the ground activities were proposed by CONAF during Project Mid-term Review (MTR).

Other Changes

24. **Intermediate indicators.** Four out of the original 22 intermediate results indicators remained unchanged. Modifications on indicators included improvements to the wording, definition, targets, data sources, and methodology, as well as adding and dropping indicators. These changes clarified the definition of expected outputs and modified the targets by adjusting them to reality. Details on changes to intermediate indicators can be found in Annex 8, Table A.8.2.

25. **Risk Assessment.** The Project's risk ratings were revised upwards to better reflect the Project's status as an Actual Problem Project in June 2016. The Systematic Operations Risk-Rating Tools (SORT) overall rating was modified from Low to Substantial. The rationale for this was that in three consecutive Implementation Status and Results Reports (ISRs) prior Project MTR, the Progress towards PDO and Overall Implementation Progress (IP) were rated Moderately Unsatisfactory (MU), due to significant delays in the start-up activities, particularly of Component 2. The main reasons for the delays were the continuous changes in Project coordination and the lack of a full-time coordinator. In June 2018, once CONAF hired a full time Coordinator, established a fully staffed PIU and the Project demonstrated an improvement in the implementation rate, the key Project ratings were upgraded. Details can be found on the Restructuring 2017, as part of the support documentation of this report.

26. **Closing date.** Two extensions were approved by the Bank, in April 2019 and July 2020. Details can be found in the next section. As part of the process, disbursements schedules were updated and adjusted to the remaining timeframe of Project implementation, for the three Restructurings conducted. No reallocation of proceeds was processed.

Rationale for Changes and Their Implication on the Original Theory of Change

27. Restructuring processes focused on increasing the efficiency of Project implementation and addressing delays. The first restructuring in 2017 was sustained on the need to increase the implementation pace of Component 2 activities. This restructuring then aimed at (i) consolidating the PIU after various changes and (ii) recalibrating targets to the

availability of counterpart funding and institutional capacities of CONAF. Two restructurings followed in 2019 and 2020 that aimed at providing enough time to engage and complete activities with local communities within Component 2. These extensions were prompted by external conditions -not related to the Project- namely social protests and the COVID-19 pandemic, and comprised six and 16-month extensions respectively.

28. None of the abovementioned Restructuring processes affected the ToC.

II. OUTCOME

A. RELEVANCE OF PDOs

Rating: High

Assessment of Relevance of PDOs and Rating

29. ***Bank - Country Partnership priorities:*** The SLM approach has been relevant to the GoC since Project preparation. The CPS in place at the time of the Project approval (2011-2016) considered the proposed Project relevant to support the Country's strategic objective number 3 (Promoting Sustainable Investments), with particular emphasis on the third institutional result on Sustainable use of natural resources. While this CPS expired on 2016, in June 2017, the World Bank published the most recent Systematic Country Diagnosis (SCD) for Chile, identifying land degradation (erosion, desertification, and drought), biodiversity and native cover loss, and climate change vulnerability (especially for rural poor) as the main issues for the land use sector. The SCD incorporated a detailed analysis identifying the sectoral priorities that included: (i)strengthening institutional capacity, (ii)coordinating efforts, and (iii)promoting sustainable agricultural and forest management. This analysis confirms the enduring relevance of the original Project objective and issues that inspired it, which remain important at the closing date. Considering this, as well as other national priorities, a new CPF is currently being prepared for the FY23-FY26 period.

30. ***GEF-7 Strategic Focus:*** The PDO/GEO remains aligned with the priorities of the current 2018-2022 Land Degradation, Biodiversity, and Climate Change Focal Areas of the GEF-7 Programming Directions that aim to contribute to: Land Degradation (LD) Objective 2. "*Creating an enabling environment to support voluntary Land Degradation Neutrality (LDN) target implementation*."; Biodiversity (BD) Objective 1. "*Mainstream biodiversity across sectors as well as landscapes and seascapes*"; and Climate Change (CC) Objective 3. "*Foster enabling conditions for mainstreaming mitigation concerns into sustainable development strategies*". In this context, in terms of land degradation, the Project supports GEF-7 by creating an enabling environment for LDN target implementation, as well as on the ground implementation of SLM. Moreover, based on the SLM approach and the lessons learned, CONAF and MMA are leading a new GEF-7 Project for "Restoration of biodiversity and ecosystem services at the landscape scale on productive agroforestry areas and their natural environment", which is currently under design. As per biodiversity the Project contributes to mainstream actions across diverse sectors and landscapes; address direct drivers to protect habitats and species; and further develop biodiversity policy and institutional frameworks. In the same way, the Project contributes to climate change by supporting the alignment of national priorities including national climate strategies and plans (such as ENCCRV), Nationally Determined Contributions (NDCs), among others.

31. ***National development priorities*:** The PDO remains highly relevant to national priorities as several key national policies and instruments had been developed by Project closure relating to Chile's sustainable land and natural resource management institutions and governance. One prominent example is the National Forest Policy 2015-2030, developed through a participatory process with a multi-stakeholder Council to promote a sustainable forestry development strategy for the Country. Similarly, the National Rural Development Policy (NRDP), approved in 2020, under its Environmental pillar, seeks to promote the creation and/or adaptation of sustainable instruments, practices, and technologies to prevent

desertification and soil erosion in the Country, encouraging SLM practices to adapt to local contexts and needs. Finally, the National Biodiversity Report 2020 emphasizes the importance of integrated land planning that balances stakeholders' interests in integrated conservation and ecosystems management with different sustainable land use.

32. ***International commitments:*** The Project has contributed to fulfilling international commitments, such as under the NDCs update presented in April 2020, which considers the National Landscapes Restoration Plan as a cross-cutting contribution to restoring ecosystems and landscapes with multiple uses. In addition, as a signatory of the UNCCD, the Project directly contributed with the preparation of the Land Degradation Neutrality monitoring report to submit to the UNCCD. The Project is clearly aligned with objectives of the international commitments signed by the Country under (i) the Sustainable Development Goals (SDGs), through goal 15 "Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss" and (ii) the CBD with the second objective of the sustainable use of its components, and Aichi Targets' strategic goals B and E. The Project has contributed to these commitments by developing effective regulation of SLM through participatory processes, piloted the implementation of sustainable management plans and application of better and sustainable agricultural practices, improve knowledge management and capacity building on SLM.

B. ACHIEVEMENT OF PDOs (EFFICACY)

Rating: Substantial

Assessment of Achievement of Each Objective/Outcome

33. The PDO of this Project contained a single Outcome, which is to *Develop a national framework for sustainable land management to combat land degradation, mainstream biodiversity into national policies, and protect forest carbon assets in the Member Country's territory.* While this was only one Outcome, the Project supported the development of the elements of a comprehensive National framework for SLM. Each of the four central elements comprising the National Framework for SLM were developed through four separate Components and associated with a PDO indicator. In view of this, the assessment of the efficacy is measured by an aggregated assessment of all four PDO indicators. The Project Outcome was largely achieved, with all corresponding revised PDO indicators, as well as all revised intermediate results, fully achieved.

PDO indicator 1*: "Development of an effective national framework to mitigate land degradation, which includes biodiversity mainstreaming and protection of forest carbon assets".*

34. The outcome indicator definition was revised as part of the Restructuring 2017 and determined that this "will be considered met when the National SLM Framework is presented to and approved by the Ministerial Council on Sustainability". To achieve this short-term outcome, the Project initially focused on producing and systematizing knowledge products and experiences that contributed to the enhancement of policy instruments for SLM. This is the case of the *Analysis Report on Relevant Instruments for Degraded* Lands, which thoroughly examines six policy incentives, identifying opportunities, gaps, and recommendations to better adapt them to improve degraded areas. This Report is an illustrative example of the contributions of the Project to strengthening the National policy framework for SLM. Additionally, the Project conducted a detailed *Analysis of degraded lands* to prioritize areas, based on vulnerabilities and potential for replicating activities.

35. The initial Project outputs contributed to the participatory development of the ENCCRV[8], led by the Climate

[8] The general objective of the ENCCRV is to "Reduce the social, environmental and economic vulnerability generated by climate change, desertification, land degradation and drought on vegetation resources and human communities that depend on them, in order to increase the resilience of ecosystems and contribute to mitigating climate change, promoting the reduction and capture of greenhouse gas emissions in Chile".

Change and Environmental Services Unit (UCCSA, *Unidad de Cambio Climático Servicios Ambientales*) and financed with diverse contributions from international donors[9]. Given the reciprocity of the SLM Project objectives with the ENCCRV, CONAF considered strategic to fully integrate these efforts; hence, the Project was aligned with the Strategy (ENCCRV) as one of its early implementation pilot initiatives to focus on consolidating SLM aspects. The National Advisory Committee acknowledged the SLM approach developed under the Project as an effective framework for coordinating national SLM efforts towards improving conditions on biodiversity, land degradation and carbon forests assets[10]. Given the strategic approach of the ENCCRV and its national impact, the Ministerial Council on Sustainability approved the Strategy as a key policy instrument to guide larger national efforts on climate mitigation and ecosystem resilience - including SLM- thus, achieving the PDOI-1.

36. Other outputs, developed by the Project, that further contributed to increase the ENCCRV's effectiveness as a SLM national framework included the elaboration of detailed Criteria and a software tool for a targeted selection of beneficiaries of SLM activities. These criteria will help CONAF's regional offices across the Country to prioritize beneficiaries for the implementation of SLM through the ENCCRV's third phase[11] (Results payments agreements), by considering not only technical aspects, but also vulnerability risk, potential for emissions mitigation, and social aspects. The Criteria, already adopted by the regional offices, will be used to guide the implementation of the Chilean Emissions Reduction Program, even beyond the geographic scope of the Project. Moreover, during the last year of implementation, to amplify Project sustainability after closure, and to strengthen SLM national policies, SLM regional representatives of CONAF participated in the Agricultural Sustainable Soils Promotion Program (ASSPP) local round tables, to provide inputs and share lessons learned from the Project that contributed to the updating process of this Program (to be renewed in 2022). In addition, a report on *Recommendations for policy Instruments Modifications* was prepared by the Project to enhance policy instruments by adapting them to local needs and reality, drawing from the results and experience gained through Component 2 activities. The National Advisory Committee approved the document to be shared with ODEPA to communicate and advocate for these recommendations with authorities and policy makers after Project closure.

PDO indicator 2: *"Land Area under sustainable landscape management practices"*

37. The Project sought to put in place an adaptive SLM framework that informed – and was informed by – implementation experience across a range of areas and ecosystems. The pilot activities supported were central to Project success and served critical functions: i) coordinating existing SLM mechanisms while identifying gaps in incentive programs and piloting new approaches to address SLM on the ground; ii) validating and enhancing the impact of existing programs with direct beneficiary feedback. Through the successful piloting of a SLM demand-driven approach, the Project implemented demonstrative activities and coordinated actions on the ground for sustainable landscape management on 50,475 ha, largely surpassing the revised target (168 percent of the revised target of 30,000). These areas allowed to demonstrate in a diverse set of ecosystems and field sizes and types, practices that could be scaled-up to promote SLM on the ground.

38. At the field level, regional teams engaged and invited beneficiaries to design participatory Farm-level plans to identify priorities and SLM needs. The participatory approach of these plans helped to ensure that interventions and activities were consistent across sectors, allowing actionable collaborations between institutions and promoting synergies between incentive instruments, thus, reducing institutional fragmentation and overlap. A total of 354 plans were developed for a diverse set of fields (151 percent of the intermediate result target), ranging from over 0,2 to 10,000 ha in diverse landscapes from the Altiplano highlands to Patagonian pastures. Each of these plans provided key technical

[9] Financed by multilateral and bilateral donations, including the Forest Carbon Partnership Facility (FCPF) and the World Bank.
[10] For further information, see the SLM Project Mid Term Review (2017) which prepared a detailed analysis on the contributions and actions of ENCCRV towards combating land degradation, mainstreaming biodiversity, and protecting forest carbon assets.
[11] The ENCCRV is divided in three phases: (i) Preparation, (ii) Implementation of Action measures and (iii) Payments for Results.

and financial information to landholders, who could create a strategic and integrated five-year planning for their lands for the first time. With the plans for each farm, beneficiaries were able to overcome barriers of incentive instruments, increasing their access to financing through government programs. In addition to financial resources, these actions made it possible to channel human and technical resources from different government institutions to improve land management and have a greater impact on the ground. The success of the Farm-level plans was a result of the active participation of beneficiaries and face-to-face coordination between institutions. Recognizing their value, CONAF publicly signed a commitment with each beneficiary to implement the plans.

39. The active involvement of beneficiaries in developing the Farm-level plans and design of on the ground practices were Project highlights, increasing participation, engagement, capacity and beneficiaries' ability to implement SLM effectively. Other planning instruments were developed to increase the area under sustainable land management, even beyond Project closure, and included the Sustainable Forest management plans (7,588 ha), Conservation Corridors designs (22,591 ha), five Regional Strategic Plans 2021-2026. To ensure increased capacities for SLM implementation in pilot areas, the Project conducted capacity building activities, training 2,383 forest users and community members on key SLM aspects, which included 1,117 women (414 percent of the revised target) and 614 people from indigenous groups (204 percent of the revised target). The interest in the Project and the SLM approach was demonstrated by the high level of participation in these training activities (revised targets were increased and surpassed), and the fact that in two regions, once field activities started, communities of two additional neighboring municipalities requested to join the Project (General Lagos in Arica, and Marchigüe in O'Higgins). The Project was responsible for directly benefitting a total number of 1,845 beneficiaries of on the ground activities (117 percent of the revised target), including recipients of Farm-level Plans and their direct relatives (living or working in the farm), as well as farm holders supported by the Project's regional teams.

40. The Project supported several innovative practices that were not financed by regular/existing incentive instruments, contributing to the achievement the Outcome, and its PDOI-2. The Project provided direct funding for these activities to demonstrate their benefits and potential for incorporating them into government programs. Some of these activities included the sustainable management of livestock and pastures, recovery of degraded areas, management of eroded slopes, protection of water infiltration areas, among others. An example of the high potential contribution for SLM demonstrated through the Project was the Integrated Wetlands Management (IWM) approach implemented in 22,179 ha in the Putre and General Lagos pilot area. In the altiplano desert, the wetlands (*bofedales*) are oases for wildlife and domestic animals; yet, soil compaction and salination, overgrazing, desertification and degradation, deficient livestock pest management, and even migration of young people to the cities, jeopardize the stability of these fragile ecosystems. Using ancestral Aymara practices of creating canals across the wetland and replanting the plants removed in this process, local communities allowed the water to flow, decreasing salination and restoring natural vegetation, while increasing biodiversity and feeding areas. In addition, CONAF implemented preventive control of pests and diseases for the livestock, prepared preliminary carrying capacity assessments for grazing, and estimated the potential impact of IWM (1 ha improved can benefit 7 ha total). Pest control not only helped the flocks, which are mainly comprised by bovines and South American camelids (species prone to pests), but also protected the native camelids by controlling the incidence and pest load in the region, thus, contributing to integrating biodiversity aspects to this management practice. As a result of the successful demonstration of IWM, CONAF and the National Corporation of Indigenous Development (CONADI, Corporación Nacional de Desarrollo Indígena of the Ministry of Social Development) provided additional financing for upscaling the implementation of these effective SLM practices in the region. Additional information can be found in the Results Framework Annex 1.

PDO indicator 3: *"Improved capacity to monitor SLM at the national level".*

41. Considering that a functional and effective framework for SLM, requires MRV systems that support its adequate implementation, the Project contributed to improve the institutional capacity to monitor SLM and land degradation at national level. As part of this MRV strengthening process, the Project, with a consortium of universities, developed an Early Alert System to detect native forest and vegetation cover degradation in the Country, supporting CONAF's monitoring and enforcement efforts. This System[12] was launched in 2017 and is currently part of the larger internal Logging and Extraction Monitoring System in CONAF used across the Country, representing a key output and contribution to conduct MRV for SLM.

42. In order to advance with degradation monitoring and reporting, CONAF combined funding from the Project and the UN-REDD Program to commission a study and *Report on Land Degradation Neutrality (LDN), and Land Degradation, Desertification, and Drought (LDDD)* in the Country. This report resulted in a state-of-the-art analysis of degradation in the Country, a set of indicators, and a blueprint for reporting LDN and LDDD international commitments[13].

43. Both, the extended use of the Early Alert System for degradation, and the uptake and use of the Report on Land degradation by decision-makers, constituted the achievement of PDOI-3.

PDO indicator 4*: "Increased management and coordination capacity for SLM institutional mainstreaming"*.

44. In order to establish a strong SLM framework, the Project supported the development of institutional capacities and promoted multisectoral coordination at different scales between institutions and stakeholders. The Project provided training activities for professionals from MINAGRI, MMA, municipalities and other institutions to improve institutional capacities to better address the needs of small and medium farmers and mainstream SLM practices. These capacity-building efforts included courses, seminars, and workshops, adding a total of 60 events (100 percent of target achievement) on SLM related issues[14]. Additionally, 22 professionals from CONAF graduated from a masters-level degree sponsored by the Project. To complement the training efforts, the Project prepared and implemented five outreach regional plans that disseminated and communicated the activities and results of the Project and ENCCRV. These intermediate results contributed to a successful and regular work of the coordination bodies established by the Project.

45. To improve cross-sectoral coordination, a National Advisory Committee[15] was established early in the Project - with representatives of CONAF, INDAP, SAG, ODEPA, and the MMA– to provide strategic consultative and technical support to the Project. The representatives of this committee were key professionals working on topics related to the SLM within their institutions at a national scale, which promoted interinstitutional coordination while guiding activities and outputs of the Project. In addition, the Project established five SLM Management Commitments (also referred as Councils or CGAIs) to foster participatory and multi-stakeholder decision-making body at regional level (beneficiaries, local community associations, local government representatives, institutional representatives, among others). Within this, local professionals from the partner institutions, including representatives of municipalities, directly coordinated the integration of different institutional objectives and policies to respond to the beneficiaries' interests, while promoting SLM. Moreover, farmers -for the first time- could prioritize, request, and steer how the incentive instruments and pilot activities would be applied on the ground. The advances of these CGAIs opening new venues for institutional coordination

[12] This platform is used throughout the Country: *https://sites.google.com/conaf.cl/lemuconaf/inicio*
[13] Including the NDCs UNFCCC, UNCCD, and Sustainable Development Goal 15.3.1 on degraded lands.
[14] Training activities included: SLM, E&S safeguards aspects, IPPF preparation, preparation of farm-level plans, SIRSD-S operations, Gender equality, animal health, climate change and gender, FAO EXACT carbon accounting, M&E, among others.
[15] National Advisory Committee is also referred to as National Technical Committee or National-level advisory group.

at ground level and fostering learning initiatives, as well as Project continuity, was recognized by stakeholders of varied backgrounds as one of the most successful elements of the Project.

46. The establishment and regular operation of the National Advisory Committee and the CGAIs, contributed to the PDO, by providing technical and strategic guidance for SLM implementation, and improving the coordination and governance mechanisms for SLM-related institutions. This improved management and coordination capacity of national and local institutions to mainstream SLM, accounted for PDOI-44 achievement.

47. In conclusion, the success of the four PDO indicators (short-term outcomes) described above, led to the achievement of the PDO, by contributing to the effective implementation of the ENCCRV as the national SLM framework. Through several of its strategic actions[16] the ENCCRV continues after Project closure contributing to combat land degradation, mainstream biodiversity into national policies, and protect carbon forest assets; while advancing at national level the long-term outcomes of reduced vulnerability of communities, improved soils and ecosystems condition and integrated and sustainable landscapes management[17].

Justification of Overall Efficacy Rating

Rating: Substantial

48. The overall efficacy is rated Substantial. The abovementioned results and accomplishments demonstrated the Project's achievement in contributing to strengthen the institutional SLM framework at central and local level, as well as coordinating SLM initiatives under a multiscale framework of action, accomplishing inter-sectoral coordination for relevant topics, promoting SLM on the ground, and strengthening the national monitoring capacity. Therefore, considering the Project accomplishments and the achievement of the PDO indicators 1, 2, 3, and 4, and subsequently PDO, the overall efficacy is set as Substantial.

C. EFFICIENCY

Assessment of Efficiency and Rating

Rating: Moderate

49. **Economic Analysis.** The PAD and Restructuring Papers provide neither economic nor financial analysis of the Project. Therefore, the current document conducted an independent economic analysis aiming at determining whether the Project was socially profitable in terms of a variety of indicators such as net present value, benefit to cost ratio and internal rate of return (IRR). The benefits analyzed were those directly linked to the activities financed through GEF funds, implemented through pilot activities of component 2. These were pilots that contributed to key environmental aspects contained in the PDO (protecting carbon forest assets, mainstreaming biodiversity and combating land degradation).

[16]The ENCCRV contains several strategic actions that coordinate and prioritize national efforts. More details: https://0a19f2cb-4f60-4a31-b065-0187018fa2ae.filesusr.com/ugd/902a1e_3991af3b75d04dc5a972342a3cce019b.pdf

[17] The goals and targets of the ENCCRV are: (i) Mitigation: Reducing degradation and deforestation GHGs emissions in 20percent by 2025, below 2001-2013 reference level, and increase carbon sink capacity of vegetation resources; (ii)Adaptation: Reducing vulnerability derived from land degradation through sustainable management of vegetative resources, by directly working in at least 264,000 ha between 2017 and 2025. Reduced vulnerability will be measured including biodiversity, ecosystems services provision (such as water supply and quality), as well as soil productivity indicators.

50. The project generated multiple benefits through investments of SLM activities in: (i) management of peatland, forest, and soil; (ii) water security trough water rights titling and infrastructure; (iii) restoration and forestation; and (iv) implementing conservation corridors. Variables to calculate the Economic benefits were derived from PIU monitoring reports and past ISRs. Only prices and yields used in the calculations were extracted from updated secondary sources from Chile.

51. The project was expected to generate a variety of benefits not all of which could be quantified. Key quantifiable benefits expected included increased peatland productivity resulting in greater water and forage availability contributing to local development, biodiversity conservation and carbon sequestration. The project also creates several important non-quantifiable benefits such as institutional strengthening and capacity building at the national level, more effective and efficient responses to land degradation, capacity building at the regional level to support communities and landowners to get access to financing and technical guidance of SLM activities, use of local labor and Improved capacity of community institutions and beneficiary groups.

52. The analysis shows that Project GEF-funded activities under the presented assumptions, benefits and net benefits at present value are positive for a 6 percent discount rate, US$10,004,118 and US$5,594,461, respectively. Main benefits are water provision (US$3.24 million), carbon sequestration (US$2.30 million), biodiversity conservation (US$2.02 million), and forage provision (US$1.69 million). The Project´s activities generated a Benefit to Cost ratio of 2.3 and an Internal Rate of Return (IRR) of 21.3 percent.

53. **A sensitivity analysis** to evaluate much more conservative scenarios was carried out for multiple variables, including changes to discount rate (10 and 20 percent instead 6 percent), carbon price (US$5 and US$20 per ton CO2eq, instead of US$32.5 per ton CO2eq), exclusion of non-local benefits (such as carbon sequestration and biodiversity conservation), and reduction of the effectiveness in peatland management by a half. The project was found moderately sensitive to higher discount rates of 10 percent and 20 percent, lower carbon prices of US$5 and US$20 per ton CO2eq. and the exclusion of carbon sequestration benefits, with IRRs ranging between 16.3percent and 17.1percent. Simultaneous exclusion of carbon sequestration and biodiversity conservation benefits -the worst scenario- reduces the IRR to 10.6percent.

54. Therefore, the ex-post analysis thus shows that project-supported investments bring moderate benefits to local communities supported by the project and other Chilean stakeholders.

55. **Aspects of Design and Implementation that influenced Efficiency.** During its first years of implementation, the Project experienced significant implementation delays due to a lack of clarity and specificity of indicators, an overestimation of available counterpart funding, and, inconsistency and frequent turn-over of the Project coordinators and institutional counterparts. These factors led to an extensive revision at Mid-term to lower targets for Component 2, among other adjustments (see section I-B). The potential efficiency of the grant:co-financing ratio was lower than expected at appraisal (from 1:9 at design to 1:5 by closure), although it remained substantial.

56. In addition, later during the last years of implementation, the Project was affected by external factors, including the social uprising and the COVID-19 pandemic, thus undergoing two extensions. These extensions accounted for additional 22 months. When the Country requested the first 16 months extension, the undisbursed funds were 25.4 percent and at the time of the second extension, only 4.43 percent of the grant was undisbursed.

57. **Rating Efficiency:** The ex-post economic analysis justifies the developed activities. Nevertheless, substantial delays occurred in Project implementation, leading to less efficient disbursement rate and additional costs associated. Given that these additional costs were financed from other sources and the scope of the specific Project economic analysis

focus on the GEF financing, they have not been incorporated into the analysis. Therefore, Efficiency has been rated **Modest.**

D. JUSTIFICATION OF OVERALL OUTCOME RATING

58. An overall **Moderately Satisfactory** outcome rating is justified by the (i) continued High relevance of the development objectives, (ii) the Substantial achievement of intended Project outcomes and targets, and (iii) the Modest efficiency in allocating resources to achieve those outcomes.

E. OTHER OUTCOMES AND IMPACTS (IF ANY)

Gender

59. While the Project was not gender-tagged, it had a positive impact on women's representation with beneficiaries (44 percent) and their participation in capacity building activities (46.8 percent) largely surpassing the Project targets on women's participation (25 percent expected for both targets). Often, it is seen that women in the field have difficulties or are unable to access government programs on capacity building or agricultural incentive instruments. This is either because they are not the official landowners or due to cultural arrangements in which men are the head of the household. Capacity building activities for farmers and Farm-level plans considered participation of women and family members, despite individual landownership status. In addition, to promote their engagement in productive activities and as members and leaders of the Local committees, there were specific activities on women empowerment organized by the Project. Some of the initiatives and activities that women benefited from are: (i) regional women's dialogues; (ii) women's leadership workshops coordinated with a partner NGO in Coquimbo; (iii) women's dialogues on gender and rural issues in Araucania; (iv)activities to develop capacities women farmers, gatherers, artisans and local leaders with partners from the National Forestry Institute (INFOR, Instituto Nacional Forestal) in Coyhaique.

Institutional Strengthening

60. The Project contributed to CONAF's institutional strengthening by supporting the implementation of a policy national framework (i.e., the ENCCRV) that enables an integrated and coordinated implementation of programs and instruments to promote SLM practices on the ground. The Project also provided the necessary tools to CONAF to build and improve inter-institutional relationships with key partners who have direct influence in the SLM management, facilitating collaboration among government agencies towards common goals, at the national and regional levels. The Project assisted in activities designed to increase national and regional collaboration, and provided information to improve existing policies and practices. Additionally, it strengthened CONAF's capacity at national and local level through staff training, forest management plans, and equipment. Moreover, the implementation of subprojects at local level increased coordination of CONAF's and other government agencies to enhance their work at local level. The Project contributed also to the development of M&E systems designed to reach a national scale and to be integrated into the existing MINAGRI's platforms and systems.

Poverty Reduction and Shared Prosperity

61. The Project did not have an explicit poverty focus, but targeted local vulnerable communities and those earning lower incomes in rural areas. Through the design of Farm-level plans and the implementation of demonstrative activities and subprojects that promoted SLM, the Project supported participants to improve the benefits obtained from their land, forest, and other natural resource assets. Under an organized and coordinated plan, these activities allowed participants to access financing through policy instruments associated with SLM implementation. Beyond Project closure, Farm-level plans, and implementation of SLM practices have the potential to continue positively impacting the participants' livelihoods by enabling access to financing sources and reducing their vulnerability to climate change and extreme weather events.

Other Unintended Outcomes and Impacts

62. **Indigenous people's recognition**. The Project was accepted and embraced by indigenous communities due to its flexibility to accommodate actions to ancestral traditions, by consulting and listening to their needs and interests. An example of this is the IWM approach developed with indigenous Aymara communities (see Section II-B). Given the characteristics of the wetlands and land tenure in Putre (Arica, north of Chile), this approach mobilized tens of thousands of ha in the region. Similarly, in Carahue-Puerto Saavedra (Araucania, south of Chile) the Mapuche communities implemented activities for protecting sacred forest areas, sacred water sources, and areas for collecting traditional medicinal plants, having an intrinsic value, that goes beyond the Results Framework. The PIU and regional teams, with the direct assistance of CONAF's indigenous peoples' unit (UAIS, Unidad de Asuntos Indigenas y Sociales), implemented participatory intercultural methodologies (particularly designed for Aymara and Mapuche) to engage, assess, and design field interventions with communities. Additional evidence on the importance of this approach can be inferred from the support that the CONADI provided to the Project. While CONADI does not belong to MINAGRI, and was not part of the original participant institutions, they joined the Project to provide counterpart funding (US$385,000), and pledged additional funds to sustain these advances beyond Project closure.

63. **Citizen engagement.** The participatory nature of the Project required multiple engagement activities with beneficiaries to incorporate their views and address their needs. The Project engaged citizens through capacity building activities, participatory land planning for farms, and governance systems for multi stakeholders' participation. These efforts successfully engaged beneficiaries across the regions: training activities for forest users reached 2,838 people (including 1,117 women and 614 indigenous people), and 1,845 people benefited from the participatory process carried out to develop 354 farm level plans. The governance bodies established by the Project promoted the integration of beneficiaries in decision making in five Management Committees (CGAIs) at local level, by fostering a horizontal communication with regional representatives of institutions and municipal professionals. At Project closure, CONAF conducted a perception survey for beneficiaries, showing positive results in four regions (in Coyhaique due to traveling restrictions was not possible to apply the survey), as beneficiaries expressed their satisfaction with the Project objectives and results.

III. KEY FACTORS THAT AFFECTED IMPLEMENTATION AND OUTCOME

A. KEY FACTORS DURING PREPARATION

64. **Preparation Process.** Time dedicated to design the Project was lengthy and the process inconsistent. The Bank approved a Project Preparation Grant Agreement for the GoC in 2005. The long process to approval (2013) and delays in the early implementation phase (see next section) derived, over the first years of implementation, on unfulfilled expectations from stakeholders.

65. **Theory of Change.** While a ToC was not required at the time of preparation (See section I-A), the Project was anchored in Critical Assumptions (CA) described in the PAD, for its implementation. The CA "*Identified incentive instruments are active and can provide funding to beneficiaries*" proved to be an important element of design. One of the incentive instruments identified at preparation as counterpart funding for piloting of areas under Component 2 was not available for implementation, thus requiring a calibration of targets (see section I-B Restructuring). These changes did not alter the scope of the PDO, or the design, as pilot activities were designed to analyze and use the available incentive instruments in the Country.

66. **Adequacy of Risk evaluation**. The Operation Risk Assessment Framework (ORAF) developed at preparation proved useful in assessing the emerging risks. Capacity of the Implementing Agency risk was rated at Moderate risk, due to the limited experience that CONAF and AGCID had with World Bank projects, as well as the challenges of having a decentralized implementation of activities with regional offices. The thorough ORAF prepared, informed Project implementation and supervision conducted by the Task Team, allowing for mitigating actions during implementations

B. KEY FACTORS DURING IMPLEMENTATION

Factors subject to government control

67. **Human resources and organizational capacity.** Over the implementation period, the Project experienced several changes in institutional leadership and coordination teams. The establishment of the PIU was inconsistent over the first four years of operation due to diverse situations, including: (i) capacity constraints to hire PIU staff; (ii) staffing regional teams and procurement specialists took longer than expected; and (iii) several PIU members -including coordinators- were not fully dedicated to the Project. After the MTR, CONAF addressed these issues by establishing a fully staffed PIU that managed to advance Project activities and objectives. During the last months of implementation, CONAF assigned a PIU member as the new Project Coordinator for the three active World Bank operations (The Sustainable Land Management Project, FCPF Readiness grant, and the Emissions Reduction Payment Agreement), requiring additional support from the Bank Task team. The lack of continuity and shortages of staff affected the implementation of the Project, resulting in restricted capacity of the PIU to supervise and meet agreed upon deadlines. However, the disposition of existing staff (particularly regional), and the additional technical and close monitoring support provided by the Bank, contributed to the successful completion of all Project targets.

68. **Administrative and Fiduciary Management.** Over the course of the Project, Chile demonstrated adequate control institutions and monitoring systems and ensured acceptable fiduciary management. Despite the existence of some fiduciary issues, the close supervision of AGCID and thorough reports of the National Comptroller Agency allowed for timely solutions.

69. **Engagement with stakeholders.** The implementation of activities with beneficiaries, and regional participation required extensive time for adequate engagement. The Project was successful at engaging stakeholders through governance arrangements and close on the ground support. The Project proposed new coordination arrangements at

the institutional level, which demanded significant commitment from the participating organizations to successfully coordinate interventions at national and regional level. After mid-term, the PIU and regional teams steadily worked to engage and build trust with beneficiaries and local authorities. As a result of this participatory approach, the PIU and regional teams were able to build a strong relationship with the beneficiaries and closely collaborate with them. Stakeholders joined local committees as active members, and many of them recognized the SLM approach and the participatory nature of the Project as the main strengths of the initiative.

70. **Legislation and regulations.** The development process of different policies and regulations led by CONAF and partner institutions created a favorable scenario for the Project. Most importantly, the ENCCRV (2017-2025) constituted the SLM framework to achieve PDO Indicator 1 (see Section B-II). During the last semester of the Project, the UCCSA was upgraded from an institutional unit to a department. Whereas this institutional improvement had no direct influence on the project's implementation, it demonstrates the increasing interest at national level on these issues, promoting favorable impacts on Project's sustainability over time. Other instruments developed during the timeframe of the Project that can contribute to SLM sustainability are (i) the National Forest Policy 2015-2035; (ii) the National Biodiversity Strategy 2017 – 2030; (iii) the National Landscapes Restoration Plan 2020-2030; and (iv) the updating process of the ASSPP.

71. **Implementation risks and disbursement rates.** The delays encountered over the first years of implementation led to lower ratings of Progress towards achieving PDO and Overall Implementation Progress, thus changing the Project classification to Actual problem Project. In addition, during the Restructuring process of 2017, the risk ratings were increased from Low to Substantial for the Political and Governance, Institutional Capacity and Sustainability and Overall ratings (more details in the Restructuring paper 2017). CONAF and partners institutions adequately responded to address identified issues. After MTR the Project implementation rate at ground level increased, the PIU was operative and staffed, and coordination bodies met regularly, which allowed upgrading of Project ratings.

Factors subject to World Bank control

72. **Adequacy of supervision.** The Bank Task Team conducted bi-annual supervision missions to provide the team Project with adequate guidance, as well as constant progress monitoring meetings. Considering the long period between preparation and the closing date, several Task Teams participated in the Project, including Task Team Leaders (TTLs). While the Bank team provided appropriate support and addressed issues that arose throughout project preparation and implementation, the Project could have benefited in early stages if these were identified in a timely manner and mitigation measures applied earlier, even prior to Mid-term Review (MTR). Throughout the Project, the Task Team supported, guided, and trained, Project staff in fiduciary management and safeguards to improve the capacities of the national teams and secure that the donor and Bank's requirements were met.

Factors outside the control of government and/or implementing entities

73. **Social unrest.** In October 2019, Chile experienced social unrest, creating political instability and mobility restrictions. This situation slowed down on-the-ground activities across the Country, requiring the rescheduling of several tasks. While this situation generated uncertainty, it did not affect the trust already built between communities and the implementing teams.

74. **COVID-19 pandemic.** Similar to other projects worldwide, this Project was affected and delayed by the COVID-19 pandemic. As mentioned in Section I, Rationale for changes, the Country was granted an additional extension. The PIU, with the guidance of the Environmental and Social (E&S) specialists, worked together to comply with national and Bank's restrictions and sanitary measures. Due to strict measures limiting mobility, it was not possible to perform as many field supervision activities as originally planned, including the Bank's final in-person mission. The PIU

ameliorated this by inviting regional teams to the last two virtual missions to present their work, highlighting the results of their efforts, recommendations and lessons learned at local level.

IV. BANK PERFORMANCE, COMPLIANCE ISSUES, AND RISK TO DEVELOPMENT OUTCOME

A. QUALITY OF MONITORING AND EVALUATION (M&E)

Rating: Modest

M&E Design

75. While the number of intermediate results was large, environmental and technical SLM aspects were well addressed in the RF. Nonetheless, identifying institutional indicators that captured the institutional achievements of the Project proved to be challenging at appraisal. The original RF presented unclear definitions for some institutional indicators, and used binary indicators (Yes/No) for which it was difficult to account for progress. However, during Restructuring 2017, additional definitions and details on data source and methodology addressed these challenges providing clearer definitions to ensure consistency of interpretations and monitoring methodologies to improve measurability during the implementation of the Project.

76. An M&E system to collect information, with clearly defined processes, responsibilities and methodologies, had not been properly designed at appraisal, which did not enable effective monitoring of Project activities during the first years of implementation.

M&E Implementation

77. After MTR, the M&E system of the Project was operational and facilitated timely tracking of the results and progress toward Project objectives. The M&E function was led by the PIU based in CONAF and supported by its regional offices, AGCID and other partners involved in project implementation based on the methodology established in the Project Operations Manual (POM). In addition to the data collected to measure progress against indicators included in the Project's Results Framework, the Project also compiled detailed information on the progress of individual activities and outputs, which was included in ISRs and semi-annual progress reports (including safeguards "Regional Safeguards Compliance Reports"-RSCR) prepared by the PIU. Risk monitoring was also documented in the ISRs. Moreover, an independent mid-term evaluation was carried out in the first half of 2017 prior to the MTR and completed in August 2017. In addition, and rather than developing a parallel Grievance Redress Mechanism (GRM), CONAF's existing System for Citizen Information and Attention (SIAC, *Sistema de Información y Atención Ciudadana*), which complies with Chile's requirement to operate an Office for Information, Claims, and Suggestions (OIRS, *Oficina de Información, Reclamos y Sugerencias*) in every public agency, was use as the Project GRM. CONAF maintained an active OIRS in each of the five Project pilot regions.

M&E Utilization

78. **M&E was utilized for regular reporting, informing the restructuring processes, and PIU management decisions**. The regular ISRs prepared by the Task teams allowed to identify and address the significant delays, causing the Project to be categorized under problem status from June 2016 to June 2018. At the MTR, available monitoring data was used to facilitate restructuring of the Project. The lack of clarity and progress of several results indicators underlined the need to revise the results framework in order to be able to better assess progress towards achievement of Project results. After MTR, M&E data was regularly reviewed by CONAF and Project staff, and was effectively used as an adaptive management tool to plan activities and to inform decision-making about any necessary Project course-correction. In addition, the

applications of M&E tools also allowed the identification of other shortcomings, which allowed the PIU to address more effectively and overcome challenges related to procurement, safeguards, and eventually the COVID-19 pandemic, to ensure that the Project achieved its outcome targets by the closing date.

Justification of Overall Rating of Quality of M&E

79. **Overall quality of Project monitoring and evaluation is rated Modest.** Once established, the M&E system was adequate in terms of capturing results, and was facilitated by the development of formal data collection and interpretation protocols. However, considering deficiencies in adequately defining indicators, and initial delays in setting up a functioning system and having the necessary capacity to manage the system in place, the Quality of M&E is rated Modest

B. ENVIRONMENTAL, SOCIAL, AND FIDUCIARY COMPLIANCE

80. **The Project was classified as Category B given the mainly positive environmental effects expected, and the low potential risks and negative impacts identified.** Since the nature and scale of activities were associated with small-scale agricultural and forestry activities, the initial assessment identified low potential environmental, social, health, and safety risks. The Project triggered the following Bank safeguard Operational Policies/Bank Policies (OP/BP): Environmental Assessment (OP/BP 4.01), Natural Habitats (OP/BP 4.04), Forests (OP/BP 4.36), Pest Management (OP 4.09), Indigenous Peoples (OP/BP 4.10), Physical Cultural Resources (OP/BP 4.11), and Involuntary Resettlement (OP/BP 4.12). Further details are in Annex 7.

81. Multiple safeguards instruments were developed during the Project preparation and implementation phases to prepare for the on the ground implementing phase. An Environmental Management Framework was developed, in compliance with both national regulations and OP 4.01, and disclosed in November 2012 prior to Appraisal. Although involuntary displacement and resettlement were not expected, a Resettlement Policy Framework (RPF) was prepared, as a precautionary measure. In addition, the Social Assessment (SA) prepared for the Project focused on the possibility of adverse socioeconomic impacts stemming from restrictions of communities' access to natural resources in protected areas, which was especially important for Putre, as the only pilot area where activities occurred directly in protected areas. Indigenous Peoples Planning Frameworks (IPPF) were was also prepared for the pilot areas with indigenous peoples' presence, including Putre, Carahue-Saavedra, and Coyhaique. In order to guide regions on the adequate implementation of the safeguards' measures, the PIU developed a "Procedure for Compliance with Environmental and Social Safeguards in the Project" in 2018. This document includes a series of tools, templates, and instructions to help regional teams engage in socio-environmental management of site-specific interventions. Furthermore, during Project implementation, additional documents were developed or updated to reflect new activities, changes in national regulations, and the new areas of intervention.

82. A flexible GRM was implemented in the regions, according to local conditions. Considering that many of the Project areas are isolated from main urban centers, and telecommunications connectivity is poor, the Project adapted the national GRM to ensure beneficiaries in extreme areas could use the mechanism. The national OIRS receives requests in institutional offices, via telephone or internet. In addition, the teams on the ground implemented a field-system, where they could directly receive, register and communicate any grievance that the beneficiaries might report. All the requests received were duly answered, as required by national and Bank regulations.

83. The Project consistently exhibited strong socio-environmental management performance during its implementation. While some challenges arose during the Project life, CONAF's PIU duly incorporated the recommendations and actionable measures proposed by the Bank, successfully overcoming those challenges. Consequently, the final overall environmental and social safeguard compliance and performance were rated Satisfactory. The PIU maintained a well staff safeguards team, with a safeguards coordinator and between one and two environmental specialists at the central level, working in tandem with CONAF's Indigenous UAIS staff, who acted as social specialists. At the regional level, the Technical Assistance Teams (EATs, *Equipo de Asistencia Técnica*) and/or Regional Technical Support staff (ATRs, *Asistentes Técnicos Regionales*) were responsible for on-site socio-environmental management and monitoring.

84. AGCID put in place Financial Management arrangements for an adequate implementation of funds, budget preparation was clearly defined, financial reports were used by the Project for monitoring progress, and approval and authorization controls were well documented. In accordance with OP/BP 10.00, and the Financial Management Manual for World Bank-Financed Investment Operations, February 10, 2017, the arrangement is adequate. The Bank provided training to the Country staff in financial management matters, and the PIU and AGCID managed to deliver an acceptable financial management performance, including the timely submission of accurate interim financial management reports and annual audit reports. Audit reviews were performed by the General Comptroller Agency and auditors issued unqualified (clean) opinions on the financial statements of the Project. Nevertheless, the auditors and the Bank identified some internal control deficiencies along with Project implementation, mainly from CONAF, which included: using CONAF bank accounts instead of the Project operative account to pay Project expenditures, insufficient supporting documentation of the expenditures paid by CONAF, and delays in submitting justification of expenditures from CONAF to AGCID for advances of funds received from AGCID. The Bank monitored these deficiencies to improve the internal control environment at CONAF and AGCID, to ensure the issues identified were adequately solved. The final financial management arrangement and performance was rated Satisfactory.

85. Procurement plans were updated regularly to develop the budgets and directly submitted to the Bank by CONAF. Procurement processes were implemented based on both the applicable Bank guidelines at the time of appraisal and the National regulations (ChileCompra) under specific conditions and thresholds. Procurement plans under the Project were subject to Bank approval. The procurement for subprojects was managed directly by the selected regions and proved to be challenging, given the need to procure numerous small items and adhere to national and Bank procurement requirements for all goods and services. The Project also faced procurement challenges for updating and uploading the procurement plans to the Systematic Tracking of Exchanges in Procurement (STEP) portal. Despite this, and owing to the perseverance of the PIU and close guidance and training from the Bank's procurement team, the PIU was able to update the portal for most items by the time of Project closure. The final Project procurement performance was rated Satisfactory.

C. BANK PERFORMANCE

Rating: Moderately Satisfactory

Quality at Entry

86. The Project built on an earlier engagement (Project Development Facility A) between the GoC and the Bank to develop analytical activities that allowed the Country to identify the key elements and constrains that led to this Project (see Section III-A). The Project was strategically relevant to Chile, consistent with the CPS and well-aligned with the ongoing national activities. Preparation was complex and lengthy, from Concept Review (March 2005) to Board Approval (June 2013). The Project was grounded in technical analysis and diagnosis on environmental and causes of desertification and land degradation as well as human resilience and prosperity. An economic analysis and ToC were absent at appraisal.

87. As discussed above, Project design assumed the validity of a policy incentive instrument that expired at the time of approval, which contributed to deficiencies in counterpart funding and setting of targets values mainly for Component 2. The latter, together with the long approval process and limited implementation on the ground, created delays on the engagement of stakeholders and local communities.

88. Safeguards and fiduciary instruments were appropriately designed. Risks and mitigation measures were, for the most part, adequately identified and mitigated; notable exceptions were the underestimation of the time required for the GoC to acquire capacities for Project implementation management Given the community-driven nature of the subprojects, the design of component 2 would have benefited from conducting a participatory and early engagement

process in the selected regions, to ensure that local contexts and beneficiaries needs were clearly reflected in Project design, and targeted strategies were developed to fully engage women from the beginning of the Project.

89. World Bank team composition was also adequate, including experienced technical specialists – covering forestry, natural resources, agriculture- as well as fiduciary and safeguards specialists. The team also had extensive experience working with community-driven projects in other countries.

Quality of Supervision

90. Implementation support missions- including safeguards, financial management and procurement reviews—were held bi-annually (13 over the lifetime of the Project)- and included both field visits and meetings with high-level decision makers. Missions focused on reviewing performance as well as identification of key issues including those that needed management attention (such as implementation of community subprojects, procurement issues, among others). The restructuring of 2017 was the result of recommendations of the MTR and the team used the opportunity to improve implementation and processes forward, as well as to address design shortcomings. The Bank task team brought in adequate expertise, including technical specialists, procurement, financial management and social and environmental specialists.

91. Fiduciary aspects were regularly supervised, and Bank support helped to strengthen the financial management and procurement capacity of the PIU, and issues that surfaced were addressed timely and pragmatically. In different stages of Project implementation, the team also provided intensive support to the PIU procurement officer, including provision of training in different aspects and assistance with STEP portal. Furthermore, the Bank team actively supervised safeguards aspects, emphasizing field level activities with beneficiaries.

92. The Task Team Leaders closely worked together to ensure an adequate and smooth transition. In addition, given the magnitude of changes to the Project, and considering the challenges it faced, during the last year of the Project, the Bank Task team provided closer supervision and assistance to the PIU. The supervision missions were instrumental to complete the activities and meet the objectives, resulting in 97.14 percent of disbursement of grant proceeds and the achievement of the planned outcomes.

93. Overall, the World Bank task team provided clear recommendations and candid advice, downgrading the Project to Moderately Unsatisfactory for two years from June 2016 to June 2018, until performance improved. Safeguards reviews led to a downgrade in some social operational policies ratings until problems were solved. The Task team also gave candid feedback to World Bank management in ISRs and Aide Memoires, with realistic ratings, of good quality and filed on time. Attention to M&E could have been stronger during first years of implementation given the issues related to the results framework; by the time of the MTR more emphasis was placed on monitoring and reporting aspects.

94. After MTR, the World Bank task team worked proactively with the GoC to restructure the Project and to move forward in the most efficient and appropriate way with the implementation of the Project and make up for the time lost due to delays. In addition, prior to completion when travel was restricted due to COVID-19, the team conducted several virtual technical missions and close supervision, while maintaining awareness of the impacts of COVID-19.

Justification of Overall Rating of Bank Performance

95. The World Bank provided solutions to issues identified during the Project resulting in the achievement of most of the objectives and the disbursement and approval of 97.14 percent of the funds. Nevertheless, considering the abovementioned difficulties at entry, and that timely alerts and actions towards delays and emerging issues could had been optimized, World Bank performance is rated **Moderately Satisfactory**

D. RISK TO DEVELOPMENT OUTCOME

96. The GoC remains committed to the continuity of the Project, as evidenced by the adoption of the ENCCRV, not only as the Country's SLM framework, but also as the larger national strategy to increase the resilience of ecosystems and contribute to mitigation of climate change. At Project closure, the ENCCRV was in an advanced stage of implementation, corresponding to its third stage, which allows the Country to access to Results payment agreements for mitigating emissions and improving ecosystem services. In addition, the PDO remains relevant to the Country, through its contribution to international commitments in the UNCLD, CBD, and the NDCs presented to the UNFCCC. Yet, despite the alignment of the Project Objective with the GoC priorities, there are potential risks that might affect the sustainability of its development outcome.

97. While the sustainability of the ENCCRV is ensured through the GoC commitment, at Project closure was not yet clear the extent to which some policy outputs generated through the Project will be fully integrated into institutional programs and processes. The Project produced a Proposal Report for Revised Procedures of Existing and Future MINAGRI Instruments in line with the National SLM Framework, and provided recommendations during the formal updating process for the INDAP-SAG Program for Sustainable soils (ASSPP) 2022. These actions, currently led by ODEPA, have significant potential to influence national policy by scaling up the lessons learned and permanently integrating them into the instruments. There is a risk that in case authorities do not commit with these recommendations, the SLM institutional improvements identified by the Project will not be fully uptake by the GoC. Nevertheless, ODEPA demonstrated their interest in the SLM framework, and took the lead in advocating and ensuring the long-term adoption and scaling up of these recommendations at national level. Moreover, due to their institutional role of advising Ministry’s authorities and providing inputs for decision making, ODEPA has advanced the SLM approach, practices, and instruments through the Pilot for the update of the National Adaptation Plan. This Plan was designed to implement a sectoral regional pilot approach for climate adaptation for agriculture. Once this pilot concludes, and the Plan will be updated in 2022, MINAGRI expects to scale it up at national level, thus, expanding the SLM approach for adaptation to the rest of the regions of the Country.

98. Multi-sectoral coordination is required to maintain effective collaboration for the SLM framework over time. The Project was successful in achieving inter-agency collaboration at the national and regional levels; nevertheless, recognizing the challenge of maintaining this over time, several regional champions have taken specific actions to secure interinstitutional coordination and governance arrangements after Project closure. For example, in the case of Arica y Parinacota, indigenous leaders advocated for the inclusion of the SLM approach in the management of the Lauca Biosphere Reserve,and proposed to transfer the CGAI to the governance body of the Reserve, ensuring the continuity of this work. Moreover, CONAF and indigenous leaders presented a request to UNESCO to expand the Biosphere Reserve, which has the potential to increase the area of SLM implementation, as it has been adopted as the productive approach in the Reserve. These actions and champions mitigate the potential risk that multisectoral coordination would not be sustained.

99. A lack of financing to implement on the ground activities could increase the risk of sustaining the PDO. While the ENCCRV has ensured financing for the implementation of diverse institutional aspects, the GoC has an ongoing commitment to increase the available funds for on the ground activities. In addition, regional stakeholders demonstrated their interest to continue implementing some of the Project activities, for which fostered and proposed new efforts to ensure the availability of financial means through regional funds. Local authorities and interested stakeholders are closely working with regional teams to secure additional sources of funding to continue with SLM

activities (such as Farm-level plans) and strengthen the SLM approach beyond Project closure. The commitment at regional and local scale reduces the financial availability risk for on the ground activities.

V. LESSONS AND RECOMMENDATIONS

100. **A highly engaged PIU and a fully dedicated project coordinator are required to maintain the momentum of the project with a steady implementation rate, and to ensure the achievement and long-term sustainability of Project Development Objective.** Constant changes in the PIU team, as well as part-time coordinators and specialists proved to be challenging; these were factors that also influenced and reduced the implementation rate, articulation with stakeholders and communication with local teams during the first years of Project implementation. Once the Project established a PIU, with permanent specialists and regional teams, that knew the local realities, the implementation advanced at a consistent rate across the regions and project components. ***Recommendation:*** A full-time dedicated Project team is key to ensure efficient implementation and guarantee the timely fulfilment of Project's milestones. Also, ensuring throughout implementation to have a dedicated leader coordinating, connecting, and inspiring the team is crucial for securing project success.

101. **Decentralized project implementation requires orchestrated efforts between regional and central teams, including close supervision and clear operational rules.** The Project sites expanded across five different regions of Country, with the central PIU coordination based in the Country's capital. While coordination and day-to-day work required a regional approach and adaptation to local context, a highly decentralized management of local teams in this Project led to implementation delays and extensive additional administrative, fiduciary and safeguards work from the PIU during the closing period. Projects that are implemented in different landscapes and contexts can be extremely challenging, even when the government has local presence. ***Recommendation:*** Future projects with decentralized arrangements can benefit from clear and detailed local/regional procedures (including standardized (i) financial management, (ii) procurement procedures, (iii) M&E unified system, and (iv) safeguards processes established in the Project Operations Manual), and increased capacities for fiduciary and safeguards implementation at the PIU level and local teams. Additional internal quality control is key to ensure adequate implementation and correct reporting and recording of information and data.

102. **Farm-level planning instruments are effective tools with incremental impact potential to promote and coordinate SLM efforts.** Farm-level plans were identified by beneficiaries and regional teams as one of the most successful and useful instruments that the Project contributed to generate. Participatory Farm-level plans have a basic flexible structure to adapt to different regional contexts, fields, beneficiaries and their interests, which includes technical, financial, safeguards and strategic aspects. Beyond the potential impact of Project's national-scale framework, as the ENCCRV, the preparation of these 354 farm-level plans contributed to effectively implement actions in a short timeframe and foster immediate coordination and commitment from local institutional teams and authorities. Recognizing the effectiveness of Farm-level plans, the Country has incorporated this tool within new emerging projects, not only for regional initiatives, but also at national level through the sectoral Pilot National Adaptation Plan. This shows that local level instruments could have high impact and replicability potential to foster coordination and promote SLM. ***Recommendations:*** Projects looking to foster interinstitutional actions or promoting coordination should consider instruments at different scales, as effective coordination can be

scaled-up from local efforts to national level.

103. **The sustainability of project interventions is bound to the engagement and motivation of key stakeholders and decision-makers.** During implementation and closure, several examples of Project champions arose from the regional level that contributed to the continuity of SLM efforts at local scales, to ensure Project sustainability overtime. For instance, in Coquimbo, the Mayor integrated safeguards into municipal policies to ensure these tools can be used at local level after Project closure. In the case of Arica, the successful participatory and engagement processes, focused on indigenous people, led to the commitment of indigenous communities beyond the Project scope. There, indigenous and rural leaders became advocates with regional authorities to channel additional funding to continue and expand the number of Project beneficiaries and geographical scope, securing funds until May 2022. These and other champion-driven initiatives -including new projects, additional funding and securing of governance bodies- demonstrate that committed advocates play a key role supporting Project objectives even beyond closure. ***Recommendation:*** Early engagement and ownership of the project can motivate decision-makers and key stakeholders to champion the project during its implementation and beyond, contributing to an incremental impact, building a collaborative environment, and sustaining its outcomes in the future.

ANNEX 1. RESULTS FRAMEWORK AND KEY OUTPUTS

A. RESULTS INDICATORS

A.1 PDO Indicators

Objective/Outcome: To develop a national framework for sustainable land management

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Development of an effective national framework to mitigate land degradation, which includes biodiversity mainstreaming and protection of forest carbon assets.	Yes/No	No 09-Dec-2013	Y 09-Dec-2013	Yes 28-Jun-2017	Yes 30-Jun-2021

Comments (achievements against targets):
Target Achieved. The National Strategy for Climate Change and Vegetation Resources (ENCCRV, Spanish acronym) was adopted by the National Advisory Council as the National SLM Framework on December 19, 2017. The ENCCRV jointly addresses the issues of land degradation and desertification, climate change mitigation (REDD+) and adaptation, while promoting biodiversity conservation. It was launched by CONAF in November 2016 and was approved by the Ministerial Council on Sustainability.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion

Improved capacity to monitor SLM at the national level.	Yes/No	No 09-Dec-2013	Y 09-Dec-2013	Yes 28-Jun-2017	Yes 30-Jun-2021

Comments (achievements against targets):
Target achieved. Sustainable Land Management monitoring has been improved through the ENCCRV Monitoring System, under which specific information on degradation generated for the entire country. This allows to identify the degradation area in the Project regions. The information was generated through the processes of updating the Desertification, Land Degradation and Drought map and Land Degradation Neutrality baseline. This Project generated the basic inputs to improve the monitoring of land degradation for the period 2001-2013, 2013-2016 and projections for 2018. The Degradation Report was presented and shared with regional professionals and the National Advisory Committee, achieving with this, the end target for this result.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Increased management and coordination capacity for mainstreaming SLM into the institutional architecture of the Ministry of Agriculture.	Yes/No	No 09-Dec-2013	Y 09-Dec-2013	Yes 28-Jun-2017	Yes 30-Jun-2021

Comments (achievements against targets):
Target Achieved. The Project established a National-level SLM Advisory Group (Resolution 1233; Dec 2014), as well as Regional SLM Management Councils in each Strategic Pilot Area which held regular meetings. In addition, an Intra-Ministerial Committee on Climate Change was established and continued operational within MINAGRI.

Objective/Outcome: To combat land degradation, mainstream biodiversity, and protect forest carbon assets

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Land area under sustainable landscape management practices	Hectare(Ha)	0.00 09-Dec-2013	30000.00 09-Dec-2013	30,000.00 28-Jun-2017	50,475.00 30-Jun-2021

Comments (achievements against targets):
Target achieved and surpassed. The hectares were achieved through the implementation of activities including: (i) Sustainable Wetlands Management with Aymara indigenous communities in partnership with CONADI, (ii) Forest Management Plans for Pilot Areas Litueche and Coyhaique, and (iii) preparing projects with beneficiaries to apply for public funds from the Republic of Chile to development instruments, among others.

A.2 Intermediate Results Indicators

Component: National Sustainable Land Management Framework

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Assessment of and proposed adjustments to existing and future MAG instruments (incentive programs) and regulations that promote ecosystem restoration and protection for use in National SLM framework.	Yes/No	No 09-Dec-2013	Y 09-Dec-2013	Yes 28-Jun-2013	Yes 30-Jun-2021

Comments (achievements against targets):
Target Achieved. The final report "Analysis of state forestry, agricultural, and environmental development instruments applicable to degraded lands" was completed and approved by the National Advisory Committee. Regional teams participated in workshops, organized by the Ministry of agriculture, that collected information and experiences at regional level to update national agricultural financing instruments.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Priority areas identified for SLM Framework.	Yes/No	No 09-Dec-2013	Y 09-Dec-2013	Yes 28-Jun-2017	Yes 30-Jun-2021

Comments (achievements against targets):
Target Achieved. CONAF prepared a Land Degradation Neutrality Report (LDN) which serves as a national baseline identifying priority areas affected by land degradation, desertification and drought, at the municipal level under the UNCCD. In addition, the country developed a Forest Reference Level under the UNFCCC which identifies the areas with the highest climate change mitigation potential for five regions. Priority areas for SLM interventions were identified for each of the 5 Strategic Pilot Areas.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Eligibility criteria established for activities to be implemented under the SLM Framework.	Yes/No	No 09-Dec-2013	Y 09-Dec-2013	Yes 28-Jun-2017	Yes 30-Jun-2021

Comments (achievements against targets):
Target achieved. A detailed eligibility criteria was developed to guide regional teams on the implementation of SLM in future activities. The criteria prepared was integrated into the Emissions Reduction Country Program guidelines for the implementation of Benefit Sharing Plan's projects. The document was approved by the National SLM Advisory Group, on June 21, 2021.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Mainstreaming Climate Change Issues	Yes/No	No 09-Dec-2013	Y 09-Dec-2013	Yes 28-Jun-2017	Yes 30-Jun-2021

Comments (achievements against targets):
Target Achieved. The National Strategy on Climate Change and Vegetation Resources (ENCCRV), adopted as the National SLM Framework, was developed to mainstream climate change priorities in the management of the Country's vegetation resources. The Strategy (launched in 2016), contains actions towards improving conditions in regard to biodiversity, land degradation and carbon forests assets; the National Advisory Committee considered this strategic document an effective framework to coordinate efforts on these issues. As a result, the Project was integrated within the National Strategy process as one of its pilot and learning initiatives during the early implementation phase.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Alignment of existing instruments with SLM Framework.	Yes/No	No 09-Dec-2013	Y 09-Dec-2013	Yes 28-Jun-2017	Yes 30-Jun-2021

Comments (achievements against targets):
Target achieved. Based on the report "Analysis of state forestry, agricultural, and environmental development instruments applicable to degraded lands" and key information generated through the implementation of SLM demonstration activities, CONAF prepared a proposal to the Ministry of Agriculture for modifying national agricultural financing instruments based on the Project's experience. A final version of the "Report on Recommendations for policy Instruments Modifications" was approved by the National SLM Technical Committee.

Component: SLM Pilot Projects

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Direct project beneficiaries	Number	0.00 09-Dec-2013	2000.00 09-Dec-2013	1,573.00 28-Jun-2017	1,845.00 30-Jun-2021
Female beneficiaries	Percentage	0.00	25.00	25.00	44.00

Comments (achievements against targets):
Target achieved and surpassed. Participants, farmers and direct family members were benefited through demonstrative activities and on the ground implementation of SLM practices. It needs to be pointed out that the reported value of 1926 beneficiaries in the last ISR of November 2020, was reevaluated and a calculation error was found. Therefore, the value reported at project closing corrects this mistake and reports the actual number of beneficiaries being 1845.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion

Strategic Plans for SLM for Pilot Areas	Number	0.00 09-Dec-2013	5.00 09-Dec-2013	5.00 28-Jun-2017	5.00 30-Jun-2021

Comments (achievements against targets):
Target achieved. Regional Technical Assistance Project teams developed Plans for Strategic Pilot Area, which were complemented by CONAF. CONAF regional offices will use the Plans to keep promoting SLM after the Project closure, for the period 2021-2026.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Degraded Areas Identified and Categorized in Strategic Pilot Areas.	Yes/No	No 09-Dec-2013	Y 09-Dec-2013	Yes 28-Jun-2017	Yes 30-Jun-2020

Comments (achievements against targets):
Target achieved. The Strategic Plans developed include a chapter identifying and characterizing degraded lands in the five Strategic Pilot Areas covering 1.7 million ha, based on a complete degradation analysis that CONAF has prepared for the Country including degradation maps that identify 2.1 million degraded hectares.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Number of farm level plans developed in Strategic Pilot Areas.	Number	0.00 09-Dec-2013	0.00 09-Dec-2013	235.00 28-Jun-2017	354.00 30-Jun-2021

Comments (achievements against targets):
Target achieved and surpassed. Technical Assistance Teams engaged with beneficiaries on the ground to developed several farm-level plans which were the basis for the development of SLM subprojects.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
New areas outside protected areas managed as biodiversity-friendly (ha)	Number	0.00 09-Dec-2013	25000.00 09-Dec-2013	12,600.00 28-Jun-2017	22,591.00 30-Jun-2021

Comments (achievements against targets):
Target achieved and surpassed. The implementation of improved practices was supported by the development of Conservation corridor Plans for each region. This indicator is a subset of PDO indicator 2.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Amount of tons of CO2e sequestered through project investments over 5 years	Number	0.00 09-Dec-2013	347111.00 09-Dec-2013	1,087,131.00 28-Jun-2017	2,619,920.00 30-Jun-2021

Comments (achievements against targets):
Target achieved and surpassed. The Ex-Act tool from FAO was used to quantify the tons of CO2 absorbed in the five pilot areas.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Area restored or re/afforested	Hectare(Ha)	0.00 09-Dec-2013	3464.00 09-Dec-2013	570.00 28-Jun-2017	7,584.00 30-Jun-2021

Comments (achievements against targets):
Target achieved and surpassed. Implementation on the O'Higgins region over the last year surpassed expectations and increased the final number. This indicator reports the area re/afforested as a subset of PDO indicator 2.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Forest area brought under management plans	Hectare(Ha)	0.00 09-Dec-2013	57250.00 09-Dec-2013	7,530.00 28-Jun-2017	7,588.00 30-Jun-2021

Comments (achievements against targets):
Target achieved. This indicator reports the forest area brought under management plans. These plans constitute a formal commitment of the beneficiaries and CONAF to implement the defined practices. This is a subset of PDO indicator 2.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion

Forest users trained	Number	0.00 09-Dec-2013	1000.00 09-Dec-2013	1,000.00 28-Jun-2017	2,383.00 30-Jun-2021
Forest users trained - Female	Number	0.00 09-Dec-2013	50.00 09-Dec-2013	250.00 28-Jun-2017	1,117.00 30-Jun-2021
Forest users trained - Ethnic minority/indigenous people	Number	0.00 09-Dec-2013	60.00 09-Dec-2013	300.00 28-Jun-2017	614.00 30-Jun-2021

Comments (achievements against targets):
Target achieved and surpassed. Several training workshops were delivered for forest users and community members working on the management of land. Trainings included: (i) Women's Climate Change Conference; (ii) training on safeguards; (iii) improvement of forestry and agricultural practices; (iv) protection of ancestral practices from native people; (v) formulation and application of promotion mechanisms; (vi) plan production techniques, (vii) forest and ecological restoration; and (viii) sustainable water use; among others.

Component: SLM Monitoring and Evaluation System

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
National monitoring system for SLM designed and operational.	Yes/No	No 09-Dec-2013	Y 09-Dec-2013	Yes 28-Jun-2017	Yes 30-Jun-2021

Comments (achievements against targets):

Target achieved. A National monitoring system for SLM was designed and the software and tools were integrated into the national system for monitoring of the ENCCRV. This system provided the necessary information to develop the first monitoring REDD+ monitoring report submitted by CONAF in 2018 to the UNFCCC. A National Land degradation report was prepared under the consultancy "*National-scale estimation of neutrality in land degradation (NDT) and update of the desertification, land degradation and drought (DLDD) map for Chile*". The Degradation Report was shared with regional professionals and the National Advisory Committee. This information is basis of the Land Degradation Neutrality Report to be submitted to the UNCCD in 2022.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Early warning system for land degradation designed and operational.	Yes/No	No 09-Dec-2013	N 09-Dec-2013	Yes 28-Jun-2016	Yes 30-Jun-2021

Comments (achievements against targets):
Target achieved. The design of the early warning system was finalized and launched in November 2017, with an initial Pilot in the Chiloe Region in December 2017. Subsequently, and based on the success of the pilot, the system was adopted by CONAF's Forest Control Department (Gerencia de Fiscalización) and developed a report for each of the country's regions. An institutional management indicator has now been added on the use of the system.

Component: Institutional Capacity Building

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Training provided to national, regional and local agencies to promote inter-	Number	0.00 09-Dec-2013	60.00 09-Dec-2013	60.00 28-Jun-2017	60.00 30-Jun-2021

sectoral coordination on SLM implementation.					

Comments (achievements against targets):
Target on track. Regional teams have organized training sessions that will account allow the Project to accomplish the end target. Among the topic trainings developed to this date are the following: SLM, environmental and social safeguards aspects, PPI preparation, preparation of farm-level plans, Wetlands, Restoration, restoration of quenoas, integrated monitoring and management of Wetlands, SIRSD-S operations, Gender equality; animal health, climate change and gender, FAO EXACT carbon accounting, M&E, among others.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
University-level course on SLM and biodiversity mainstreaming developed and taught	Yes/No	No 09-Dec-2013	Y 09-Dec-2013	Yes 28-Jun-2017	Yes 30-Jun-2021

Comments (achievements against targets):
Target achieved. CONAF through the University Mayor has developed and finalized a Masters course on Climate Change and Native Vegetation which includes a SLM module, with 22 out of 23 students having received their Masters' degree.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Annual public outreach	Yes/No	No	Y	Yes	Yes

program.		09-Dec-2013	09-Dec-2013	28-Jun-2017	30-Jun-2021

Comments (achievements against targets):
Target achieved. There was dissemination plan established and implemented for each pilot region.

B. KEY OUTPUTS BY COMPONENT

Develop a national framework for sustainable land management	
Outcome Indicators (Revised, 2017)	1.Development of an effective national framework to mitigate land degradation, which includes biodiversity mainstreaming and protection of forest carbon assets. 2. Land area under sustainable landscape management practices. 3.Improved capacity to monitor SLM at national level. 4.Increased management and coordination capacity for mainstreaming SLM into the institutional architecture of the MINAGRI.
Intermediate Results Indicators (Revised, 2017)	1.1: Assessment of and proposed adjustments to existing and future MINAGRI instruments (incentive programs) and regulations that promote ecosystem restoration and protection for use in National SLM framework. 1.2: Priority areas identified for SLM Framework. 1.3: Eligibility criteria established for activities to be implemented under the SLM Framework. 1.4: Mainstreaming Climate Change Issues. 1.5: Alignment of existing instruments with SLM Framework. 2.1: Direct project beneficiaries. 2.2 Female beneficiaries (percent) 2.3: Strategic Plans for SLM for Pilot Areas 2.4: Degraded Areas Identified and Categorized in Strategic Pilot Areas. 2.5: Number of farm level plans developed in Strategic Pilot Areas. 2.6: Dropped 2.7: New areas outside protected areas managed as biodiversity-friendly (ha)

	2.8: Amount of tons of CO2e sequestered through project investments over 5 years. 2.9: Area restored or re/afforested (corporate results indicator). 2.10: Forest area brought under management plans (core). 2.11: Forest users trained (corporate results indicator). 2.12: Forest users trained – Female 2.13: Forest users trained - Ethnic minority/indigenous people. 3.1: National monitoring system for SLM designed and operational. 3.2 Early warning system for land degradation designed and operational. 4.1: Training provided to national, regional and local agencies to promote intersectoral coordination on SLM implementation. 4.2: University-level course on SLM and biodiversity mainstreaming. 4.3: Annual public outreach program.
Key Outputs by Component (linked to the achievement of the Objective/Outcome 1)	**Component 1: National Sustainable Land Management Framework** *This component aimed at developing a national flexible framework to integrate policies, programs and others to promote SLM.* (1) Detailed assessment of MINAGRI's programs regarding their potential for supporting SLM prepared by University of Chile. (2) Eligibility criteria and software for prioritizing beneficiaries and areas developed. This will support the implementation of SLM under the ENCCRV, first to be applied for the ERPA's Benefit Sharing Plan. (3) Proposal for revised procedures and improvements for existing and future MINAGRI instruments that contribute to SLM prepared and presented to the National Advisory Committee and ODEPA. **Component 2: SLM Pilot projects** *This component was designed to pilot the SLM framework at regional and local levels, by training beneficiaries to co-designing and*

	implementing on the ground pilot activities while coordinating between different institutions. (1) 354 farm-level plans developed in a participatory way with beneficiaries to propose SLM activities and practices, while planning on financing (including proposed governmental programs to apply), safeguards, and others. (2) Five strategic plans prepared as guidelines at regional scale based on the lessons learned of the project for the period 2021-2026. (Originally in the PAD, these were designed to be strategic guidelines for regional Project implementation). (3) Five biological corridors plans designed for each Project region. (implementation at closing differs between regions). (4) Forest Management Plans covering 7,588 ha to implement sustainable practices. (5) Carrying out pilot activities in all Project regions from which lessons learned were derived for component 1, and a total number of 50,475 ha under SLM were achieved. (6) Establishing local management committees (CGAIs) and carrying out training sessions and participatory processes to increase beneficiaries' engagement and inter institutional integration in order to develop regional pilot activities and farm-level plans. **Component 3: SLM Monitoring and Evaluation System.** *The component sought to develop a decision support system for policy makers, regarding land degradation and sustainable land management.* (1) Early warning system for land degradation prepared and operational at national scale and being used by CONAF professionals ("LEMU" system in Spanish).

	(2) A detailed national land degradation report prepared to be presented to the UNCCD in 2022. **Component 4: Institutional Capacity Building** *The aimed at promoting capacity building for institutional mainstreaming of SLM and improving inter institutional coordination mechanisms especially between CONAF, SAG, INDAP, MMA and local governments.* (1) Development and implementation of training programs and events on sustainable land management, biodiversity, climate change, monitoring of land degradation and desertification, safeguards implementation, among others. (2) National advisory committee, as a coordination mechanism of central offices of CONAF, ODEPA, SAG, INDAP, and MMA.

ANNEX 2. BANK LENDING AND IMPLEMENTATION SUPPORT/SUPERVISION

A. TASK TEAM MEMBERS

Name	Role
Preparation	
Peter Jipp	Task Team Leader(s)
Selene del Rocio La Vera	Procurement Specialist(s)
Ana Lucia Jimenez Nieto	Financial Management Specialist
Mi Hyun Miriam Bae	Social Specialist
Ricardo Larrobla	Social Specialist
Supervision/ICR	
Gabriela Encalada Romero	Task Team Leader(s)
Selene del Rocio La Vera	Procurement Specialist(s)
Nelly Ikeda	Financial Management Specialist
Kennan W. Rapp	Social Specialist
Elke Pinedo Castillo	Procurement Team
Juan Paulo Rivero Zanatta	Team Member
Francisco Javier Winter Donoso	Team Member
Maria Jose Carreras Gamarra	Environmental Specialist
Paloma Francisca Caro Torres	Team Member

B. STAFF TIME AND COST

Stage of Project Cycle	Staff Time and Cost	
	No. of staff weeks	US$ (including travel and consultant costs)
Preparation		
FY05	1.742	25,168.74
FY06	1.342	17,090.53
FY07	5.843	47,578.34
FY08	2.751	14,589.32
FY09	3.769	33,302.33
FY10	7.407	35,688.54
FY11	4.887	43,371.64
FY12	18.024	171,466.97
FY13	17.599	122,977.90
Total	**63.36**	**511,234.31**
Supervision/ICR		
FY14	10.156	62,203.80
FY15	4.369	36,413.25
FY16	1.842	33,726.95
FY17	7.944	74,118.33
FY18	13.295	79,137.16
FY19	9.175	82,065.30
FY20	14.375	91,517.64
Total	**61.16**	**459,182.43**

ANNEX 3. PROJECT COST BY COMPONENT

Components	Amount at Approval (US$M)	Actual at Project Closing (US$M)	Percentage of Approval (percent)
National Sustainable Land Management Framework	4.86	8.03	165.23
SLM Pilot Projects	39.11	15.4	38.46
SLM Monitoring and Evaluation System	9.60	5.99	62.40
Institutional Capacity Building	5.40	4.49	83.15
Project Management	4.90	2.29	46.73
Total	**63.86**	**36.21**	**56.70**

ANNEX 4. EFFICIENCY ANALYSIS

Efficiency Analysis of the GEF-Sustainable Land Management (SLM) in Chile

1. In this section, efficiency is analyzed by performing a benefit-cost analysis; and discussing direct and indirect benefits. The present analysis assesses partially the efficiency and PDO/GEO of the project funded by GEF.

2. The original PAD and Restructuring Papers did not provide neither economic nor financial analysis of the project to be used as a benchmark for the analysis presented in this document. Therefore, benefits were obtained from the PDO, results framework, and conversations with the technical teams.

3. The PDO is to develop a national framework for sustainable land management to combat land degradation, mainstream biodiversity into national policies, and protect forest carbon assets. The project has 5 Components. Component 1 develops a National Sustainable Land Management Framework to assess existing agriculture, forestry, ranching and conservation programs in order to identify gaps and provide recommendations of updates those programs to implement SLM initiatives. Component 2 consists of SLM Pilot Projects in 5 Areas, implementing demonstrative activities of desirable SLM, capacity building activities and technical assistance on best practices for agriculture, forestry, ranching and conservation. Component 3 designs and implements a SLM Monitoring and Evaluation System. Component 4 develops Institutional Capacity Building that supports inter-sectoral coordination, carries out capacity building to improve SLM, and to design and implement outreach activities to disseminate SLM information. Finally, Component 5 implements Project Management Support involving training, workshops and systems and capacities for monitoring.

4. The benefits analyzed were those directly linked to the activities financed through GEF funds, implemented through pilot activities of Component 2 – Sustainable Land Management (SLM). These were pilots that contributed to key environmental aspects contained in the PDO (protecting carbon forest assets, mainstreaming biodiversity, and combating land degradation). The present analysis only accounts for the GEF costs and excluded co-financing. Therefore, benefits estimations exclude benefits related through co-financing.

5. However, the project also creates a number of important positive externalities under Component 1, Component 3 and Component 4, which have not been quantified because of the difficulty to assess in monetary terms the effects of institutional strengthening and capacity building. Component 1 allows identifying and redirecting funding that -in other circumstances- would not have been assigned to implement current and future SLM measures. Component 3 develops a decision support system for policy makers that identifies conditions leading to forest and land degradation, allowing for a more effective and efficient responses throughout the implementation and expansion of SLM activities in the Country. Component 4 creates capacity building at the regional level to support communities and landowners to get access to financing and technical guidance of SLM activities now and in the future.

6. The investments costs considered for this analysis come from the disbursement information as June 2021 which had been USD$ 5,276,472. Since the Project experienced significant delays in start-up activities, affecting the pace of implementation and disbursements, especially Component 2 – SLM Pilot Projects (representing more than 60percent of total project financing), most disbursement took place after 2018.

7. The analysis shows that Project GEF-funded activities, under the presented assumptions, benefits and net benefits at present value are positive for a 6 percent discount rate, US$10,004,118 and US$5,594,461, respectively. Main benefits are water provision (US$3.24 million), carbon sequestration

(US$2.30 million), biodiversity conservation (US$2.02 million), and forage provision (US$1.69 million). The Project´s activities generated a Benefit to Cost ratio of 2.3 and an Internal Rate of Return (IRR) of 21.3 percent. The project's returns are nevertheless sensitive to several scenarios as reflected by the sensitivity analysis. The economic analysis thus shows that project-supported investments bring substantial benefits to local communities supported by the project and other stakeholders.

8. The result is a conservative estimate of return on investment. Any additional net benefits that could be quantified and added up will lead to higher returns. The components and subcomponents of this project are not separable and are therefore all required to capture planned benefits. While the quantitative results shown later in the ex-post analysis is focused only on the benefits from SLM activities of Component 2, the success of the project not only during the implementation stage but also during current and future implementations relies on Components 1,3 and 4.

9. The ICR results could not be compared with those calculated in the PAD because the ex-ante analysis had not computed Internal Rate of Return (IRRs) or NPVs. This shortcoming in the project design was due to the difficulty to appraise in advance the investments and the complexity to quantify environmental benefits due to lack of information at that time. In contrast, the ex-post efficiency analysis estimates benefits associated to the actual investments in the implementation of different demonstrative and management activities for the Component 2 – SLM in five pilot projects areas: Putre-General Lagos, Combarbala, Litueche-Marchigue, Carahue-Saavedra, and Coyhaique.

The Project benefits stakeholders at different levels.

On-site private benefits (micro-project level):

10. **Increased yields.** Yield increases (mainly due to peatland management in the Putre-General Lagos pilot area) are due to the adoption of SLM approaches, such as (i) maintenance and cleaning of primary and secondary channels to irrigate different parts of the Andean peatland, (ii) alpacas and llamas' vaccinations against parasites (iii) fence installations to protect the forage and domesticated camelids from wild animals. These practices and land conservation approaches ultimately resulted in improved water availability and forage yields due to the better quality of the soils and water management. Yields also increases in the pilot area of Combarbala are due sanitary pruning applied to *Proposis chilena* that increase fruit productivity by avoiding plague losses and reduced land degradation trough the cultivation of fodder crops in Litueche-Marchihue.

11. **Reduced land and soil degradation.** Soil quality if improved due to the adoption of SLM activities such as (i) forest patches connection in Combarbala, (ii) grooves and multipurpose afforestation Combarbala and Carahue-Saavedra, respectively, (iii) post-fire forest reforestation in Litueche-Marchihue; (iv) cultivation of fodder crops in Litueche-Marchihue; (v) dune stabilization in Carahue-Saavedra and v) soil and forest management activities in Coyhaique. These practices improve of planting trees and vegetation providing benefits in terms of reducing runoff velocity and maintaining soil integrity.

12. **Water security.** Water availability increases due to SLM practices as well as activities such as (i) management of peatland in Putre-General Lagos, (ii) water rights titling in Combarbala, (iii) implementation of devices to capture and store rainwater in Litueche-Marchihue and Carahue-Saavedra. The activities improve welfare at the household level. This is due to improved revenues and food security.

13. **Positive social externalities** (human capital strengthening and local empowerment) (not quantified in the analysis). The Project contributed to strengthen human capital through an improved access to workshop and training on SLM practices. Besides, trainings in participatory appraisal, monitoring and evaluation empowered communes, grassroots community groups and their members.

Regional and downstream benefits:

14. **Reduced coastal degradation** (not quantified in the analysis). In addition to improving yields, dunes stabilization activities under the GEF-SLM Project contributed to reduce the negative externalities of land and coastal degradation providing benefits by enabling vegetation and fauna habitats, protecting fresh groundwater from saline waters, and conserving recreational landscape as beaches. These benefits were not quantified in the analysis due to the difficulty to quantify the relation between dune stabilization activities, their physical effects, and their translation into quantifiable measures.

National and Global Public benefits:

15. **Institutional strengthening** (not quantified). In line with the activities performed under Component, the Project provided capacity building and institutional support to the decentralized authorities (mainly regional) for development planning, financing and management of SLM activities. The project also strengthened coordination and capacity building among cross-sector governmental units. Moreover, the recruitment of national consultants to support the implementation of microproject strengthened the local capacity in providing technical services to rural communities.

16. **Increased biodiversity conservation.** The implementation of conservation corridors at small or bigger scale protects vegetation and fauna habitats in geographical areas of interests in terms of biodiversity conservation such as Putre-General Lagos, Litueche- Marchihue, Carahue- Saavedra and Coyhaique. Other activities that involve plantation of trees and vegetation such as forest patches connection, post-fire native forest reforestation, and groove and multipurpose afforestation are important to avoid landscape fragmentation thus providing better habitat for flora and fauna species. These activities provide benefits to nationals who are willing to pay to fund these efforts on biodiversity conservation.

17. **Global environmental public benefits.** The Project has generated one main global public benefit, namely the reduction of carbon emission by increasing below and above ground sequestration of carbon.

18. Variables to calculate the Economic benefits are derived from PIU monitoring reports and ISRs. Only prices and yields used in the calculations were extracted from updated secondary sources. Table 1 shows the main sources of data for the analysis of each benefit.

Table 1. Benefits Estimation: Data Sources

Benefit	Physical Information
CO2 sequestration	ISRs PIU Monitoring Reports
Water provision	ISRs PIU Monitoring Reports
Animal Health	PIU Monitoring Reports
Biodiversity	ISRs PIU Monitoring Reports
Soil	PIU Monitoring Reports
Tourism	PIU Monitoring Reports
Non-Wood Forest Products	PIU Monitoring Reports

19. It considers only activities and demonstrative practices of Component 2 with GEF funding and data availability. Not all the benefits apply to all pilot areas. Carbon sequestration benefits are estimated in all pilot areas as the project provided calculation of CO2eq sequestration for each area. Animal health benefits are specific to Putre-General Lagos because is the only area where the project implemented livestock vaccination. Biodiversity benefits apply to each pilot area where the project implemented a conservation corridor and where afforestation measures were part of demonstrative activities such as groves afforestation and post-fire reforestation in Litueche-Marchihue and multipurpose afforestation in Carahue-Saavedra. Water provision benefits are only considered for pilot areas where there was information about the activities implemented to increase availability of water such as peatland management in Putre-General Lagos, water right titling in Combarbala, drinking troughs and water holes in Litueche-Marchihue and rainwater harvesting in Carahue-Saavedra. Estimation of water benefits due to afforestation and forest management in the rest of the pilot areas were not considered because the afforested or managed area there were not enough information to estimate those benefits. Benefits from non-timber forest products (NTFP) are estimated for Combarbala and Carahue-Saavedra because those pilot areas implemented activities that directly affected the availability of NTFP. Benefits of soil erosion control are estimated for all pilot areas where soil degradation was important, the exception Putre-General Lagos. Benefits in tourism apply to Putre-General Lagos because is the only pilot area with tourism.

20. Detailed information on how these benefits were estimated are shown later below. Table 2 resumes the activities and demonstrative practices and its associated benefit by pilot area:

Table 2. GEF-SLM activities and ecosystem benefits per pilot area

Benefit	**Pilot Area**				
	Putre – General Lagos	**Combarbala**	**Litueche - Marchigue**	**Carahue - Saavedra**	**Coyhaique**
Carbon sequestration	Several	Several	Several	Several	Several
Animal health	Peatland Management				
Biodiversity	Conservation corridor	Forest patches connection	Groves afforestation Post-fire native forest reforestation Conservation corridor	Multipurpose afforestation Conservation corridor	Conservation corridor
Water provision	Peatland management	Water rights titling	Drinking troughs Water holes		
Non-Wood forest products		Sanitary pruning		Multipurpose afforestation	
Soil erosion control		Forest patches connection	Grooves afforestation Post-fire native forest reforestation Cultivation of fodder crops	Multipurpose afforestation Dune stabilization	Forest and soil management
Tourism	Peatland management				

21. **Definition of Evaluation Scenarios.** Under the scenario without project no SLM activity/practice is carried out in the different pilot areas. Several SLM documents such as the Project Appraisal Document (PAD), the 2021 Closing Report, the Activities Files and the Pilot Area information, provide qualitative information that accounts a negative trend of the vegetation resources, water availability, soil quality and conservation of biodiversity in the pilot areas. Unfortunately, there is no quantitative data to project such deterioration in the scenario without GEF-SLM activities. Therefore, the scenario without the project considers a conservative scenario that maintains the state of the natural resources before the implementation of the GEF SML project.

22. Benefits for each activity are incremental over the scenario without a project. Due to information constraints, the analysis considers that the flow of annual benefits is maintained during the lifespan of an activity. The present value of the benefits is estimated considering a discount rate of 6percent used by the World Bank and that coincides with the social discount rate used by the government of Chile to evaluate social programs. The ex-post analysis takes that each SLM activity has different lifespan after which no incremental benefits are generated. Most of the activities such as peatland management, conservation corridors, forest patches connection, groves afforestation, post-fire restoration, supplementary pastures, multipurpose afforestation, dune stabilization, forest and soil management are assumed to last for 12 years based on the lifespan of forest restoration plans in Chile. Other activities have different lifespan depending on the characteristics of the technology, frequency of implementation or duration of the rights. Drinking troughs, water holes and rainwater harvesting last 10 years according to information about the durability of construction materials. Animal health measures and sanitary pruning provide benefits for only 1 year because they are annual activities that were carried out only for one year. Water rights titling yields benefits at perpetuity because private water rights in Chile have permanent ownership.

23. In the estimations is used a value of the exchange rate $703 peso/USD – average of 2019, year where most of the activities were implemented.

Benefit estimations:

24. **Carbon Sequestration Benefits.** Annual reduction of CO2Eq tons is equivalent to a fifth of the total CO2Eq tons reduced within a 5-year period of the project implementation according to the Client´s Final Report: 251,892 CO2Eq tons for Putre-General Lagos; 31,959 CO2Eq tons for Combarbala; 42,066 CO2Eq tons for Litueche-Marchigue; 5,865 CO2Eq tons for Carahue-Saavedra and 233,278 CO2Eq tons in Coyhaique. Each CO2Eq ton is valued at USD$1.84 per year which is an estimate of the perpetual annuity for the social price of USD$ 32.5 per ton of CO2eq used by the Government of Chile to evaluate social programs. GEF funded activities accounted for 50.5percent of the carbon sequestration benefits in Putre-General Lagos and 25.3percent in others Pilot Areas.

25. **Water Provision Benefits.** Peatland management in Putre-General Lagos could increase water availability by 34 percent due to greater peatland biomass, providing an incremental benefit in present value of USD$1,409 per hectare (Figueroa et al. 2016; MST, 2019) according to information from traders in private water rights market in the northern area of Chile. Water rights titling in Combarbala provides water security for the communities throughout the delivery of a permanent flow of 1.36 liters/second valued at USD$ 17,798. Construction of drinking troughs, water holes and rainwater harvesting devices in Litueche-Marchigue and Carahue-Saavedra provides water 10,000 and 1,350,000 liters for livestock, essential under a reality of permanent drought, whose value is USD$0.056/liter of water based on the sale price of a sheep divided by the water requirements to raise an animal. GEF funded activities accounted for 50.5 percent of the water provision benefits in Putre-General Lagos and 100percent in others Pilot Areas.

26. **Benefits in Animal Health.** A number of 9,000 llamas and alpacas received vaccinations against parasites as part of the management of peatlands in Putre-General Lagos. Losses due to parasitic diseases in camelid herd in the Andean peatlands can reach up to 40 percent (Bonacic, 1991) but under a more conservative scenario (20 percent), present value of animal health care benefits can be estimated at USD$425,905. GEF funded activities accounted for 50.5 percent of these benefits.

27. **Benefits of Soil Erosion Control and Recovery.** Benefits of control of soil erosion are estimated using a unit value of USD 84 per ha/year from Lillo et al. (2015) -who study the willingness to pay of smallholders for soil restoration through a contingent valuation survey that was implemented for different municipalities in central Chile. This value is applied to 4.5 ha of forest patches connection in Combarbala; 69.4 ha of grooves afforestation, post-fire forest reforestation and cultivation of fodder crops in Litueche and Combarbala; 106.8 ha of multipurpose afforestation and dune stabilization in Carahue-Saavedra; and 5.9 ha of diverse activities of forest and soil management in Coyhaique. GEF funded activities accounted for 100 percent of these benefits.

28. **Biodiversity Conservation Benefits.** A value of USD$ 47 per ha is calculated to estimate the benefits due to biodiversity conservation derived from activities of the project. This number is the biodiversity value of 1 ha of protected area in Chile obtained from multiplying the willingness to pay for biodiversity of USD$144 per person/year (Cerda et al. 2017) to the total number of visitors of public protected areas in Chile and divided this product by the total soil area of these public protected areas. The value per ha is applied to either the area of conservation corridors (22,000 ha in Putre-General Lagos; 62 ha in Carahue-Saavedra; 5,460 ha in Coyhaique) or to the area of some activities related to conservation such as the reconnection of patches (Combarbala); post-fire restoration (Litueche-Marchihue); and multipurpose afforestation (Carahue-Saavedra). GEF funded activities accounted for 25.3 percent of biodiversity conservation benefits in each Pilot Area.

29. **Benefits in Tourism.** Peatland management have a positive impact on charismatic fauna and scenic beauty view that benefits tourism in Putre-General Lagos where Lauca National Park visited by 14,500 tourists per year. Cerda et al. (2013) and Huenchuleo and Villalobos (2010) estimated a willingness to pay of USD$7 per visitor and USD$ 5 per visitor for improving charismatic fauna and scenic landscape view in Chile. Applying this value to the number of visitors and total area of the park results is possible to obtain a benefit of USD$1.26 per ha/year that is applied to the 4,964 ha under management according to the project. GEF funded activities accounted for 100 percent of benefits in tourism.

30. **Benefits for Provision of Non-Wood Forest Products** (NWFP). Sanitary pruning could avoid a 20 percent productivity loss for Prosopis chilensis affected by parasitic plague in Combarbala where pest could attack 25percent of the 245.5 ha where this activity was implemented (INIA, 2014). The Prosopis chilensis yields 5 ton/ha/year of fruits valued at USD$4,267 per ton that results in USD$414,920 NWFP benefits in present value due to avoided losses in Combarbala. In Carahue-Saavedra, a value NWFP of USD$31.8 per ha from Figueroa et al. (2017) is applied to estimate the NWFP benefits of 20.5 ha of multipurpose afforestation due to lack of information about composition of tree species in that zone. GEF funded activities accounted for 100 percent of benefits for provision of NWFP.

31. **Benefits for provision of animal food.** The management of 4,964 ha of peatland in Putre-General Lagos and the cultivation of 48.5 ha of fodder in Litueche-Marchigue can provide food for wild and domesticated animals. In Putre-General Lagos, peatland management could increase the carrying capacity of livestock - in terms of vicuña units (VU) – by 0.89 VU per ha and the dry matter for animal food by 0.433 ton/year (Castellano, 2005). The price of one ton of forage is USD$ 192 implying a unit benefit of USD$83.2 per ha/year of additional animal food due to peatland management. The same methodological approach yields a return of USD$ 1,008 per ha in Litueche-Marchigue for the demonstrative activity of cultivation of fodder crops fodder assuming a conservative yield of 5.25 ton/ha. The implementation of the latter activity on 45.5 ha provides a return of US$45.872 per year. GEF funded

activities accounted for 50.5 percent of the water provision benefits in Putre-General Lagos and 100 percent in Litueche-Marchigue.

32. Investment costs. Investment costs included in the analysis are based on actual spending as of March 2020 amounting to USD$5,276,472 distributed across six years from 2015 to 2020. Taxes and duties are excluded from the investment costs in the economic analysis. Table 3 shows the timing of investment costs per year.

Table 3. Investment cost per year of the Project (in USD$)

Year Calendar	2015	2016	2017	2018	2019	2020	2021
Investment cost	121,184	638,520	817,592	1,660,415	1,082,980	773,458	182,323

33. **Results**. Table 4 shows the results in present value (PV) under the benchmark scenario (6 percent discount rate). The benefits and costs are US$10 million and US$ 4.4 million which in net benefits of nearly $5.6 million. Water provision benefits accounts for about 32.4 percent of the benefits stream, carbon sequestration benefits for about 23.0percent, biodiversity conservation benefits for about 20.2 percent, and forage provision benefits for about 16.9percent. The rest of benefits account for about 7.4percent of the total benefits. The benefit to cost ratio is 2.3, indicating a moderate social profitability of the Project. Table 4 shows that the IRR of the project is 21.3 percent under the baseline scenario with a carbon price of 32.5 USD/ton CO2Eq.

Table 4. Benefits, Costs and Net Benefits of the Project

Benefit type	Present Value (in USD$)	Share in Total Benefits (percent)
Water provision	3,240,595	32.4
Forage provision	1,689,779	16.9
Animal health	215,082	2.1
Biodiversity conservation	2,018,277	20.2
Carbon sequestration	2,304,773	23.0
Tourism	14,621	0.1
Non timber forest products	419,249	4.2
Soil degradation control	101,780	1.0
PV Benefits	10,004,118	100
PV Costs	4,409,657	
PV Net Benefits	5,594,461	
Benefit/Cost ratio	2.3	

34. **Sensitivity Analysis**. A Sensitivity Analysis was carried out to evaluate the robustness of the results under different assumptions. First, a sensitivity analysis to discount rates considering more conservative values of 10 and 20 percent. Second, a sensitivity analysis for also more conservative carbon prices of per ton CO2Eq (US$5 and US$20) was carried out. Third, a sensitivity analysis excluding global benefits due to carbon sequestration. Fourth, a sensitivity analysis excluding global benefits due to carbon sequestration and national benefits due to biodiversity conservation. Fifth, a sensitivity analysis that reduces the effectiveness of Andean peatland management by a half. Results are shown in Table 5.

35. **Sensitivity to discount rates**. Net benefits are positive under scenarios of higher (10percent and 20percent) discount rates. Using a discount rate of 10percent, the total benefits are reduced to US$7

million, net benefits to US$ 3.1 million and the benefit-cost ratio to 1.8. A more conservative discount rate of 20percent reduces the total benefits to US$3.4 million, net benefits to $0.3 million and the benefit-cost ratio to 1.1.

36. **Sensitivity to carbon prices**. In comparison to the baseline, total and net benefits are reduced by 19.3 percent and 34.9 percent, respectively when the carbon price is 5 USD/ton CO2Eq, and by 8.9percent and 15.8 percent, respectively when the carbon price is 20 USD/ton CO2Eq. A carbon prices of 5 USD/ton CO2Eq leads to an IRR of 17.1 percent and benefit-cost ratio to 1.8. A carbon prices of 20 USD/ton CO2Eq leads to an IRR of 19.5 percent and benefit-cost ratio to 2.1.

37. **Exclusion of carbon sequestration benefits.** In comparison to the baseline scenario and considering a discount rate of 6percent, when carbon sequestration benefits are excluded from the analysis, total and net benefits are reduced by 26.4percent and 32.2percent, respectively. In this case, benefits amount USD$ 7,699,385, net benefits amount USD$ 3,289,728 and the benefit-cost ratio falls to 1.7. The exclusion of carbon sequestration benefits leads to an IRR of 16.3percent.

38. **Exclusion of carbon sequestration and biodiversity conservation benefits**. In comparison to the baseline and a discount rate of 6percent, when carbon sequestration and biodiversity conservation benefits are excluded from the analysis, total and net benefits are reduced by 59.1percent and 72.1percent, respectively. In this case, benefits amount USD$ 5,681,107, net benefits amount USD$ 1,271,451 and the benefit-cost ratio falls to 1.3. The exclusion of carbon sequestration benefits leads to an IRR of 10.6percent.

39. **Reduction of peatland management effectiveness**. In comparison to the benchmark scenario and a discount rate of 6percent, when peatland management is reduced by a half, total and net benefits are reduced by 20.9percent and 37.4percent, respectively. In this Total benefits amount USD$ 7,914,032 and net benefits of USD$ 3,504,375 and the benefit-cost ratio falls to 1.8. The Internal Rate of Return (IRR) is 11.2percent.

40. NPV is negative for the most negative scenarios: (i) when the discount rate is 20percent and carbon price is low, 5 USD/ton CO_2Eq; (ii) when the discount rate is 20percent and carbon benefits are excluded; (iii) when the discount rate is 20percent, and carbon and biodiversity conservation benefits are excluded; and (iv) when the discount rate is 20percent, and peatland management effectiveness is reduced by a half. However, the IRR of the worst scenario -when carbon and biodiversity conservation benefits are excluded- is 10.6percent, is still higher than the 6percent discount rate used by the Chilean government and World Bank.

Table 5. Sensitivity Analysis

Scenario	Discount rate 6percent			Discount rate 10percent			Discount rate 20percent			Internal rate of return (percent)
	Benefits (in USD)	Net Benefits (in USD)	B/C Ratio	Benefits (in USD)	Net Benefits (in USD)	B/C Ratio	Benefits (in USD)	Net Benefits (in USD)	B/C Ratio	
Baseline	10,004,118	5,594,461	2.3	7,012,858	3,065,148	1.8	3,352,798	276,688	1.1	21.3percent
Carbon price 5 USD/ton CO2Eq	8,053,959	3,644,302	1.8	5,6985,890	1,748,180	1.4	2,708,514	-367,596	0.9	17.1percent
Carbon price 20 USD/ton CO2Eq	9,117,682	4,708,025	2.1	6,414,236	2,466,526	1.6	3,011,753	-64,357	1.0	19.5percent
Excluding carbon sequestration benefits	7,699,385	3,289,728	1.7	5,456,441	1,508,731	1.4	2,841,188	-234,922	0.9	16.3percent
Excluding carbon sequestration and biodiversity benefits	5,681,107	1,271,451	1.3	4,075,523	127,813	1.0	2,004,124	-1,071,986	0.7	10.6percent
Reducing peatland management effectiveness by 50percent	7,914,032	3,504,375	1.8	5,546,809	1,599,809	1.4	2,674,354	-401,756	0.7	11.2percent

Qualitative Benefits

41. **Use of local labor during implementation.** Project implementation has included a substantial amount of local labor that implied the hiring of 47 professionals and 271 local workers across the 5 pilot areas under implementation.

42. **Developing of a SLM Monitoring and Evaluation System.** The Project allowed to develop an information platform of the SLM monitoring system whose purpose was to design and establish an early warning system to identify environmental conditions which could lead to land degradation and desertification. The system provides better information to implement current and future SLM activities in a more effective and efficient way which translates into higher benefits

43. **Governmental Institutional Capacity Building**. The Project provided training several workshops (introduction to SLM, social and environmental safeguards, farm level plan design, implementing and monitoring of farm level plans, planning instruments, financial monitoring, and development of implementation plan) that allowed creating capacity building essential to strengthen the capacity to integrate the institutional SLM work on the ground and sustain their use after the Project. Today this capacity is being used to expand the implementation of SLM to other geographical areas, whose benefits are no included in the ex-post analysis.

44. **Local capacity building.** The project allowed the implementation of sustainable land practices on community areas under Component 2 – carried out an extensive and complex process of creation of management councils in each region. The Project has allowed the development and implementation of collaborative instances such as the Management Councils of the Implementation Area (CGA)I. These institutions can not only provide long-term lifetime to the MST activities but also expand them territorially, particularly in the case of the pilot areas of Putre-General Lagos, Combarbala and Coyhaique as it is already occurring in Chile.

45. **Adjustments to existing and future incentive programs and regulations that promote ecosystem restoration and protection.** The Project identified available silvo-agricultural and environmental instruments and improved cross sectoral coordination among governmental institutions. The integration of the existing forestry and agriculture governmental promotion instruments and its focus on sustainable natural resource use and biodiversity conservation would have not been possible without the Project and therefore either the estimated benefits of the Project. These actions provide funding for current and future implementation of SLM activities and therefore result in incremental benefits such as the estimated in this report but for other areas of the Country.

46. **Improved capacity of community institutions and beneficiary groups.** Forest users and community members that have received capacity building through training as a result of the project (female and indigenous) which can improve sustainability and increase social and economic benefits. Strengthening social capital and local institutions can lead to benefit streams that can continue into the future.

Conclusions

47. The suggested efficiency of the SLM based on this quantitative analysis is moderate. The ex-post analysis shows that the presented assumptions, the GEF-funded Project´s benefits and net benefits at present value are positive for a 6 percent discount rate, amounting US$10,004,118 and US$5,594,461, respectively. Main benefits are water provision (US$3.24 million), carbon sequestration (US$2.3 million), biodiversity conservation (US$2.02 million), and forage provision (US$1.69 million). The Project´s activities generated a Benefit to Cost ratio of 2.3 and an Internal Rate of Return (IRR) of 21.3 percent. The project's returns are nevertheless sensitive to several scenarios as reflected by the sensitivity analysis,

but they are high. In the worst sensitivity analysis scenario -when carbon and biodiversity conservation benefits are excluded- the estimated IRR is 10.6 percent, higher than either the discount rate used by Chilean government and World Bank to evaluate social projects or the discount rate used to evaluate private projects in Chile.

48. Because all project costs are included in this analysis, all other non-quantified benefits are expected to increase the estimated rates of return. The economic analysis thus shows that project-supported investments bring substantial benefits to local communities supported by the project and other Chilean stakeholders.

49. Other benefits from many non-quantified project achievements include:

a. Use of local labor during implementation
b. Developing of a SLM Monitoring and Evaluation System
c. Governmental Institutional Capacity Building
d. Regional capacity building
e. Adjustments to existing and future incentive programs and regulations that promote ecosystem restoration and protection
f. Improved capacity of community institutions and beneficiary groups

Bibliography

Bonacic S., C, 1991. Características biológicas y productivas de los camélidos sudamericanos. Avances en Medicina Veterinaria, Vol.6(2), Julio-diciembre 1991.

Castellaro, G. 2005. Manejo nutritivo de la vicuña en condiciones de pastoreo. Capítulo 7. pp. 221 – 246. En: Galaz, J. L. y G. González (Eds.). Técnicas de Manejo Productivo de la Vicuña (*Vicugna vicugna* Molina, 1782) en Chile. Corporación Nacional Forestal - Fundación para la Innovación Agraria (CONAF - FIA). Santiago, Chile. 280 pp.

Castellaro G. 2007. Capacidad de carga de praderas altiplánicas destinadas al manejo de la vicuña (*Vicugna vicugna mol.)*. Vº Congreso de Especialistas en Pequeños Rumiantes y Camélidos Sudamericanos, Mendoza, Argentina Pg. 3.

Cerda, C. Valuing biodiversity attributes and water supply using choice experiments: a case study of La Campana Peñuelas Biosphere Reserve, Chile. Environmental Monitoring Assessment, 185, 253–266 (2013).

Cerda, C., Fuentes, J., De La Maza, C. (2017). "Assessing visitors' preferences for ecosystem features in a desert biodiversity hotspot", Environmental Conservation: DOI.10.1017/S0376892917000200.

Figueroa, E. (2017). "Chile: Análisis Económico de la Estrategia Nacional de Cambio Climático y Recursos Vegetacionales 2017-2025 (ENCCRV)".

Gonnet, J; Lopez, C; Aranibar, D; Lictevout, E. 2016. Manual introductorio al manejo de vegas y bofedales mediante prácticas tradicionales de culturas andinas en el norte de chile. Corporación norte grande. Pag 43.

GEF-MST (2019). Manejo Integral de Bofedales.

Huencheleo, C. y Villalobos, P. (2010): "Ecosystem Service Valuation of Ruil (Nothofagus Alessandrii) Forests in Central Chile: An Application of the Choice Experiment Method", en Choice Experiments in Developing Countries Implementation, Challenges and Policy Implications, editado por Jeff Bennett and Ekin Birol, Edward Elgar Publishers.

Lillo, F., Acuña, E., Vásquez, F., Mena, P., Rodríguez, R. (2015). "Willingness to pay of smallholders for soil restoration: results of a contingent valuation survey", Custos e Agronegócio Online.

ANNEX 5. BORROWER, CO-FINANCIER AND OTHER PARTNER/STAKEHOLDER COMMENTS

Chile is highly vulnerable to climate change due to the bio-geographic diversity that characterizes its territory. At Project closure, a phenomenon known as "mega drought" affects most of the country, implying several consequences related to the advance of desertification and land degradation, both for local ecosystems as well as for the productive capacity of the inhabitants. The economic incentive instruments were not specifically developed to tackle this situation, thus, increasing the importance of the Project recommendations and knowledge generated. During the implementation phase of the Project, the environmental benefits achieved in the territory were evident, meaning significant improvements that allowed recovering the ecosystem functions and minimizing the effects of degradation in areas where there is no coverage classified as forest, such as the wetlands areas in Putre- General Lagos and the native bush vegetation of Combarbalá. Additionally, it contributed to increase and appropriately manage the forest cover in the intervention areas of Marchigüe-Litueche, Carahue-Saavedra and Coyhaique. Furthermore, several activities were planned and developed within the framework of conservation corridors, which served as the basis for various projects and programs that are being developed in the territory.

From the social and economic point of view, the actions carried out by the Project included integrated property planning and strengthening of both local governance and interinstitutional coordination. These allowed to combine ecological aspects with agricultural and forestry productivity objectives, having a direct impact on the most vulnerable communities, for which the Sustainable Land Management framework has contributed to lay the foundations to address and respond to the complex climate change scenario.

Considering these advances, and the good work carried out together with the support of the World Bank on aspects related to financial management, as well as the management and support provided to ensure progress in the implementation of a long-term international cooperation project, we hope to continue working together with the World Bank in projects that can contribute to the mitigation of desertification, land degradation and, in general, the negative effects of climate change.

ANNEX 6. SUPPORTING DOCUMENTS

World Bank Project and Financing Documents

- Grant Agreement – December 9, 2013(Grant Number TF015104)
- Project Appraisal Document – May 7, 2013 (Report No: 63430-CL)
- Aide Memoires for Project Supervision Missions
- Project Implementation Status and Results Reports (ISRs)
- Restructuring Paper 2017 (Report No.: RES27301)
- Restructuring Paper 2019 (Report No.: RES36446)
- Restructuring Paper 2020 (Report No.: RES42782)

WBG Engagement Strategy Documents

- Republic of Chile Partnership Strategy (CPS) FY11-16 (Report No. 57989-CL).
- Republic of Chile Systematic Country Diagnosis (SCD) 2017

Other Documents

- Final Monitoring and Completion Report prepared by borrower's implementing agency, CONAF.
- Biannual Reports prepared by CONAF.
- Biannual Safeguards Regional Reports prepared by CONAF.
- Interim financial reports prepared by AGCID.

Other souces

-Encuesta Nacional de Empleo (ENE). 2021. Accessed 27 of October 2021 at *https://www.ine.cl/estadisticas*.
-Banco Central (BC) and Oficina de Estudios y Políticas Agrarias (ODEPA). 2014. *https://www.odepa.gob.cl/pib-por-clase-de-actividad-economica*.
-Chile Biodiversity country Profile CBD. Accessed 03 November, 2021. *https://www.cbd.int/countries/profile/?Country=cl*
- FESLM: An international framework for evaluating sustainable land management. FAO. 1993. Accessed June, 2021 at: *https://www.fao.org/3/t1079e/t1079e00.htm)*

ANNEX 7. SAFEGUARDS

Safeguards triggered:

a. OP 4.01 was triggered in order to identify and assess the project's potential environmental risks and impacts in its five regions of intervention, propose a framework for their mitigation and management, and outline the process for developing the necessary site-specific assessments during project execution.
b. OP 4.04 was triggered considering that a number of interventions were expected to be carried out in natural habitats and/or critical natural habitats, including the Lake Budi "priority conservation area" in the Araucanía region, and other protected areas (PAs). Activities with the potential to result in significant adverse impacts to natural/critical natural habitats were not financed.
c. OP 4.36 was triggered considering the inclusion of activities involving the sustainable management of native forests and/or plantations, all of which were expected to have positive environmental impacts. The project did not finance activities involving commercial harvesting of timber or activities with the potential to result in significant adverse impacts to forested areas. Only activities in native forests that promoted their health, regeneration and/or recuperation were carried out.
d. OP 4.09 was triggered considering that a small number of activities (related for example to the installation of small-scale agroforestry systems) involved the use of pesticides and/or herbicides.
e. OP 4.10 was triggered due to the presence of indigenous peoples in the project pilot areas, and particularly in the Putre-General Lagos area of the Arica y Parinacota region, the Carahue-Saavedra area of the Araucania region, and the Coyhaique area of the Aysén region. Most of those present were identified as Mapuche, with Andean peoples (such as Aymara) existing in smaller numbers.
f. OP 4.11 was triggered due to the potential of chance finds during the execution of activities that could involve minor earthworks. Chance finds were not reported during execution, and requirements of this policy were applied in those cases in which activities were developed in areas close to sites or areas with particular cultural importance for local communities.
g. OP 4.12 was triggered not from an expectation that the project would physically displace people, but because of the possibility that it would lead the restrictions of community-level access to natural resources in legally designated protected areas, or as a result of related land-use changes, with impacts on indigenous peoples in particular.

Details on development and implementation the of national safeguards strategic instruments:

1. Project preparation was marked by the preparation of multiple safeguards instruments, reflecting an approach that was highly tailored to the assessed safeguards-related risks and impacts, but that also went beyond them to a certain degree. For example, even though involuntary displacement and resettlement was not expected, a RPF was prepared, as a precautionary measure.[18] Rather, the SA prepared for the project focused on the possibility of adverse socioeconomic impacts stemming from restrictions of communities' access to natural resources in protected areas. This was further narrowed down to a need to include relevant guidance on addressing these risks in the IPPF prepared for the Putre pilot area, as the only intervention area containing PAs. The Putre document was one of three IPPFs prepared for the project; the others were for Carahue-Saavedra and Coyhaique.[19]

[18] *https://www.enccrv.cl/politica-reseasentamiento-aplicable*

[19] *All the project's IPPFs are available at* https://www.enccrv.cl/proy-manejo-sust-de-la-tierra

2. A EMF was also developed, in compliance with both national regulations and OP 4.01, and disclosed in November 2012 prior to Appraisal[20]. Following the Bank's guidance, the EMF was updated and re-disclosed in 2019[21] in order to include additional activities financed by the project that were not assessed in the original versions[22], reflect updated applicable national regulations, and include new areas of intervention in the Arica-Parinacota and O'Higgins regions. The project's SA, RPF and IPPFs were also updated a few months later. The updated EMF includes, among other things: institutional arrangements for project implementation and environmental management; assessment of potential adverse environmental risks and impacts (all of which were classified as "non-significant"); mitigation measures for each of the identified risks and impacts; and measures for the supervision of the identified mitigation strategies.

3. In order to guide regions on the adequate implementation of the measures included in the EMF, the PIU developed a "Procedure for Compliance with Environmental and Social Safeguards in the Project" in 2018. The document includes a series of tools, templates, and instructions to help regional teams engage in socio-environmental management of site-specific interventions.

4. For each identified beneficiary, the PIU developed a farm-level plan (*Plan Predial*) and associated Safeguards Datasheet (SD, *Ficha de Salvaguardas*). Each SD identifies applicable safeguard policies and describes relevant risks, impacts and mitigation measures following the EMF, considering the particular socio-environmental conditions of each site, in close coordination with the corresponding beneficiary.

5. In the case of OP 4.04, the EMF (Annex 7.04)[23] includes the "Guía Técnica de Buenas Prácticas de Recursos Naturales". Activities developed within natural or critical natural habitats were carried out following these guidelines, which includes best environmental management practices related to water, soil, air, and biodiversity. Additionally, the PIU made sure all activities carried out within critical natural habitats were aligned with the conservation objectives of these areas.

6. Regarding OP 4.36, forests were identified based on the classification included in Law 20.283[24], and best practices were employed in all forestry activities consistent with national legislation and Bank policies. Activities conducted within native forests were done following the national guidelines and activities involving plantations according to the guidelines of the "Manual de buenas prácticas de plantaciones forestales".

7. Regarding OP 4.10, a total of 17 Indigenous Peoples Plans have been prepared and implemented throughout the life of the project, based on the guidelines provided in the three IPPFs. Of this total, 3 correspond to the Putre-General Lagos pilot area, 11 correspond to the Carahue-Saavedra pilot area, and 3 correspond to the Coyhaique pilot area.[25] Regional project teams worked through two participatory

[20] https://documents.worldbank.org/en/publication/documents-reports/documentdetail/220371468016228041/plan-marco-de-gestion-ambiental
[21] https://www.enccrv.cl/actualizacion-mga
[22] *Mainly new Demonstrative Activities (ADs) related with forestry and water management activities.*
[23] http://documents1.worldbank.org/curated/en/220881468023421751/pdf/E4118v20P085620102302013 0Box374317B.pdf
[24] https://www.bcn.cl/leychile/navegar?idNorma=274894
[25] All the project's IPPs are available at *https://www.enccrv.cl/proy-manejo-sust-de-la-tierra*

intercultural methodologies, known as "MOFIM[26]" for Mapuche indigenous beneficiaries and "MAIA[27]" for indigenous beneficiaries of Andean origin. The positive results from the application of these methodologies have already been detailed in para. 58 of the ICR.

8. In the case of OP 4.09, the EMF (Annex 7.05)[28] includes SAG's List of Authorized Pesticides[29]. This list is aligned with World Health Organization's "Recommended Classification of Pesticides by Hazard and Guidelines to Classification" (Geneva: WHO 1994-95). The PIU made sure that, in those cases in which pesticides were used, they were included in that list and that SAG's recommended application methods and doses for application were considered[30].

9. Finally, regarding OP 4.11, the EMF (Annex 7.06)[31] includes norms and procedures to guide the borrower in the case of chance finds or the development of activities that could impact physical cultural resources. No chance finds occurred during implementation. Where needed, an archaeologist accompanied the implementation of activities in order to safeguard neighboring cultural heritage sites, following the recommendations of the Chilean National Cultural Heritage Service.

10. Throughout implementation, the project had the dedicated support of an environmental coordinator and between one and two environmental specialists at the central level, in charge of the project environmental management and monitoring in line with the provisions of the EMF. Responsibility for providing social-side support, meanwhile, was centered in an Indigenous and Social Affairs Unit (UAIS in Spanish) that worked in tandem with UCCSA. At the regional level, the EATs and/or ATRs were responsible for on-site socio-environmental management and monitoring.

11. For each semester of implementation, CONAF prepared and presented to the Bank a set of RSCRs, which (i) described in detail compliance with the management measures for each of the applicable safeguards policies; (ii) assessed the effectiveness of these measures in term of mitigating corresponding impacts; and (iii) proposed corrective actions, as necessary. These results are reflected the following documentation, included as supporting evidence in each set of prepared RSCRs: (i) contractors' reports; (ii) reports from field visits ("manifold reports") prepared by CONAF; (iii) Field Datasheets for Safeguards Monitoring (FDSM); among other documents.

12. The main challenges in the project's environmental and social management throughout implementation had to do with:

- Use of exotic species (mainly Pinus radiata) as part of DAs related to soil degradation and agroforestry: Although the EMF contemplates specific management measures in order to avoid potential negative impacts on the native biodiversity of intervention areas resulting from the planting of exotic species, the implementation of such measures (or the analysis of the pertinence of implementing these measures) was not reflected in the different documents for the evaluation and monitoring of safeguards that were being prepared by the PIU. In this sense, in coordination with the

[26] MOFIM: *Modelo Forestal Intercultural Mapuche*, Intercultural Mapuche Forest Model. https://www.enccrv.cl/mofin
[27] MAIA: *Modelo Ambiental Intercultural Andino*, Intercultural Andean Environmental Model. https://www.enccrv.cl/maia
[28] *http://documents1.worldbank.org/curated/en/444381468216003774/pdf/E4118v60P0856201023020130Box374317B.pdf*
[29] *http://www.sag.cl/ambitos-de-accion/plaguicidas-y-fertilizantes/78/registros*
[30] *idem.*
[31] *http://documents1.worldbank.org/curated/en/944071468010915072/pdf/E4118v30P0856201023020130Box374317B.pdf*

Bank, CONAF prepared in February 2020 a justification for the use of exotic species and an analysis (based on desktop review) of the non-invasive behavior of these species in the areas of intervention.

- Supervision activities in the context of the COVID-19 pandemic: Mobilization restrictions associated with the COVID-19 pandemic hindered the supervision of activities in the field by CONAF's regional teams and the PIU's central-level specialists. The task team discussed with the PIU potential alternatives to continue the monitoring of subprojects, per region, and a "Matrix of Monitoring Alternatives" was prepared by the PIU with the different supervision alternatives plausible for each region. These have been implemented as necessary during the pandemic period. Also, in this context, the PIU prepared a FDSM, to support the evaluation of safeguards implementation in each region through alternative methods (phone calls, etc.).
- Ensuring a continuous support in the implementation and management of safeguards at the regional level: As the contracts of the EAT/ATR specialists came to an end, prior to the extensions of the project Closing Date, it became important to make sure that the environmental management and monitoring function within the regions was maintained, in order to ensure adequate safeguards implementation and follow-up results in the field. Safeguards responsibility was, in some regions, distributed among the staff of each regional team, while in other regions it fell on specific specialists of the regional teams. The latter solution represented a challenge in terms of ensuring a continuous level of safeguards support at the regional level given changes in /turnover of these specialists. Nevertheless, in all regions, a significant level of installed capacity in terms of environmental and social safeguards can be detected, as reflected in the understanding and internalization of the importance of the application of safeguards by the project beneficiaries and relevant public institutions (municipalities, etc.). This is one of the major positive outcomes of this project.

13. During each supervision mission the Bank made recommendations and proposed actionable measures to improve the project's socio-environmental management, and these were duly incorporated into the project by the PIU, which is an important reason why the project exhibited consistently strong performance ratings during its life. In fact, OP 4.01, OP 4.04, OP 4.36, OP 4.09, and OP 4.11 performances have been rated as Satisfactory throughout execution. Ratings for OP 4.10 and OP 4.12 were also largely S, except for a brief period during 2018 when they dropped to MS owing to delays in the updating of the social safeguards instruments. Incremental improvements in the project's social and environmental management practices during execution were shown by: (i) significant improvements in the quality of the periodic RSCRs received; (ii) the inclusion of robust safeguard aspects in procurement documents; (iii) consistency in the definition of Natural and Critical Natural Habitats and application of OP 4.04 and OP 4.36; (iv) alignment of the safeguards information presented at central and regional levels; (v) analysis of and reporting on the actions and results of the project's environmental management by the PIU beyond the EMF provisions, highlighting the main lessons learned from the implementation of these measures in terms of risks /impacts identified in the field and the effectiveness of the measures implemented, and at a scale broader than just the property level.

ANNEX 8. REVISED RESULTS FRAMEWORK, RESTRUCTURING 2017

A. Results Framework, detailed proposed changes, Restructuring 2017.

Table A.8.1. Changes to Intermediate Indicators

Original PDO Indicator	Changes	Original Definition	Revised Definition	Baseline	Current	Revised Target	Rationale
Indicator 1: Development of an effective national framework to mitigate land degradation, which includes biodiversity mainstreaming and protection of forest carbon assets.	No change	For purposes of the project, the National Framework for Sustainable Land Management means the interlinked elements, including national programs, which support the objective of ameliorating land degradation and/or desertification. The framework would be flexible so as to add or remove elements to improve its function and efficiency over time or changing conditions.	No change. Data source and methodology: The indicator will be considered met when the National SLM Framework is presented to and approved by the Ministerial Council on Sustainability.	No	Yes	Yes	The development of the National Strategy for Climate Change and Vegetation Resources (ENCCRV, for its acronyms in Spanish), launched in November 2016 and approved by the Ministerial Council on Sustainability, counts as the National Framework for Sustainable Land Management as it jointly addresses the issues of land degradation and desertification, climate change mitigation (REDD+) and adaptation, while promoting biodiversity conservation.
Indicator 2: Reduced land degradation in 5 target areas through the application of restoration and SLM.	Revised: Land area under sustainable landscape management practices (CRI)	Successful piloting of a collaborative SLM approach for reducing land degradation demonstrated on approx. 100,000 ha through individual subprojects in 5 pilot areas. *<u>Original target</u>: 100,000*	Successful piloting of a demand driven SLM approach for reducing land degradation demonstrated on approx. 30,000 ha, through individual sub-projects on individual or community landholdings in 5 pilot areas.	0 ha	0 ha	30,000 ha	Revised wording of indicator and definition to focus on application of SLM practices at sites through a demand-driven approach and adopting use of the Corporate Results Indicator (CRI). The target value was adjusted based on a detailed assessment developed by Regional Technical Assistance Teams.

Indicator 3: Improved capacity to monitor impacts and results through the development of a decision support system for effective SLM monitoring and early warning system for land degradation.	Revised: Improved capacity to monitor SLM at the national level.	Land degradation and sustainable land management monitoring system is online and supporting decision making at the policy level.	Land degradation and sustainable land management monitoring system is operational and supporting decision making at the policy level through regular generation of monitoring reports. Data source and methodology: This indicator will be considered met when the first monitoring reports on land degradation and climate change are made available and shared with relevant decision-making bodies.	No	No	Yes	Revised wording of indicator for clarity and more detail added to the definition to better define measurability. A new intermediate indicator will be added for Component 3 to capture the development of an early warning system for land degradation as part of the overall monitoring system.
Indicator 4: Increased management and coordination capacity for mainstreaming SLM into the institutional architecture of the Ministry of Agriculture.	No change	Improved capacity for institutional mainstreaming of SLM along with improving cross-sector coordination, especially between CONAF, SAG, INDAP, MMA and local governments, as demonstrated through applying SLM through existing and new instruments and programs in eligible areas, designing and implementing programs and replicating project activities.	Improved capacity for institutional mainstreaming of SLM along with improving cross-sector coordination, especially between CONAF, SAG, INDAP, MMA and local governments. Data source and methodology: This indicator will be considered met through the establishment and operation (e.g. at least biannual and documented meetings) of a National SLM Advisory Group, Regional SLM Management Councils, and other interinstitutional coordination platforms.	No	No	Yes	Revised definition to improve measurability and focus on the operationalization of interinstitutional SLM coordination mechanisms. The Project has established a National-level SLM Advisory Group (Resolution 1233; Dec 2014), while the establishment of Regional SLM Management Councils is in progress. In addition, an Intra-Ministerial Committee on Climate Change has been established and is operational within MINAGRI.

Table A.8.2. Changes to Intermediate Indicators

Intermediate Indicators	Changes	Original Definition	Revised Definition	Baseline	Current	Revised Target	Rationale
Indicator 1.1: Assessment of existing MINAGRI instruments that promote ecosystem restoration and future services for their use in SLM.	Revised: Assessment of and proposed adjustments to existing and future MINAGRI instruments (incentive programs) and regulations that promote ecosystem restoration and protection for use in National SLM framework.	A detailed assessment of existing MINAGRI rural development programs, among others, in the context of their potential for supporting SLM, including their strengths and weaknesses, and recommendations for reforms.	No change. Data source and methodology: This indicator will be considered met through a report providing the detailed assessment.	No	No	Yes	Minor change in wording and definition for clarity. The University of Chile is under contract to produce a detailed assessment of existing MINAGRI instruments (SLM incentives programs) with recommendations for reforms expected by June 2017.
Indicator 1.2: National-level priority area network for Framework determined.	Revised: Priority areas identified for SLM Framework.	Classification of geographic locales nationwide for SLM purposes, based on their vulnerabilities and potential.	Classification of geographic locales nationwide for SLM purposes, based on their land degradation status, climate change mitigation potential, and biodiversity considerations. Data source and methodology: This indicator will be considered met through one or more maps identifying the proposed locales.	No	Yes	Yes	Minor change in wording and definition for clarity. CONAF has prepared a Land Degradation Neutrality Report which serves as a national baseline identifying priority areas affected by land degradation, desertification and drought, at the municipal level under the UNCCD. It has also developed a Forest Reference Level under the UNFCCC which identifies the areas with the highest climate change mitigation potential.

Indicator 1.3: Eligibility criteria established for SLM activities to be funded through a National Framework.	Revised: Eligibility criteria established for activities to be implemented under the SLM Framework.	Development, validation and refined eligibility criteria for participation in government supported sustainable land management activities under the new framework approach.	Development and validation of eligibility criteria for participation in activities to be implemented under the SLM Framework. Data source and methodology: This indicator will be considered met when the eligibility criteria are approved y the National SLM Advisory Group.	No	No	Yes	Minor change in wording and definition for clarity. CONAF is elaborating a document specifying eligibility criteria for beneficiary identification and selection for SLM activities under the ENCCRV.
Indicator 1.4: Mainstreaming Climate Change Issues.	Indicator 1.4: No change.	Climate Change mitigation and adaptation are incorporated into eligibility criteria for SLM activities.	No change. Data source and methodology: This indicator will be considered met through a clear reference to climate change mitigation and adaptation in the eligibility criteria for the National SLM framework.	No	Yes	Yes	The prioritization and eligibility criteria for area identification and participation in SLM activities under the ENCCRV is based on climate change mitigation and adaptation criteria (among others such as land degradation and biodiversity).
Indicator 1.5: Mainstreaming SLM into Existing Instruments.	Revised: Alignment of existing instruments with SLM Framework.	Proposal for revised procedures for application to, and allocation of MINAGRI instruments for SLM.	Proposal for revised procedures of existing and future MINAGRI instruments in line with the National SLM framework. Data source and methodology: This indicator will be considered met through a report including the revised procedures.	No	No	Yes	Revised wording and definition of indicator to focus on alignment of existing MINAGRI instruments and approaches with SLM Framework. The detailed assessment of existing MINAGRI programs (under Indicator 1.1) will include a proposal for revised procedures for application to, and allocation of MINAGRI instruments for SLM activities under the ENCCRV.
Indicator 2.1: Direct project beneficiaries (core indicator).	Revised target.	Direct beneficiaries are people or groups who directly derive benefits from an intervention.	No change. Not a core indicator anymore.	0	0	1.573	The target value was revised based on a detailed assessment

		Please note that this indicator requires supplemental information. Supplemental Value: Female beneficiaries (percentage). Based on the assessment and definition of direct project beneficiaries, specify what proportion of the direct project beneficiaries are female. This indicator is calculated as a percentage. *Original target: 2000*					developed by Regional Technical Assistance Teams.
Indicator 2.2 Female beneficiaries (percent) (core).	No change.	Based on the assessment and definition of direct project beneficiaries, specify what percentage of the beneficiaries are female.	No change. Not a core indicator anymore.	0	0	25	The target value was maintained based on a detailed assessment developed by Regional Technical Assistance Teams.
Indicator 2.3: Strategic Plans for SLM for Pilot Areas.	No change.	Strategic plans for each of the five strategic pilot areas to promote holistic and long-term land-use planning at the landscape level, over around 1.7 million ha total. The plans will identify priority locales for SLM interventions (or intervention areas), land capability for both productive and conservation concerns, as well as environmental considerations, such as ecosystem connectivity, to promote a balanced and sustainable approach to rural development and land management.	No change	0	0	5	Indicator is on track. CONAF has developed a template for the development of Strategic Plans for the five Pilot Areas covering a total of 1.7 million ha.

Indicator 2.4: Degraded Areas Identified and Categorized in 5 Pilot Areas (at the Strategic Level).	Revised: Degraded Areas Identified and Categorized in Strategic Pilot Areas.	Land degradation characterized by class and type in the 5 strategic pilot areas over a total area of approx. 1.7 million ha.	Land degradation characterized by class and type in the Strategic Plans for each Pilot Area covering a total area of approx. 1.7 million ha.	No	No	Yes	Minor change in wording and definition to remove the numeric target from the indicator. The Strategic Plans will include a chapter identifying and characterizing degraded lands in the five Strategic Pilot Areas covering 1.7 million ha.
Indicator 2.5: Land area where sustainable land mgt. practices were adopted as a result of project (core).	Dropped	This indicator measures the land area that as a result of the Bank project incorporated and/or improved sustainable land management practices. This indicator can track progress toward sustainability at farm scale and at landscape scales within agroecological zones, watersheds, or basins. The baseline value for this indicator is expected to be zero. *Original target:* 100,000ha	n/a	0 ha	0 ha	n/a	This indicator is a duplication of PDO Indicator 2, which will be replaced by the corporate results indicator "Land area under sustainable landscape management practices". Therefore, it is removed.
n/a	New: Indicator 2.5: Number of farm level plans developed in Strategic Pilot Areas.	Number of farms that have developed a long-term farm-level plan (at least 5 years) in the Strategic Pilot Areas, in line with the National SLM framework, as a result of the project.		0	0	235	Farm-level plans are a key intervention strategy of the Project promoting an integrated and long-term plan at the farm level which aligns the required SLM activities with existing MINAGRI instruments over the long term.

Indicator 2.6: Producer training events on best practices for SLM and biodiversity mainstreaming.	Dropped	Outreach, training, demonstration activities and awareness building to inform producers, communities and stakeholders about the project benefits and SLM techniques. *Original target: 60*	n/a	0	0	n/a	Dropped as duplication of Indicators 2.112.13.
Indicator 2.7: New areas outside protected areas managed as biodiversity-friendly (ha) (core).	Revised target.	This indicator measures the number of terrestrial ha outside protected areas where, as a result of the World Bank operation, the site is managed at least in part to obtain biodiversity gains. *Original target: 25,000* ha	This indicator measures the number of terrestrial ha outside protected areas where, as a result of the World Bank operation, the site is managed at least in part to obtain biodiversity gains. For this project, it will measure the area of land outside of protected areas that is managed as part of a conservation corridor.	0 ha	0 ha	12,600 ha	Revised definition to improve measurability. The target value will be revised based on a detailed assessment developed by Regional Technical Assistance Teams.
Indicator 2.8: Amount of tons of CO2e sequestered through project investments over 5 years.	Revised target	Tons of CO2e sequestered through project investments in the forest sector as attributed to afforestation, reforestation and improved management of forests. *Original target: 347,111* tCO_{2e}.	No change	0 tCO_{2e}	0 tCO_{2e}	1,087,131 tCO_{2e}	No change. The target value was revised based on a detailed assessment developed by Regional Technical Assistance Teams, and calculated through the FAO Ex-Act tool.
Indicator 2.9: Area restored or re/afforested (corporate results indicator).	Revised target	This indicator measures the land area targeted by the Bank intervention that has been restored or reforested/ afforested. The baseline value is expected to be zero.	No change	0 ha	0 ha	570 ha	No change. The target value was based on a detailed assessment developed by Regional Technical Assistance Teams.

		<u>Original target</u>: 3,464 ha					

Indicator 2.10: Forest area brought under management plans (core).	Revised target	This indicator measures the forest land area, which, as a result of Bank investments, has been brought under a management plan. This includes production and protection forests as well as other forests under sustainable management. The baseline value is expected to be zero. *<u>Original target:</u> 57,250ha*	No change	0 ha	0 ha	7,530 ha	No change. The target value was revised based on a detailed assessment developed by Regional Technical Assistance Teams.
Indicator 2.11: Forest users trained (corporate results indicator).	Revised target	This measures the number of forest users and community members that have received capacity building through training as a result of the project. The baseline value is expected to be zero. *<u>Original target:</u> 200*	No change	0	0	1.000	No change. The target value was revised based on a detailed assessment developed by Regional Technical Assistance Teams.
Indicator 2.12: Forest users trained – Female (core).	Revised target	This measures the number of female forest users and community members that have received capacity building through training as a result of the project. This indicator captures a sub-group of indicator 2.7.	No change	0	0	250	No change. The target value was revised based on a detailed assessment developed by Regional Technical Assistance Teams.

		Original target: 50					
Indicator 2.13: Forest users trained - Ethnic minority/indigenous people (core).	Revised target	This measures the number of ethnic minority and indigenous forest users and community members that have received capacity building through training as a result of the project. This indicator captures a sub-group of indicator 2.7. *Original target: 60*	No change	0	0	300	No change. The target value was revised based on a detailed assessment developed by Regional Technical Assistance Teams.
Indicator 3.1: National monitoring system for SLM designed.	Revised: National monitoring system for SLM designed and operational.	Design of a system to (i) identify environmental conditions which could lead to land degradation and desertification (and scenario modeling), (ii) identify and quantify advances in degradation and desertification, and (iii) measure impacts of mitigation efforts from the SLM activities.	Design and establish a monitoring system to measure progress with the National SLM Framework, by identifying and quantifying advances in land degradation and desertification at the national level. Data source and methodology: The system will be considered operational once a monitoring report for the National SLM framework is generated.	No	No	Yes	Revised wording and definition of indicator for clarity and improved measurability. The methodologies developed by CONAF for the Land Degradation Neutrality under the UNCCD and the ongoing improvements incorporated in related monitoring systems with the ENCCRV provide the elements for meeting the revised indicator definition.

	New: Indicator 3.2 Early warning system for land degradation designed and operational.	n/a	Design and establish an early warning system to identify environmental conditions which could lead to land degradation and desertification. Data source and methodology: The system will be considered operational once a monitoring report is generated for the Strategic Pilot Areas.	No	No	Yes	New indicator, as a result of revised PDO indicator 3.
Indicator 4.1: SLM Training	Revised: Training provided to national, regional and local agencies to promote intersectoral coordination on SLM implementation.	Training events (national, regional and local agencies) to promote intersectoral coordination needed for SLM and biodiversity mainstreaming.	No change	0	0	60	Revised wording to reflect target audience and purpose (to promote intersectoral coordination).
Indicator 4.2: University-level course on SLM and biodiversity mainstreaming developed and taught.	No change	Curriculum development and teaching a university-level course on SLM for professionals and technicians.	No change. Data source and methodology: The course is completed and the learning outcomes have been validated through participant certifications issued by a higher education institution.	No	No	Yes	Indicator is on track. CONAF has contracted University Mayor to carry out a Masters course on Climate Change and Native Vegetation which includes a SLM module.

Indicator 4.3: Public outreach program.	Revised: Annual public outreach program.	Annual public outreach program for SLM and biodiversity mainstreaming underway through media, fairs, and public training events during each year of project.	No change. Data source and methodology: Development of a multi-annual public outreach program which will be monitored through project implementation.	No	No	Yes	Revised wording of the indicator and definition to focus on the frequency (annual) of the public outreach program. CONAF is currently carrying out a series of public outreach and communication activities related to the ENCCRV which will be systematized in an Outreach Program document.