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Report No: ICR00005881

IMPLEMENTATION COMPLETION AND RESULTS REPORT

TF0A0233

ON A

GRANT

IN THE AMOUNT OF US$6.29 MILLION

TO THE

Argentina Undersecretariat of International Financial Relations for Development, Secretariat of Strategic Affairs, Office of the President

FOR THE

Rural Corridors and Biodiversity Project

August 4, 2022

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

CURRENCY EQUIVALENTS

(Exchange Rate Effective: Feb 26, 2015 / Dec 31, 2021)

Currency Unit =	Argentine Peso (ARS)
8.75 ARS=	US$1 (at Appraisal)
US$ 0.114 =	ARS 1
102.69 ARS=	US$1 (at Completion)
US$ 0.0097 =	ARS 1

FISCAL YEAR
July 1 - June 30.

Regional Vice President:	Carlos Felipe Jaramillo
Country Director:	Jordan Z. Schwartz
Regional Director:	Anna Wellenstein
Practice Manager:	Genevieve Connors
Task Team Leader(s):	Pablo Francisco Herrera
ICR Main Contributor:	Marcela Portocarrero Aya

ABBREVIATIONS AND ACRONYMS

APN	Argentine National Parks Administration (*Administración de Parques Nacionales*)
ARS	Argentine Peso
CBD	United Nations Convention on Biological Diversity
CDD	Communitiy Driven Development
C eq	Carbon equivalent
COFEMA	Federal Council of the Environment (*Consejo Federal de Medio Ambiente*)
CPS	Country Partnership Strategy
DO	Development Objective
ESA	Environmantal and Social Assessment
FVSA	Argentina Wildlfe Fundation (*Fundacion Vida Silvestre Argentina*)
FY	Fiscal Year
GDP	Gross Domestic Product
GEF	Global Environment Facility
GoA	Government of Argentina
GPS	Global Positioning System
ha	Hectares
ICR	Implementation Completion and Results Report
ISR	Implementation Status and Results Report
IP	Implementation Progress
IPs	Indigenous Peoples
IPP	Indigenous Peoples Plan
M&E	Monitoring and Evaluation
MTR	Mid-Term Review
NDC	Nationally Determined Contributions
NP	National Park
PA	Protected Areas/s
PAD	Project Appraisal Document
PDO	Project Development Objective
PP	Provincial Park
RF	Results Framework
SEPA	Procurement Plans Execution System (*Sistema de Ejecución de Planes de Adquisiciones*)
SIFAP	Federal System of Protected Areas (*Sistema Federal de Areas Protegidas*)
SORT	Systematic Operations Risk Rating Tool
SPA	Selected Protected Area/s
STEP	Systematic tracking of Exchanges in Procurement
TA	Technical Assistance
TF	Trust Fund
ToC	Theory of Change
TT	Tracking Tool
TTL	Task Team Leader
UCEFE	Project Execution Coordination Unit (*Unidad Coordinadora de Ejecución de Proyectos con Financiamiento Externo*)
WB	World Bank

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DATA SHEET

BASIC INFORMATION

Product Information

Project ID	Project Name
P114294	Rural Corridors and Biodiversity
Country	**Financing Instrument**
Argentina	Investment Project Financing
Original EA Category	**Revised EA Category**
Partial Assessment (B)	Partial Assessment (B)

Organizations

Borrower	Implementing Agency
Argentina Undersecretariat International Financial Relations for Development, Secretariat of Strateg	APN - Administración de Parques Nacionales

Project Development Objective (PDO)

Original PDO

The objective of the project is to increase the protection of vulnerable natural areas and conserve biological diversity within the Gran Chaco Ecosystem and the Patagonian Steppe and Coastal-Marine Ecosystems and, implement measures to enhance biodiversity resilience to climate change and protect forest carbon assets.

FINANCING

	Original Amount (US$)	Revised Amount (US$)	Actual Disbursed (US$)
World Bank Financing			
TF-A0233	6,289,030	6,289,030	6,234,039
Total	**6,289,030**	**6,289,030**	**6,234,039**
Non-World Bank Financing			
Borrower/Recipient	13,000,000	3,980,000	7,125,757
Total	**13,000,000**	**3,980,000**	**7,125,757**
Total Project Cost	**19,289,030**	**10,269,030**	**13,359,796**

KEY DATES

Approval	Effectiveness	MTR Review	Original Closing	Actual Closing
07-Apr-2015	09-Nov-2015	07-Dec-2018	30-Nov-2020	31-Dec-2021

RESTRUCTURING AND/OR ADDITIONAL FINANCING

Date(s)	Amount Disbursed (US$M)	Key Revisions
14-Sep-2018	1.27	Change in Results Framework Change in Components and Cost Reallocation between Disbursement Categories Change in Legal Covenants
05-Nov-2020	4.42	Change in Results Framework Change in Loan Closing Date(s) Change in Implementation Schedule
24-Aug-2021	5.82	Change in Loan Closing Date(s) Reallocation between Disbursement Categories

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	08-Oct-2015	Satisfactory	Satisfactory	0
02	16-Jun-2016	Moderately Satisfactory	Moderately Satisfactory	0
03	21-Dec-2016	Moderately Satisfactory	Moderately Satisfactory	.50
04	30-Jun-2017	Moderately Unsatisfactory	Moderately Unsatisfactory	.71
05	05-Jan-2018	Moderately Unsatisfactory	Moderately Unsatisfactory	.88
06	21-May-2018	Moderately Unsatisfactory	Moderately Unsatisfactory	1.27
07	13-Jun-2018	Moderately Unsatisfactory	Moderately Unsatisfactory	1.27
08	21-Dec-2018	Moderately Unsatisfactory	Moderately Unsatisfactory	1.77
09	16-Apr-2019	Moderately Unsatisfactory	Moderately Satisfactory	2.44
10	25-Jun-2019	Moderately Satisfactory	Moderately Satisfactory	2.65
11	20-Dec-2019	Moderately Satisfactory	Moderately Satisfactory	3.44
12	10-Jun-2020	Moderately Unsatisfactory	Moderately Satisfactory	3.82
13	30-Oct-2020	Moderately Satisfactory	Moderately Satisfactory	4.42
14	30-Apr-2021	Moderately Satisfactory	Moderately Satisfactory	5.42
15	03-Nov-2021	Moderately Satisfactory	Moderately Satisfactory	5.82

SECTORS AND THEMES

Sectors

Major Sector/Sector	(%)
Agriculture, Fishing and Forestry	**100**
Public Administration - Agriculture, Fishing & Forestry	50
Forestry	50

Themes

Major Theme/ Theme (Level 2)/ Theme (Level 3)	(%)
Private Sector Development	**100**
Jobs	100
Environment and Natural Resource Management	**100**
Renewable Natural Resources Asset Management	68
Biodiversity	68
Environmental policies and institutions	32

ADM STAFF

Role	At Approval	At ICR
Vice President:	Jorge Familiar Calderon	Carlos Felipe Jaramillo
Country Director:	Jesko S. Hentschel	Jordan Z. Schwartz
Director:	Paula Caballero	Anna Wellenstein
Practice Manager/Manager:	Emilia Battaglini	Genevieve Connors
Project Team Leader:	Peter Jipp	Pablo Francisco Herrera
ICR Co Author:		Marcela Portocarrero Aya

I. PROJECT CONTEXT AND DEVELOPMENT OBJECTIVES

A. CONTEXT AT APPRAISAL

Context

1. **When the Rural Corridors and Biodiversity (RCB) project was approved in 2015, Argentina was rebounding from the economic crisis of 2001 and was one of the top two performers in the Latin America and Caribbean region in terms of reducing poverty and sharing the gains of rising prosperity by expanding the middle class**.[1] Total poverty (measured at US$4 per day) had declined from 31.0 percent in 2004 to 10.8 percent in 2013, while extreme poverty (measured at US$2.50 per day) had fallen from 17.0 percent to 4.7 percent.[2] Nonetheless significant regional disparities persisted with respect to poverty and access to basic services. The gap between regions had grown since the 2002 crisis, with Patagonia far outpacing the Northeast and Northwest regions. The Northern region provinces had poverty rates two to three times higher than the national average and lagged the rest of the country in social services and basic infrastructure.

2. **Paradoxically, despite natural resources being at the basis of Argentina's socio-economic development, the lack of planning and environmental enforcement enabled rapid degradation of natural capital, with significant consequences for biodiversity and the provision of ecosystem services, which in turn can undermine community resilience.** The country's record on environmental management is uneven, with a score of 41.1 out of 100 in the Environmental Performance Index (as of June 2022), the country is ranked 92 out of 180 countries (22 out of the 32 LAC countries; and 12, out of the G20 countries). Regarding terrestrial biomes protection, Argentina, with a score of 41.7, ranks 29 out of 32 LAC countries; on Protected Areas Representativeness, with a score of 17.2, ranks 31; on species protection, with a score of 37.1, ranks 19; and on climate change mitigation, with a score of 35.5, ranks 23 in the region[3].

3. **Poverty and limited development options were also enabling deforestation and the degradation of natural resources**. A third of Argentina's continental territory is covered with natural grasslands, and another third with crops and forest plantations. Only around 11 percent of its territory is covered with natural forest totaling approximately 31.4 million hectares. Two thirds of this area is situated in the Chaco Eco-Region (21.7 million ha), which also has around 13.4 million ha of forest and shrub land in various stages of degradation due to overgrazing and unregulated timber and fuel-wood extraction. The Chaco Region produces around 90 percent of all natural forest products in Argentina (mainly poles, tannin, firewood, and charcoal). Although the population of the 12 Provinces that make up the Chaco Region amounts to only 18 percent of the national total and consume more than 50 percent of the total fuel wood in the country. Some of the poorest and most isolated people in Argentina (often indigenous and rural producers) are heavily dependent on these resources for their livelihoods, making the forests, and therefore these livelihoods particularly vulnerable to encroachment and climate change.

[1] Unless otherwise specified, poverty data in this paragraph are from: Socio-Economic Database for Latin America and the Caribbean (CEDLAS and World Bank).
[2] Poverty measured at US$1.25 per day declined from 6.3 percent in 2004 to 1.3 percent in 2012.
[3] https://epi.yale.edu/epi-results/2022/country/arg

4. **At project design twenty percent (sixty million ha) of the country was considered degraded[4] with high rates of deforestation (240,000 ha/year[5]) reported, and disturbances (such as fires, overgrazing, drainage, and pollution of soils) often driven by cropping and ranching in grasslands (especially the Pampas and Patagonian Steppe)**. Most deforestation in Argentina in recent decades has taken place in the Chaco region[6], where a combination of weak institutions and poverty combine to make the area extremely vulnerable both economically and environmentally. The main driver of deforestation in this region is the expansion of industrial-scale agriculture, particularly soy production and cattle ranching.

5. **Argentina ranked 15th in terms of the estimated number of globally important endangered species that inhabit its territory, being habitat loss, degradation and fragmentation, illegal hunting and fishing, pollution and climate change[7] the main threats**.[8,9] Regions like the Patagonia Steppe, cover ecosystems that go from glaciers of the Andes to plateaus that descend to the Atlantic Sea, hosting representative species of grasslands, xerophytic grasses, and foraging shrubs, many of them endemic to the country. The coastal-marine ecosystems host species of commercial value like the blond croaker, whiting, vitamin shark, anchovy and sole as well of a diversity of algae, bivalves and crustacea.[10] Larger mammals like the endangered Franciscana dolphin, many species of fur seals and resident and migratory whales are of not only of environmental importance but a key source of income for tourist operators. The Chaco region hosts a well recorded number of species, many endemic and endangered including umbrella species of environmental importance such as Jaguar, tapir, and crowned eagle.

6. **The country is also increasingly exposed to climate-driven natural hazards such as flooding, water scarcity, extreme heat waves, and extreme precipitation events**. Climate Change threatens the provision of ecosystem services underpinning agricultural economic activities, increasing the risk to the poor and the most vulnerable. Improving environmental management is one of the best adaptation strategies to manage climate risks as well as essential to Argentina's transition towards a modern, resilient, and low-carbon economy.[11]

7. **Despite the urgency of conserving these habitats, less than two percent of the Chaco, the Patagonian Steppe and the coastal-marine ecosystems were under formal protection at appraisal, and inter-agency conservation efforts outside protected areas were insufficient**. The decentralized nature of the Argentina's conservation system has made it challenging for Argentinian National Parks Administration (APN) and the 24 Provinces to coordinate effectively and to design and implement common policies on natural resources use, biodiversity conservation and climate change. The national protected areas (PA) system, managed by the National Parks

[4] The GEF (2009) defines land degradation as "any form of deterioration of the natural potential of land that affects ecosystem integrity either in terms of reducing its sustainable ecological productivity or in terms of its native biological richness and maintenance of resilience"

[5] FAO 2010. Forest Resources Assessment 2010. Rome Italy.

[6] Early reports say that in 2021 110,180 ha were deforested in the Chaco Region (52,290 in Santiago del Estero Province, 18,068 in the Chaco Province, 29,165 ha in Formosa and 10,657 ha in Salta).

[7] SAyDS. 2010. Secretaría de Ambiente y Desarrollo Sustentable de la Nación. 2010. Convenio sobre Diversidad Biológica-Cuarto Informe Nacional.

[8] SAyDS, 2019. Informe Nacional Ambiente y Áreas Protegidas de la Argentina. 2008-2018.Available at: *https://www.argentina.gob.ar/sites/default/files/informe_ambiente_y_ap_final.pdf*

[9] Fundación Vida Silvestre Argentina (FVSA). 2016. La Salud de Nuestra Tierra. Monitoreo de servicios ecosistémicos para un diagnóstico sobre la salud ambiental de la Argentina.

[10] Information of Biodiversity extracted from the National Biodiversity System – SIB *https://sib.gob.ar/ecorregiones* and the Chaco Ecoregion Evaluation 2018

[11] Argentine Republic, Argentina Country Environmental Analysis. 2016. World Bank Report No. AUS11996

Administration (APN), is the oldest in South America. Nevertheless, at appraisal, it only covered 1.45 percent of the country's terrestrial ecosystems.[12] Argentina's Federal System of Protected Areas (SIFAP) also includes provincial, municipal, and private protected areas, and entails a tripartite institutional framework integrated by i) the Federal Council of the Environment (COFEMA, Consejo Federal de Medio Ambiente, which includes environmental representatives of all provinces and the Autonomous Buenos Aires City); ii) APN; and iii) the National Ministry of Environment and Sustainable Development (MAyDS). However, standards for conservation in provincial areas were, in general, much lower than the national protected areas.

8. **The RCB– a Global Environment Facility (GEF 4) operation – was part of a long-term and evolving engagement between the World Bank (WB) and Argentina's National Parks Administration (APN)**. This project advanced achievements and progress made under the previous Native Forests and Protected Areas Project (NFPA, P040808) and the GEF Biodiversity Conservation Project (ABC, TF028372), that introduced alternative, less destructive productive activities in park buffer zones; and the Sustainable Natural Resources Management Project (P100806), that identified two pilot conservation corridors and made initial infrastructure investments within different national parks.

9. **This Project was also designed as part of a broader and complementary set of operations in the environment and natural resources sector**, such as the Reducing Emissions from Deforestation and Forest Degradation (REDD+) Readiness Preparation Grant (P120414), which provided support to Argentina to mitigate forest carbon emissions and enhance its preparedness to access forest carbon markets; and the Forest and Community Project (P132846) that aimed at improving communal forest management through the sustainable use of natural resources in the northern provinces of Argentina.

10. **The RCB constituted a strategic element to make a substantive case for an improved biodiversity conservation approach based on the sustainable management of landscapes.** By supporting participatory corridors mapping and planning jointly led by APN and the provincial counterparts; by investing in infrastructure outside national parks (i.e., in provincial protected areas); and by supporting Community Driven Development (CDD) subprojects in key points outside the protected areas but across corridors connecting them, this Project went beyond APN's usual business to improve biodiversity conservation through a more holistic management of landscapes. At closing, the experience and capacity gained through the implementation of the RCB project informed a significantly larger investment; the recently approved Sustainable Recovery of Landscapes and livelihoods in Argentina Project (P175669).

Theory of Change (Results Chain)

11. **Because a diagrammatic Theory of Change (ToC) was not required at appraisal, the ToC presented here was developed during project implementation (after the mid-term review)**. Not formally included as part of the official Project approval package, the TOC was reinterpreted for the purpose of this Implementation Completion and Results Report (ICR).

[12] At appraisal, the national protected areas system, managed by the National Parks Administration (APN) covered 4,055 million hectares and included 48 protected areas and four natural monuments. Today APN manages 54 Protected Areas, covering 1.65 percent of the terrestrial ecosystems. By 2022, Argentina reports additional 480 PAs registered in the Provincial System of Protected Areas – SIFAP, covering 11 percent of the national territory (31.4 million ha). The Marine protected area is of 7 percent and correspond to three PA strictly marine, and 31 PAs that cover costal and marine territories.

12. **The RCB project aimed to curb the high levels of habitat degradation, deforestation, and ecosystem fragmentation, that were identified as drivers of increased vulnerability to climate change in the ecosystems of the Gran Chaco forests and the Patagonian steppe and coasts.** This unsustainable land use by both big agroindustry and local communities in and around PAs affects the landscape at different levels. Local rural communities can act as drivers of ecosystem degradation through unsustainable use of forest and other natural assets. Conversely, they can also help prevent more extensive land-use change by industrial agribusiness and act as barriers to ecosystem transformation, as the presence of smallholders in human-managed ecosystems, agricultural dominated lands, livestock grazing areas and exploited forests limit such transformation.

13. **The three regions selected for project interventions were prioritized by threat level and impact on biodiversity**.[13] The preexisting conservation strategies in the three regions, were also considered, despite their varied levels of development (some had been supported by previous World Bank operations). The selection of areas with more advanced interventions was expected to provide example and allow less advanced areas to receive support to ensure they were effectively providing protection to biodiversity. The Gran Chaco constituted the most advanced region from the perspective of the development of dialogues and agreements between national and provincial authorities for the creation of new protected areas and the design of landscape management strategies. A Rural Corridors[14,15] Strategy was designed by APN and the Provinces of the Gran Chaco region in 2008, to address the scarce representation of natural Protected Areas, as well as the complex way in which the natural resources of the region were used. This regional strategy to connect protected areas through establishment of biodiversity corridors across the rural landscape informed the design and implementation of this project. The Patagonian steppe and coasts were less advanced in the design of management strategies to protect their biodiversity. The selection of PAs in the Chaco, the Patagonian Steppe, and the Patagonian Coastal-Marine regions where the project would invest, considered not only their strategic location and biodiversity value, but also their formal creation and implementation status both at appraisal, and when the project was restructured.

14. **The project design addressed the prioritized problems within the three selected regions by i) enhancing the management effectiveness in natural PAs** that function as biodiversity sources or "core areas" within the landscapes, by providing critical infrastructure, equipment and training to PA staff, and by formulating management and action plans for the Selected Protected Areas (SPA),[16] strategies that increase enforcement

[13] The project prioritized activities within 3.66 million ha. corresponding to the total area of 10 Selected Protected Areas and the Chaco Húmedo and Chaco Seco Corridors (3 million ha). The total area of the Gran Chaco region in Argentina is 60 million ha. The project prioritized activities in this region within 3.37 million ha (5.6 percent) and specifically implemented investments in 0.87 million ha (1.45 percent). The total area of the Patagonia Steppe in Argentina is 48 million ha; the project implemented investments in 0.10 million ha (0.2 percent). The total area of the marine/coastal ecosystems of Argentina is of 16 million ha (12 miles from the coast); the project intervened 0.17 million ha (1 percent). The total area of designed corridors for the Gran Chaco Region in Argentina is of 15 million ha* (core areas: 5 million ha; corridors 10 million ha), the project implemented investments in 0.24 million ha (1.6 percent) of the prioritized 3 million ha (20 percent) of the Chaco Húmedo Corridor (1 million ha) and the Chaco Seco Corridor (2 million ha). *http://visorgranchaco.org/wp-content/uploads/2015/08/Corredores_Chaco_Argentina.pdf

[14] Corridors are spatially and ecologically specific landscape elements which provide connectivity between discrete patches to form ecological networks, they are key components for an ecosystem approach to conservation, as recommended by the Convention on Biological Diversity (CBD) (2004).

[15] Conservation Corridors is a synonym of Rural Corridors within this ICR.

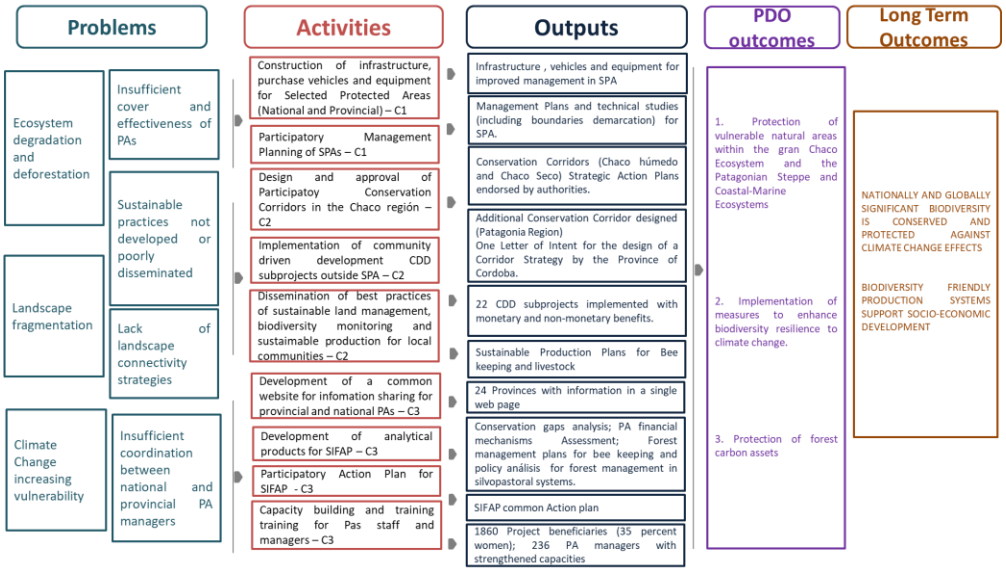
[16] **SPAs at appraisal**: *Chaco Region*: (i) Chaco Seco (National Park), (ii) Impenetrable Chaqueño (Provincial Multiple-Use Reserve), (iii) Copo Provincial Park, S. del Estero (Provincial Park). *Patagonian Steppe and Marine/Coastal region*: (i) Punta Buenos Aires (Joint management Nature Reserve), (ii) Patagonia-Austral Coastal-Marine Park (Joint management Park), (iii) Isla Pingüino.

capacity within PAs and yield positive conservation outcomes[17]; **ii) planning and implementing rural corridors** to improve connectivity among the previously mentioned core areas, inducing better land-use management practices through CDD subprojects, within such corridors. Subprojects were focused on beekeeping, cattle ranching, forest management and tourism; **iii) building capacities among staff from the provincial PA systems and local communities**, with a focus on indigenous groups and women**; and v) facilitating the enabling environment to strengthen the collaboration between the national and provincial protected areas systems** (within the framework of the Federal System of Protected Areas, SIFAP).

15. **CDD subprojects aimed to provide alternative livelihoods to rural communities while contributing to maintaining or improving connectivity between protected areas and other natural lands.** The underlying assumption was that these productive landscapes, subject to enhanced sustainable management practices, would maintain significant areas of natural habitat allowing conservation of native fauna and flora and continued provision of ecosystem services[18]. Well-designed CDD subprojects can provide monetary and non-monetary benefits to rural communities, through less degrading use of local natural resources, while generating incentives leading to an increased protection of these ecosystems.

16. **The project investments, both physical (tangible) and those aiming at strengthening conservation governance (intangible), were expected to result in improved natural resource management of the rural corridors**, contributing to the protection of these regions' natural capital, including forest and other natural ecosystems, contributing to the enhancement of the resilience of biodiversity of these territories to climate change.

Figure 1. Schematic Overview of the Project's Theory of Change



[17] Nolte, C. (2016). Identifying challenges to enforcement in protected areas: Empirical insights from 15 Colombian parks. Oryx, 50(2), 317-322. doi:10.1017/S0030605314000891

[18] Forest Peoples Programme, International Indigenous Forum on Biodiversity, Indigenous Women's Biodiversity Network Centres of Distinction on Indigenous and Local Knowledge, and Secretariat of the Convention on Biological Diversity. (2020). Local Biodiversity Outlooks 2: The contributions of indigenous peoples and local communities to the implementation of the Strategic Plan for Biodiversity 2011–2020 and to renewing nature and cultures. A complement to the fifth edition of Global Biodiversi. Moreton-in-Marsh: Forest Peoples Programme.

Project Development Objectives (PDOs)

17. **The Project Development Objective was to increase the protection of vulnerable natural areas and conserve biological diversity within the Gran Chaco Ecosystem and the Patagonian Steppe and Coastal-Marine Ecosystems, implement measures to enhance biodiversity resilience to climate change and protect forest carbon assets**.

Key Expected Outcomes and Outcome Indicators

18. **At appraisal, the project expected outcomes were broadly defined to encompass a breadth of concepts and conservation approaches which were then expected to be tailored, during project implementation, to the circumstances of different ecosystems (from dry forests to marine habitats).** This approach was to allow for flexibility to implement groundbreaking concepts that could potentially trigger desired transformational changes and promote cross-regional learning. The PDO included biodiversity resilience concepts that were still evolving at the time of project preparation. The implementation of interventions on the ground tested the feasibility of upscaling 'ecosystem specific' landscape level biodiversity conservation strategies. This approach was the next logical step for an innovative operation, within the context of a longer-term succession of projects, responding to the threats identified in the selected and diverse areas of intervention.

19. Original PDO level results indicators consisted of the following: i) areas brought under enhanced biodiversity protection (hectares), ii) people in targeted forest and adjacent communities with increased monetary or non-monetary benefits from forests (number), iii) Common Action Plan for corridors conservation between Federal and Provincial Authorities Adopted (Yes/No), and iv) aboveground carbon protected in Chaco forests (TonCeq).

20. **During project implementation the PDO level results indicators were revised and modified**. See section B. "Significant Changes during implementation".

21. **Targeted Beneficiaries:** At appraisal, direct beneficiaries were defined as (i) rural populations living within the selected protected areas and in their buffer zones[19] and within target corridors. These rural populations living in heterogenous landscapes that contain an important share of the regional biodiversity that if managed wisely together with a robust protected areas system can significantly contribute to the maintenance of the overall regional and national biodiversity; and (ii) Government institutions, mainly APN and provincial agencies, responsible for the management and sustainable development of protected areas; (iii) park visitors (through the provision of new facilities, management and services in the parks); (iv) the tourism sector (through new infrastructure which attracts park visitors to rural areas); and (v) the education sector (although this group was not prioritized in actual project investments).

Components (as approved)

22. **Component 1: Core Protected Areas (estimated GEF allocation US$3.19 million, actual GEF allocation US$3.32 million after 2018 Restructuring, estimated Government allocation US$2.3 million, actual Government**

[19] Areas "peripheral to a national park or equivalent reserve, where restrictions are placed upon resource use or special development measures are undertaken to enhance the conservation values of the area" The buffer zone concept has been suggested as one possible solution to safeguard the protected areas, providing an extra layer of protection through sustainability of human activities and environment.

allocation US$6,8 million). Establishment, strengthening and operational startup of SPA, within the Gran Chaco Ecosystem and the Patagonian Steppe and Coastal-Marine Ecosystem, through: i) the provision of the necessary infrastructure for basic management, small-scale improvements for park access and visitor use, and small infrastructure such as fences, corrals, and garages, ii) the carrying out of selected technical studies on, topics including, social, environmental, climate change and management themes, including the provision of support to drafting legal instruments required for the establishment of new protected areas, the preparation of draft management plans and land surveys to identify the formal boundaries of SPAs, iii) the provision of training and capacity building for personnel assigned to SPA protection and management; and iv) the acquisition and provision of select equipment needed for park management including, vehicles, small boats, communications, firefighting, Global Positioning System (GPS), audiovisual equipment, computers, and furniture.

23. Community Driven Development Subprojects had the primary objective of improving small-holder and community land-use practices to enhance their compatibility with biodiversity conservation; and included provisions for public consultations including meetings and workshops, the generation and dissemination of information, and the design of a participation plan for purposes of encouraging stakeholder involvement in conservation throughout project implementation.

24. Component 2: Conservation Corridors in the Gran Chaco Ecosystem and the Patagonian Steppe and Coastal-Marine Ecosystems (estimated GEF allocation US$1.55 million, actual GEF allocation US$1.87 million after 2018 Restructuring, estimated Government allocation US$1.41 million, actual Government allocation US$0.33 million). Design and implementation of a multi-stakeholder process for implementing interventions in Rural Corridors in the Gran Chaco Ecosystem and the Patagonian Steppe and Coastal-Marine Ecosystems, through: i) mapping of the Chaco and Patagonia Steppe Rural Corridors, ii) design, validation and dissemination of participatory, operational, and strategic plans, programs, and management tools for said Corridors, iii) design of cooperation frameworks for the Chaco and Patagonia Steppe Rural Corridors' management, and the establishment of coordination mechanisms and/or management committees for said corridors, iv) carrying out of studies and workshops including on social, environmental, biodiversity and climate-change issues in said Corridors, and the design of draft management plans for legally established provincial protected areas within the Chaco Rural Corridors, v) establishment of APN field units in Rural Corridors (including the acquisition and utilization of necessary equipment); and vi) provision of support in the designing of financial incentives to promote biodiversity conservation in said Corridors.

25. Carrying out catalytic actions to pilot mainstreaming of corridor conservation in the *Chaco Húmedo* Pilot Conservation Corridor and the *Chaco Seco Impenetrable* Pilot Conservation Corridor (Chaco Rural Corridors), through: i) provision of training including to park guards, wildlife agents, extension agents and rural educators, ii) cataloging of best practices for sustainable land use, conservation and biodiversity monitoring, and the development and dissemination of guidelines on such best practices, iii) establishment of a network for conservation action, biodiversity monitoring and climate change mitigation; and iv) carrying out of community driven development subprojects.

26. Component 3: Collaboration for Corridors' Conservation (estimated GEF allocation US$0.99 million, actual GEF allocation US$0.46 million after 2018 Restructuring, estimated Government allocation US$0.06 million, actual Government allocation US$0 million). Strengthening of the Federal System of Protected Areas through the promotion of a shared vision among its members, comprehensive stakeholder involvement, institutional support and long-term financial planning, including: i) the provision of operational support to start-up SIFAP's executive

committee and secretariat, ii) the collection, comparison, and analysis of provincial- and private-protected area classifications, and the provision of support to Argentina in the drafting of a proposal for common standards for protected areas, iii) the establishment of a website for online information and registration system, and the design of a management effectiveness evaluation tool for protected areas, iv) the analysis and preparation of climate change mitigation and adaptation strategies to support conservation, including tie-ins to the Forest Law and REDD initiatives, and v) the carrying out of national and eco-regional gap analyses and conservation priority setting.

27. Development of management standards and strengthening of provincial and national parks institutional capacity, including: i) the carrying out of needs assessment studies aimed at acquiring an accurate and comprehensive overview of the strengths and weaknesses of national and provincial protected areas systems; ii) the carrying out of regional and inter-provincial workshops for best-practice sharing, as well as the provision of training for conservation management and climate change mitigation/adaptation (including short-courses and scholarships); iii) the development of guidelines for provincial protected areas management; and iv) the carrying out of training visits by personnel of provincial and national protected areas) for capacity building on conservation and climate-change themes.

28. Improvement of SIFAP's organizational structure, through: i) the carrying out of analyses and the provision of support in the development of proposals for financing mechanisms for conservation, as well as the review of regulatory frameworks and existing incentive structures for mainstreaming biodiversity conservation at provincial and national levels; and ii) the carrying out of a diagnostic review and the provision of support in the development of a proposal for a regulatory framework for private and community protected areas, as well as the identification of options for funding mechanisms for such private and community protected areas.

29. Component 4: Management, Monitoring and Evaluation (estimated GEF allocation US$0.55 million, actual allocation US$ 0.63 million after 2018 Restructuring, estimated Government allocation US$0.20 million, actual Government allocation US$0 million). Provision of technical and operational assistance, as necessary to support adequate Project management. Development and implementation of a monitoring and evaluation program for the Project (including a monitoring and evaluation program for climate-change themes). Carrying out of Project audits, mid-term review and final evaluation of the Project.

B. SIGNIFICANT CHANGES DURING IMPLEMENTATION (IF APPLICABLE)

30. Four project restructurings took place during the project implementation. **The first**, dated August 28, 2015, only involved the editorial corrections of the Trust Fund code in the Grant Agreement.

31. The second restructuring, dated September 30, 2018 (as part of the project mid-term review, MTR), was due to the identification of three key challenges that the project was facing: (i) some changes in the context, in terms of the protected areas to be supported by the project (in terms of legal status and investment needs); (ii) a complex design with many activities that dispersed the Project Implementation Unit (PIU) efforts over a very diverse set of fronts; and (iii) poor management capacity. On the latter, key issues included a) an activity driven, as opposed to a results-driven, approach to Project management by the PIU; b) a weak monitoring and evaluation framework; and c) cumbersome procedures to approve procurement processes, among others, for infrastructure works.

32. Despite a slightly improved performance and progress towards the achievement of the PDO, a **third restructuring,** dated November 11, 2020, was needed to overcome specific circumstances that had delayed the implementation of many activities, and some implementation challenges identified by the Task Team. The Project went through two management changes at the provincial and national level and the PIU lost key personnel between 2018 and 2019. The outbreak of the COVID-19 pandemic led to mandatory and preventive social isolation measures in Argentina, which also hampered the implementation of some Project activities as limitations were imposed to the continuity of civil works; and face to face interaction with stakeholders (such as the beneficiary rural communities) was discouraged. Additionally, deficiencies in the implementation of social safeguards and the M&E system, that were affecting the progress towards the achievement of the PDO, required additional time to be properly addressed. This restructuring extended the closing date by nine months from November 30, 2020, to August 31, 2021.

33. The **fourth restructuring**, dated August 16th 2021, was conducted to grant additional time to the PIU to achieve some of the pending project's results and complete some expected activities, including the conclusion of some civil works in the Loro Hablador and Copo Provincial Parks. This restructuring extended the closing date further, to December 31, 2021.

34. All restructurings were targeted and effective. Each restructuring led to an increase in the project's disbursements and in the execution of resources and implementation of activities on the ground. Restructurings however were not enough to offset the delays caused by the COVID-19 pandemic and the project closing date had to be extended twice.

Revised PDOs and Outcome Targets

35. The PDO was not changed during project implementation. A review was conducted and a reduction in PDO scope was considered and dismissed at MTR. Given the administrative and political economy complexities involved in such a restructuring (local legal framework requires a presidential decree to do so), the parties considered it would not be practically feasible. Instead, the WB and the Government of Argentina (GoA) agreed that the original PDO be maintained to allow for the integration of multiple approaches that could be tailored to local circumstances and that was still possible to measure its achievement without changing its original wording.

36. Restructurings in 2018 and 2020 were responsive and focused on addressing specific implementation and project management weaknesses. Restructuring Actions (i.e., redistribution of activities among components and the deletion of some others no longer valid for the project; and the revision of the Results Framework) were to better reflect the changes in the Project context and part of the Bank's continuous implementation support. Annex 4 summarizes the changes introduced to the Project Results Framework (RF), and their justifications.

Revised PDO Indicators

37. During project implementation original PDO indicators were modified as follows:

a) Original Outcome Indicator 1. *Areas brought under enhanced biodiversity protection* was revised and its name changed to *Areas brought under enhanced biodiversity conservation*, to better reflect the results of the activities under implementation. The indicator's end target was decreased from 882,000 ha to 655,624 ha, measuring now only the conserved area under SPAs. The area under other biodiversity

conservation/protection measures outside the SPA was measured in two new Outcome Indicators, compensating the change in the indicator's end target.

b) Outcome Indicator 2. *People in targeted forest and adjacent communities with increased monetary or nonmonetary benefits from forests* was labeled as an intermediate indicator. It was identified that the link of this indicator to the PDO was not direct, as shown in the ToC.

c) A new Outcome Indicator *Land area under sustainable landscape management practices* was added after the 2020 project restructuring since it was a relevant Corporate Results Indicator to which the Project contributes. End Target of 226,376 ha.

d) The new Outcome Indicator *Area benefiting from biodiversity resilience measures* was created to reflect Project contribution to the PDO's component on the implementation of measures to enhance biodiversity resilience to climate change. End Target of 5,513 ha.

Revised Components

38. The WB was responsive to contextual changes and implementation challenges and supported changes in the components to ensure resources were available to implement key activities and deliver the PDO. The technical design of the Project was revised as part of the Level 2 Restructuring completed in 2018.

39. Key changes in component 1 included: the elimination of all references of the Chaco Seco National Park and the Impenetrable Chaqueño Provincial Multiple Use Reserve. During project preparation these PAs were expected to be created. This did not happen, and instead different and new PAs were created and incorporated into the project, replacing those previously mentioned. These changes did not affect the project design or its implementation as the principal value of the project was to develop a regional rural corridors strategy that was flexible and responsive to local need. In this sense, the specific location of activities was less central than evidence and experience of how the approach could be adapted and applied effectively. With the restructuring, a total of ten protected areas from the national and the provincial systems were selected for the implementation of prioritized activities under this component.[20]

40. Other changes to component 1 included the removal of redundant activities, such as training, capacity building and public consultations planned already under different components and the removal of the subprojects from this Component to keep them under Component 2. Activities for the formulation of management plans for SPA expected under Component 2, were included under Component 1 activities.

41. In Component 2, project activities were also streamlined towards the PDO, for example, through an increased emphasis on the corridors approach in Component activities, and the differentiation of activities in the Gran Chaco ecosystems from those implemented in the Patagonian Steppe and Coastal Marine Ecosystems, to facilitate monitoring and evaluation. Activities related to potential tie-ins to the Forest Law and REDD initiative were removed as they were no longer a priority for the GoA. Activities related to the designing of financial incentives to promote biodiversity conservation were moved to Component 3. **In Component 3**, there were minor changes to the narrative to strengthen the links between the component activities and the PDO Outcomes.

[20] **Final Protected Areas supported by the project**: Chaco region: (i) Impenetrable National Park, (ii) Copo National Park, (iii) Copo Provincial Park, (iv) Copo Multiple Use Reserve, (v) Fuerte Esperanza Provincial Park, (vi) Loro Hablador Provincial Park, (vii) Pampa del Indio Provincial Park. Patagonian Steppe and Marine/Coastal Region: (i) Patagonia National Park, (ii) Makenke Interjurisdictional Marine Park, (iii) Patagonia Austral Interjurisdictional Coastal Marine Park.

Other Changes

42. **Eligible Expenditures.** The 2018 restructuring included changes to eligible expenditure categories and budget allocations to improve budget execution efficiency. See Annex 5 for more detailed information.

43. **Counterpart financing**. Total counterpart financing was increased from US$3.98 million, as reported in the PAD, to US$ 7.1 million. For Component 1, it was increased in US$4.5 million compared to what was expected at appraisal. These resources came from the expropriation of La Fidelidad ranch that allowed the creation of the Impenetrable National Park and from the donation of the lands that allowed the expansion of the Patagonia National Park. The counterpart financing presented under Component 2, corresponded to complementary resources from those communities and associations implementing the CDD subprojects. The counterpart financing obtained significantly contributed to the achievement of the PDO. This financing does not include the in-kind contribution of APN originally projected (as the final total co-financing exceeded the originally projected amount, the client did not report this contribution). Changes between the originally projected and final amounts did not reduce project effectiveness or adversely impact it in any other way. The total GEF grant amount remained unchanged during project implementation, slight changes were made in the amounts per components.

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

44. **The ToC was strengthened through the project restructurings, but that did not affect the overall logic underlying the original Project design**. Restructuring processes were focused on increasing the efficiency of project implementation, updating project design, and addressing delays.

II. OUTCOME

A. RELEVANCE OF PDOs

45. **During implementation, the PDO was consistent with the Country Partnership Strategy (CPS) FY15-18 (Report No. 81361-AR)** strategic theme of "Reducing Environmental Risks and Safeguarding Natural Resources" and contributed to the following CPS Result Areas: "Improving natural forest cover in the Chaco Eco-Region" and the CPS cross-cutting portfolio management indicators related to increasing the share of WBG financing directed to impoverished Northern Provinces, governance (strengthening institutions to reduce emission from deforestation), and gender (through gender mainstreaming and disaggregated data collection).

46. **At closing, the PDO remained aligned with the current Argentina CPS FY19-FY22 (Report No. 131971-AR)**, particularly with Focus Area 3, "supporting Argentina achieve its Nationally Determined Contribution (NDC) by reducing vulnerability to climate change and mitigating the country's global environmental footprint." As well as aligned with the CPS Objective 9: climate-smart agriculture in the agricultural sector, with the implementation of CDD subprojects to increase the number of farmers adopting climate risk management approaches. Regarding the 2018 Systematic Country Diagnostic (SCD): Argentina: Escaping Crises, sustaining growth, sharing

prosperity[21], the PDO was aligned with its Pathway 4: Investing in natural capital and ensuring environmental sustainability. The project through its investments aimed at strengthening the national and provincial Protected Areas and Protected Areas systems, as well as to increase the local community's governance of their resources, to counter act the existing drivers of deforestation and biodiversity degradation, and to close the gap between unsustainable agricultural practices and conservation strategies.

47. **The Project at appraisal and closing was consistent with the GEF Biodiversity Focal Areas**, in particular the following Biodiversity (BD) and climate change (CC) strategic programs (SP): BD SP1 - Sustainable Financing of Protected Area Systems at the National Level; BD SP2 – Increasing Representation of Effectively Managed Marine Protected Areas in Protected Areas Systems; BD SP3 – Strengthening Terrestrial Protected Area Networks; and CC SP6 – Management of Land Use, Land-Use Change and Forestry (LULUCF) as a Means to Protect Carbon Stocks and Reduce Greenhouse Gas Emissions (GHG). The project approach to rural corridors was based on the United Nations Convention on Biological Diversity (CBD) recommendations and guidelines (2003, 2004 and 2006).

Assessment of Relevance of PDOs and Rating

48. **The relevance of the PDO is rated as High,** considering the alignment of the PDO and project activities with the CPS and SCD, as well as the sectorial context at appraisal and closure.

B. ACHIEVEMENT OF PDOs (EFFICACY)

Assessment of Achievement of Each Objective/Outcome

Objective Outcome 1. To increase the protection of vulnerable natural areas and conserve biological diversity with the Gran Chaco Ecosystems and the Patagonian Steppe and Coastal-Marine Ecosystems.

49. **This objective outcome was successfully achieved. The project influenced decisions and measures taken by national and local governments about the way they conserve and plan the development of their territories, therefore, it is further increasing the protection of the vulnerable ecosystems of focus**. The project contributed to the enactment of the rural corridors in the Chaco Province (Resolution 510 of 2021); the participatory design of the Patagonian corridors (covering 82.8 million ha); and the letter from the Cordoba Province authorities stating their intention of embracing the corridors approach to improve the connectivity among protected areas in their territory. In addition, the project supported the drafting of the Provincial Decree 2223-21 '*Estructura organica SDTyA*' that resulted in creation of the Secretariat of Territorial Development and Environment for the Chaco Province, and within it the Directorate of Native Forests and Biodiversity Corridors, that has the responsibility to ensure the implementation of actions in rural corridors.

50. **Key project investments and other concurring interventions by third parties have been critical to improve the control and surveillance enforcement conditions and to implement conservation activities in the project focal areas, increasing their protection.** Even though many project benefits will emerge over time, there is already evidence the project has been effective in increasing the protection of vulnerable areas and biodiversity. For example, since 2019, the Impenetrable National Park (created just before the project became effective and

[21] World Bank. 2018. Argentina: Escaping Crises, Sustaining Growth, Sharing Prosperity. Vol. 1 of 2 Washington, D.C.: World Bank Group. *https://imagebank2.worldbank.org/search/30444280*

strengthened by several project investments), has recorded the presence of species that had not been seen in the region for decades, like jaguars and giant river otters. Their presence was confirmed with camera traps and constitutes an indication of the role of protected areas and corridors connecting them in the protection of biodiversity (Annex 8 includes a series of links to media pieces with related anecdotal evidence; and Annex 9 C, D, E provides photographic evidence of the infrastructure and equipment delivered).

51. **PDO Indicator 1: Areas brought under enhanced biodiversity conservation**. This indicator was used as proxy to measure biodiversity protection through the improvement of conditions to enhance management effectiveness of Selected Protected Areas. For that purpose, an adapted version of the original GEF Management Effectiveness Tracking Tool (METT) was used (Annex 9 A, B presents the explanation of the methodology used to calculate results measured under PDO Indicator 1 and PDO Indicator 5). At project closure it was estimated that 631,204 hectares were brought under enhanced biodiversity conservation, including ten (10) SPAs that received support for the development and/or update of their management plans, the acquisition operational and administrative centers, housing modules, storage facilities, vehicles, motorbikes, communications kits, camera traps, and fire response equipment, and the training of their staff. These are now key operational tools for an improved performance of SPAs staff and the accomplishment of the SPAs mission and objectives.

52. **PDO Indicator 2: Land area under sustainable landscape management practices**. This indicator is used as proxy of the protection of vulnerable areas within the focal ecosystems, through lower impact land uses and measures the total area covered by the implementation of 22 CDD subprojects which introduced or scaled-up improved land use management practices (such as restoration of natural vegetation cover, beekeeping, and low impact tourism) in areas outside the SPAs from the Chaco rural corridors (Annex 9 F provides a list and objective of each subproject). 241,281 hectares of land area were brought under sustainable landscape management practices. As such, the subprojects complemented the interventions within SPAs with a comprehensive landscape conservation approach that integrated not only different natural resources and conservation actions, but also a variety of local stakeholders.

53. Before the project was put in place there was no clear budget allocation plan for the implementation of the rural corridors' strategy in the Chaco region. The availability of the GEF funds provided a good opportunity for APN and the provincial authorities to initiate the ground-testing of this strategy, and to strengthen their interinstitutional collaboration. CDD Subprojects cost accounted for 14 percent of the grant, and they were implemented in 8 percent of the total area of the Chaco rural corridors. Overall, they were successful in improving the economic conditions of local small-scale family agriculture communities.

54. **Communities benefiting from CDD subprojects have recognized that by adopting improved management of the natural resources in their production systems, they can obtain economic benefits that can be translated into improved livelihoods and healthier and less threatened ecosystems**. The benefits arising from the technical assistance (TA), equipment and infrastructure provided to communities in the framework of the subprojects are evidenced by: **i) increased honey production and sales, due to improvements in hive management and the acquisition of new technology for processing honey**: One subproject [22]rescued 31 hives of native bees from wood sent to sawmills, allowing the production of 18 kg of honey which was sold in the local market and another portion used for local consumption supporting food security as an added benefit while generating additional income of US$1,000. This practice of rescuing hives continues to happen. Another subproject generated an income of US$9,800 from the production of honey and after project closure this association continued generating revenues from honey production[23]. The acquisition of improved equipment to

process honey, allowed beneficiaries of another subproject [24] to recover up to 15,300 kg of honey through more efficient processing, generating an income of US$42,500; **ii) improved water retention and its subsequent availability for domestic animals (reducing the losses during drought periods), and for households consumption**: on subproject[25] promoted the construction of waterholes that reduced the amount spent by communities on water for domestic purposes. Each family was spending US$ 38 for two thousand liters of water per month, reducing the resources spent to buy water; **iii) improved herds rotation and pasture management, which provided producers with tools to improve their revenues from ranching in the short and medium term**: TA provided to livestock producers[26] helped raise the prices of cattle in local auctions from US$0,78/kg to US$ 1/kg; additionally a group of livestock producers adopted management practices promoted by the project without being subjects of investment. **Other benefits included iv) reduction of costs of fuel for cooking or businesses** (e.g., local bakeries), due to the sustainable use of firewood from thinning practices; **and iv) increased revenues from tourism.** These results show the efficacy of CDD subprojects in generating sustainable income, promoting inclusion and collective efforts to conserve the habitats on which these communities rely.

55. In the Chaco Rural Corridors policy and knowledge was also advance including development and adoption of a Native Bees Sustainable Production Action Plan; a Sustainable Livestock production Action Plan; a Policy Analysis and guidelines for the sustainable use and conservation of forests in silvopastoral systems; and a Forest Management Plan for Beekeeping were developed by the project, providing knowledge to provincial authorities and local communities relevant to the management of the Chaco corridors. This, together with capacity building and training sessions, has strengthened local communities' skills on improved practices (1,346 local people; out of which 47 percent are female; and 48 percent are indigenous).

56. The project also supported the operationalization of areas such as the Impenetrable National Park and the Patagonia National Park created right before the project became effective, and the subsequent expansion of the latter. It also supported the formulation of the SPAs Management Plans with special emphasis on climate change mitigation and adaptation measures, providing APN and the respective Provinces, with tools and guidance for implementation of conservation actions in the short and medium-term. In addition, the Project also supported six biodiversity monitoring campaigns in the Copo Provincial and National Parks, which continue strengthening the knowledge on biodiversity of these areas and providing better information for decision making.

57. APN also managed to secure additional funds to contribute to this objective. This includes the development of the Management Plan for the Patagonia Austral Interjurisdictional Coastal Marine Park, with resources leveraged from an InterAmerican Development Bank loan (BID 2606-OC-AR); and the development of the Management Plan of the Patagonia National Park, with resources from the Conservation Land Trust showing institutional commitment to the long-term management and sustainability of these protected areas supported by the project.

58. By successfully implementing activities on the ground, within 3.7 million hectares in some of Argentina's most vulnerable regions, the project demonstrated how longstanding coordination challenges could be overcome (especially through timely stakeholder engagement) to provide models for application at greater scale. It has highlighted that governance of natural resources within and outside of protected areas needs to be participatory

[22] CDD subproject PPI-07-18,
[23] CDD subproject PPI-20-19
[24] CDD PNEI 23-19
[25] CDD subproject PNEI-03-18
[26] CDD PNCH-12-19

to effectively tackle drivers of ecosystems degradation, to improve impoverished local communities, enhance interinstitutional collaboration, strengthen institutional roles (national, regional, and local) for biodiversity conservation and ground-truth conservation interventions. Stakeholder engagement promotes flexible and transparent decision-making that embraces diverse experiences in dynamic scenarios. Participation needs to be considered as early as possible to lead to more effective and durable decisions[27].

Objective Outcome 2. To implement measures to enhance biodiversity resilience to climate change.

59. **At appraisal, "biodiversity resilience" was still an evolving concept that was just starting to be ground-tested, with few learned experiences available**. This project served as an early proof of concept for the practical application of such theoretical approach. In the current development agenda, economic growth, and recovery from impacts, like the ones caused by the pandemic of COVID-19, is expected to be trough interventions that can guarantee and sustainably increase nature's benefits to people. Such nature-smart approach is also considered to play a key role when building resilience to climate change. In line with that, the project invested in nature to contribute to Argentina's growth agenda by targeting the poorest communities and strengthening the path for a transition to a greener, more inclusive, and resilient development.

60. **PDO Indicator 3. Common Action Plan for corridors conservation between Federal and Provincial Authorities Adopted**. This action plan aimed to address some of Argentina's international commitments under the CBD for the years 2020-2022, was reviewed by the provinces and subsequently sent by the President of the SIFAP Executive Committee to the COFEMA for approval. This action plan provides a roadmap for effective interinstitutional coordination and biodiversity conservation integrating both the national and provincial protected areas systems with the vision they work together for greater impact across a wider landscape. The participatory formulation of the Plan, resulted from the promotion of dialogue and work roundtables among SIFAP members (which had hardly occurred since SIFAP was created, in 2013). This plan strengthened the collaboration between decision makers and is expected to result in more comprehensive decisions about investments to build biodiversity resilience to climate change.

61. **PDO Indicator 4. Area benefiting from biodiversity resilience measures**. This indicator used as a proxy, measured the area estimated to have been positively impacted by the upgrading of a 4,800 sqm waterhole (aguada) in the Copo National Park in the Santiago del Estero Province (See Annex 9 D), as a strategy to increase the availability of surface water for biodiversity during droughts. Although resilience is defined more broadly as "the capacity of social, economic, and environmental systems to cope with a hazardous event or trend or disturbance, responding or reorganizing in ways that maintain their essential function, identity, and structure, while also maintaining the capacity for adaptation, learning, and transformation"[28]. The construction of waterholes to address droughts can be considered as an important initial step in a broader strategy for building resilience of biodiversity to climate change, as it aims at reducing the negative impacts of climate variability, in this case longer and harsher dry seasons.

Objective Outcome 3. To protect forest carbon assets.

[28] IPCC (International Panel on Climate Change). (2014). *Climate Change 2014: Synthesis Report.* Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland, 151 pp.

62. **The management of the Impenetrable National Park supported by the project constitutes an emblematic case of the role of PAs in the conservation of forest carbon stocks**. This PA was created out of part of the La Fidelidad ranch, a huge extension of continuous forest on private property adjacent to lands where no conservation strategies are in place and where land use is threatened by deforestation. Global Forest Watch server data shows the impact of this PA in preventing the loss of forests (and the related carbon assets) as compared to the prevailing situation around it; particularly when compared with the non-protected part of this property (Annex 9). Other supplementary project interventions, such as the provision of infrastructure, vehicles, and equipment and training for fire response in other areas across the rural corridors, are expected to contribute to the long-term protection of related forest carbon stocks.

63. **The PDO Indicator (5) used as proxy for this PDO Outcome is: Aboveground carbon protected in Chaco forests.** To reach this result, the project reported the following activities[29]: i) the support in the creation of the Impenetrable National Park, with more than 106,694 ha of forested lands (6,187,956 TCeq); ii) conservation actions and the supply with infrastructure, equipment and trained personnel, for the protection of 139,000 ha (3,035,244 TCeq) of forested lands in the protected areas of Pampa de Indio, Loro Hablador, Fuerte Esperanza Provincial Parks, and the Copo Provincial and National Parks; and iii) the implementation of 22 CDD subprojects in areas outside protected areas, accounted for an area of intervention of 28,550 ha of which 19,385 ha were forested lands (1,200,000 TCeq). During the project's lifetime these carbon assets have been protected and monitored.

Justification of Overall Efficacy Rating

64. Project Efficacy is rated **Substantial**, considering that their expected outcomes have been materially achieved and documented. The achievement of project outcomes has also been assessed in light of the huge scale of intervention; country, province, and landscape wide. This project was ground proof of concept of a landscape level intervention that went beyond APN's business-as-usual, that led to enhanced ways to pursue its institutional mission to protect nationally and globally important natural assets and biodiversity from local and global threats (such as climate change).

C. EFFICIENCY

Assessment of Efficiency and Rating

65. Efficiency is rated as **Modest** based on i) the financial analysis; and ii) some shortcomings that adversely influenced project design and implementation. An ex-post economic analysis for the project (see Annex 6) showed substantial benefits for beneficiaries in areas served by the project and indicated substantial benefits for the Argentinian society. This economic analysis was undertaken as part of this ICR based on available data and considering the measurable benefits directly related to project activities. The incremental analysis of the economic (welfare) benefits generated by the proposed financing, included key benefits streams from the value of carbon sequestration through the protection of forest areas; from the ecosystem services provided by the areas brought under enhanced biodiversity conservation; and from the implementation of sustainable-use sub-projects, trainings and workshops that positively impact beneficiaries' earnings. However, the *ex-ante* economic

[29] To measure this indicator the PIU used a Carbon Accounting Tracking Tool, which methodology is explained in Annex 9B.

analysis conducted during project appraisal lacked methodological details to allow any kind of comparison between both analyses.

66. **Some management shortcomings, typical of a complex project, adversely affected the project's efficiency**. The different project restructurings implemented simplified the project design and increase APN's efficiency in the implementation of activities and execution budget. However, they only partially compensated accumulated implementation delays caused by lengthy bureaucratic process within APN to approve procurement processes and handle contractors for timely delivery of infrastructure and equipment; a high PIU staff turnover; and by other factors beyond PIU's control, such as changes in government administration and the COVID 19 pandemic-related mobility restrictions. Project ISRs rated implementation performance mainly as Moderately Satisfactory (MS). Despite most of the civil works inside protected areas were completed or had been resumed after COVID-19 pandemic restrictions, there were infrastructure works in the Copo Provincial Park that could not be completed before the project closing date (progress of execution by closing date was 72 percent).

D. JUSTIFICATION OF OVERALL OUTCOME RATING

67. Overall project outcome is rated **Moderately Satisfactory** based on the: **High** relevance of the PDO; **Substantia**l rating for Efficacy; and **Modest** rating for Efficiency.

E. OTHER OUTCOMES AND IMPACTS (IF ANY)

Gender

68. **There is compelling evidence that women played an increasing role in sub-projects and benefitted to a high degree from training and other support.** Female participation increased steadily throughout implementation and indicates that the involvement of women at community levels could be scaled up in future projects. By closing, 35 percent of the beneficiaries were women (1860 total beneficiaries), albeit only 1 of the sub-projects implementing organizations was led by women (PPI 20-19).

69. Women were however, engaged in project-related productive activities in the field and trained on fire management, camera trapping, survey methodology and technics, strategic planning and native beekeeping, protected areas management and management effectiveness assessment.

Institutional Strengthening

70. **Based on previous engagements, APN was considered an experienced institution with satisfactory Financial Management performance.** However, at the time of preparation the SPA and staff had limited planning instruments, infrastructure, and equipment, to optimally achieve its institutional mission and conservation objectives. Important support was provided including housing modules, vehicles, fire response equipment, communications equipment, and other institutional capacity building to ensure better manage these PAs and overcome some of the limitations identified. Capacity building was focused *inter alia* on strategic landscape planning, PAs management, fire control, species sustainable use and exotic species control, Geographic Information Systems (GIS), and Management Plan formulation. Equipment and infrastructure were delivered expecting to last well beyond project duration.

71. **Component 3 had a significant role in strengthening the Federal System of Protected Areas (SIFAP) that at appraisal was disarticulated and its members did not have a shared vision or plans for common conservation actions**. The project facilitated spaces for dialogue (in-person and virtual when the COVID 19 pandemic hit) that reunited members of the Provincial Protected Areas (Heads of PAs), the Ministry of Environment and Sustainable Development (Technical Secretariat of SIFAP), the COFEMA (Presidency of SIFAP) and APN (Coordination of SIFAP). The meetings, that have continued after the project closing date, allowed them, in many cases for the first time since the creation of the Federal System (2003), to sit on the same table to build a common vision of a national and provincial network of protected areas. The project supported the preparation of the SIFAP Action Plan for 2020-2022, although its implementation has been limited.

72. **In addition, the SIFAP has been strengthened with the development of the Argentina's Federal Protected Areas website that for the first time consolidates information from 24 provincial jurisdictions and their protected areas (533) into one database accessible to the public (*www.sifap.gob.ar*)**. This site is periodically updated with new information. Finally, analytical work on PAs Financial Mechanisms and Sources, Conservation Gaps, and a regulatory gap analysis have generated knowledge products that aim at improving decision making practices within (and among) APN, SIFAP, and the provincial environmental and production authorities responsible of the sustainable use of the conservation corridors, the management of PAs, and the promotion of sustainable production practices.

Mobilizing Private Sector Financing

73. **At least US$329,280 were mobilized as co-financing for the implementation of the CDD subprojects under Component 2**. These resources came from the beneficiary communities, cooperatives and associations that implemented the CDD subprojects.

Poverty Reduction and Shared Prosperity

74. **Over 50 percent of the subprojects implemented under Component 2 had indigenous peoples' communities as beneficiaries, which are among the poorest social groups in the country**. Over 1,346 people (650 indigenous) were directly supported in sustainable production of cattle, honey, and other associated products for improved management of natural resources, restoration and vegetable plots practices, improved water management, and tourism. Economic benefits were obtained by families that received TA as part of the CDD subprojects implementation (see Annex 8).

Other Unintended Outcomes and Impacts

75. **Under Component 3, a bill on Minimum Standards for Protected Areas Management was drafted**. The bill aims at establishing uniform rules and management standards for all National and Provincial Protected areas. Lacking a shared legal framework for protected areas management at the National and Provincial levels, this proposal was the first attempt to face some of Argentina's decentralization challenges. This proposed Law has not been approved in the Federal Congress however if this proposal eventually gets through and is enacted as a law, its impact to the protection of Argentina's natural assets could be significant.

76. **The recently approved Sustainable Recovery of Landscapes and livelihoods in Argentina Project (P175669) was informed by the lessons learned and scaled up from the Rural Corridors and Biodiversity Project outcomes**. The new operation aims at improving the management and resilience of ecosystems and related livelihoods of local communities in selected conservation and production landscapes and seascapes, through increasing management effectiveness of PAs, enabling the conditions for more sustainable landscape management practices and improved landscape climate resilience. Part of this new project will be implemented in the Chaco and the Yungas ecoregions, allowing the continuation and scale-up of the conservation and sustainable development interventions within Chaco ecosystems started by the project including investments identified in existing climate adaptation and planning documents such as the Chaco Corridors Strategic Plans. In addition, many of the SPA of this Project will be beneficiaries of the new operation.

III. KEY FACTORS THAT AFFECTED IMPLEMENTATION AND OUTCOME

A. KEY FACTORS DURING PREPARATION

77. **During the period between project preparation and approval there were changes in key stakeholders; as well as in the country and the sectoral contexts, which later affected project implementation.** 75.6 months passed between project preparation and Bank approval. Project preparation started in 2008 and the related legal agreement was originally negotiated on August 8 and 9, 2011. After that, the macroeconomic situation of Argentina worsened affecting all WB operations and putting any decision to be taken about this project temporarily on hold. New negotiations took place on February 26 and 27, 2015, where some adjustments to the project design were agreed upon and reflected in the Grant Agreement (GA) and the Project Appraisal Document (PAD) (Annex 8). By the time the Project was negotiated for the second time and Approved by the WB's Board (April 7, 2015), there were many discrepancies between the project design and the context where it was to be implemented, such as the need for support of some of the originally selected PA.

B. KEY FACTORS DURING IMPLEMENTATION

Factors subject to government and/or implementing entities' control:

78. **The project brought multiple actors to the same table, which contributed to the successful achievement of most project outcomes**. Meetings and discussion spaces (in-person and virtual) brought together at least 24 Directors of Provincial Protected Areas and staff of the National Protected Areas Administration to discuss and work towards the development of a shared vision for SIFAP under Component 3 activities. In addition to APN there was strong participation of the Provincial Governments, the National Agricultural Technology Institute (INTA) that provided technical assistance to local communities, the Wildlife Conservation Society that led the design of the Patagonia Arida Conservation Corridor, The Northeast University in the Corrientes Province, that gave facilities for the establishment of a regional unit for contractors and members of the regional PIU (*promotores*), the Argentina Wildlife Foundation (FVSA), and the Argentinian Private Reserves Network. These organizations brought specialized technical expertise to discussions, technical workshops, knowledge products that allowed the integration of biodiversity and ecosystems knowledge and best-practices into productive landscapes, sustainable management practices, and other project activities.

79. **Complex project design (involving many activities that dispersed PIU's efforts during the first two years of implementation), together with changes in project context (particularly in terms of protected areas prioritized for support at appraisal), were addressed in 2018 and 2020 through project restructurings**. Procurement processes consisted of small (in budget) and multiple activities and purchases. The PIU managed to overcome and comply with the Procurement Plan and Annual Operation Plan year after year, despite these issues.

80. **The difficulties in retaining competent staff, as salaries were low compared to other job opportunities, caused high turnover of project staff that caused significant delays throughout the implementation**. This, combined with technical capacity gaps, made it harder to sustain the pace of implementation or create institutional memory. Furthermore, changes in government (new administrations took office in 2015 and 2019) caused additional delays, as technical and procurement priorities were revisited and redefined. Despite this, the project received constant support from the PIU's staff and APN's middle-management.

Factors outside the control of the World Bank and GoA

81. **In the context of the COVID 19 Pandemic, the Preventive and Mandatory Social Isolation restrictions imposed in Argentina, including restrictions to mobility, quarantine, and social distancing, led to the interruption of civil works within SPA covered under Component 1**. Works were resumed several months later, but the project timeline and financial health of contractors were severely affected. Therefore, the Operations center in the Copo Provincial Park was not finished by the closing date (despite it being extended twice) affecting the originally planned interventions. CDD subprojects related to tourism were also impacted as mobility restrictions affected the presence of tourists and visitors in the project area.

82. **Macroeconomic instability**. The local currency has strongly devaluated from a rate of US$1/AR$8.75 at the time of Project approval, to a rate of about US$1/AR$102 at closure. During certain periods of project implementation, the economic situation in Argentina prompted the Government to introduce caps on annual disbursement of projects posing budget restrictions and limiting the project expenditures, despite they were derived from an international grant. Nevertheless, Financial Management and Procurement performances were always rated as Satisfactory. The PIU managed to overcome this situation and to comply with its commitments.

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

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

M&E Design

83. **The M&E methodology, as detailed in Annex 4 of the PAD, consisted of different and complementary strategies**. Procurement: included the supervision of procurement plans, prepared, updated, reviewed and approved through the Procurement Plans Execution System (SEPA) (Today the Systematic tracking of Exchanges in Procurement, STEP); Financial Management: support for monitoring disbursement progress and the effectiveness of financial management, as the review of external audits and the provision of training; Grievance Management: supervision and review of the effectiveness of the project grievance and complaints management mechanism;

Review of implementation progress, through the RF and GEF Biodiversity Tracking Tool – METT, and finally, specific risks monitoring was done through the Systematic Operations Risk Rating Tool (SORT).

84. **During preparation the designed M&E system consisted of standard elements including the PDO, a results framework with PDO and intermediate indicators, bi-annual progress reports, bi-annual implementation support missions, MTR, tracking tools, and a final evaluation or ICR.** The M&E design came from discussions between APN and the WB TT, including a Senior M&E specialist.

85. **Despite the initial design of the M&E system, the WB did not specifically request APN to include a M&E specialist as part of the PIU at inception of project implementation.** However, this was subsequently recommended repeatedly and documented during different implementation support missions throughout project implementation, especially during and after MTR.

86. **The project results framework developed at design suffered from flaws that were hard to correct through the project restructurings.** Most of the results indicators developed during project preparation lacked accurate definitions and explicit measurement methodologies. To monitor the accomplishment of the PDO Indicator 1. "Areas brought under enhanced biodiversity conservation", during project implementation the original GEF Biodiversity Tracking Tool (TT) used at appraisal was adapted, aiming at reflecting the demands of investments received by the project and estimating the area impacted by them. However, this adaptation of the tracking tool focused not on the achievement of the expected outcomes, rather on the expected outputs. The full Tracking Tool methodology taken from the Project Operations Manual is described in Annex 9A. The methodology was incomplete, and technically contestable, as it relies on several arbitrary assumptions. The results measured with this Tool can be found in Annex 8.

M&E Implementation

87. **Efforts were made through two of the project restructurings to accurately define and adjust the results indicators to improve their fit to better capture project progress and achievements**. Additionally, in late 2020 a M&E Specialist was hired to strengthen the PIU. Although such measures were not enough to obtain a results framework robust enough to fully gather systematic evidence on the expected project outcomes, they significantly improved the project management and performance.

88. **Bi-Annual implementation support missions were a strong monitoring tool for the Project as they constituted the space in which project progress, bottlenecks, social and environmental safeguards instruments and their implementation, and RF indicators were revised and documented**. Aide Memoires and ISRs also provided good monitoring elements to the WB's team. Specific activities such as civil works (Component 1) and the implementation of subprojects (Component 2) had their own supplementary monitoring mechanisms.

M&E Utilization

89. **The RF and the tracking tools to monitor PDO Indicator 1 and PDO Indicator 5 constituted the main M&E elements used by the PIU**. These were used to report on the project implementation status during the implementation support missions conducted by the WB, and to support the MTR. However, they were

infrequently included by the PIU in the bi-annual progress reports nor used typically to adapt Project implementation.

Justification of Overall Rating of Quality of M&E

90. M&E quality is rated **Modest.** The Monitoring and Evaluation (M&E) has been an area showing suboptimal performance. Lack of a dedicated M&E specialist in the PIU during the first years of project implementation was a big constrain for the project, as it is reflected in this ICR that relies mainly on ex-post review and information.

B. ENVIRONMENTAL, SOCIAL, AND FIDUCIARY COMPLIANCE

91. The project activities complied with the World Bank safeguards throughout the implementation period, with minor and temporary deviations. The project triggered Environmental Assessment (OP/BP 4.01), Natural Habitats (OP/BP 4.04), Forests (OP/BP 4.36), Physical Cultural Resources (OP/BP 4.11), Indigenous Peoples (OP/BP 4.10) and Involuntary Resettlement (OP/BP 4.12) and was categorized as 'B' in terms of environmental and/or social risks and impacts. A Social Assessment (SA) and an Environmental Assessment (EA) were conducted as part of the project preparation, both assessments identified positive (environmental) and potential negative impacts of project investments with special attention to sub-projects. The SA identified the social context within SPA and the rural corridors to ensure the full understanding and inclusion of indigenous peoples and rural producers as project beneficiaries. Appropriate management measures were identified in the Environmental and Social Management Framework (ESMF) and in its associated instruments, the Indigenous Peoples Framework (IPF), and the Resettlement Policy Framework. Although, this instrument failed on identifying existing conflicts between the Fuerte Esperanza Provincial Park and the indigenous organization MOWITOB. Indigenous Peoples Plans (IPP) were required for this SPA under the IPF provisions.

92. Environmental Safeguards. The Environmental risks were rated as Moderate at appraisal and during most of the project implementation. The project was expected to reduce pressure on ecosystems, preserve biodiversity and protect forests, and produce positive impacts. Land use change (i.e., further infringement on conserved land) or other negative impacts on forests and other natural ecosystems were not anticipated. The EA produced a series of recommendations and guidelines for each of the project interventions, infrastructure and works within SPA, development of sub-projects in conservation corridors, development of analytical work and technical assistance provided to project beneficiaries. The EA informed the APN on the formulation of Management Plans for National and Provincial Protected Areas. All Sustainable Development Sub-projects included the application of a Preliminary Environmental Form for risk assessment and environmental evaluation. The works were of limited scale and scope with manageable and localized impacts. However, given that they are in critical habitats (in buffer zones of protected areas), they follow APN procedures for the evaluation and management of impacts. For monitoring civil works, since 2020, COVID 19 pandemic protocols were formulated, including specific construction sector recommendations based on the National Workplace Preparation Guide for the COVID 19 virus - OSHAS 3992/2020, and the Protocol for the construction of the Argentine Constructions Union (UOCRA). The contractors for these works developed Occupational Health and Hygiene protocols for dengue prevention. A remote construction monitoring tool was also developed using KoBo toolbox[30]. No safeguards-related performance issues were observed, nor environmental or occupational health and safety incidents took place during implementation.

[30] KoBo ToolBox is a comprehensive platform for data collection.

93. **Social Safeguards.** Social risks were rated as Moderate, at appraisal and during most of the project implementation, mainly due to the nature of the proposed interventions within SPA, and in rural corridors, that could affect the access of indigenous peoples to the forests and its resources. In the SA Indigenous peoples were not identified to live within SPAs but identified to make customary use of the natural resources within them. Indigenous peoples were involved and consulted throughout the project to ensure their engagement and consent in the formulation of the SPA's Management Plans (Component 1) and the definition and design of rural corridors (Component 2) that could potentially overlap with their traditional territories. This involvement was moderate and not as robust and comprehensive as expected. The impact of the COVID 19 pandemic, could likely interfered in the work that APN was doing in the territory. Switching to a virtual mode impacted the way the project communicated with the communities. In addition, APN as an institution that so far had worked within its areas of jurisdiction, had limited relationships and communication channels opened with those communities beyond its APs boundaries. In the end, after many delays, an Indigenous Peoples Plan (IPP) and Management Plan were prepared for the Chaco Corridors and the Impenetrable National Park. The Management Plan included actions aimed at avoiding or mitigating potential restriction of access to natural resources in the National Park, which could affect 38 indigenous families and 12 criollo families located in the Park's buffer zone. The Management Plan of the Copo Provincial Park, and the Copo Multiple Use Reserve, included an IPP and a document on Guidelines for the Regularization of the situation of the inhabitants within both PAs. The Management Plan of the Provincial Park Fuerte Esperanza and the associated IPP, were only partially completed by closing date. Land use and ownership conflicts and a legal claim by the indigenous organization MOWITOB appealed by the Province of Chaco, had implications in the consultations and agreements required with these groups for the formulation of both documents.

94. **Financial Management (FM) performance was rated as either Satisfactory or Moderately Satisfactory and the FM risk rating was Moderate, throughout the Project's life**. All the Project's Financial Statement Audit Reports were received on time or with a delay of less than 4 months. All the Financial Statement Audit Reports expressed unmodified opinions and carried out by private firms. All Interim Financial Reports (IFR) received during the life of the Project were considered acceptable. The majority (55 percent) of IFRs were received with some delays of no more than 3 months after the due date. These delays were due to the high Project FM specialist turnover throughout the implementation period, among other reasons.

95. Project's planning, budgeting, accounting, internal controls, funds flow, financial reporting, and auditing arrangements have: (a) correctly and completely recorded all transactions and balances relating to the project; (b) facilitated the preparation of regular, and generally timely, and reliable financial reports/statements; (c) safeguarded the project's assets; and (d) been subject to auditing arrangements acceptable to the Bank, and therefore provided reasonable assurance that the proceeds of the loan were used for the intended purposes.

96. **The project showed a satisfactory trajectory in procurement performance**. The country's general macroeconomic situation and the PIU staff high turnover, that implied delays in the hiring of a Procurement Specialist, did not have major effects on procurement processes.

97. **Disbursements:** Disbursements have been constant throughout the project but increased in amount starting in 2018. Out of the total of the GEF grant resources 99.46 percent was disbursed. A small undisbursed balance of funds remained at end of project.

98. **Audits:** Audit reports were acceptable to the Bank, with only minor issues related to weaknesses internal control noted. Nonetheless, all the internal control recommendations made by the independent auditor were addressed and implemented by APN to the Bank's satisfaction.

99. **Grievance response mechanism.** The project had mechanisms in place for potentially affected and interested people to contact the PIU with grievances, questions, and/or suggestions. A general email account and a postal address were available. Mailboxes were set up in key sites across the Project area, such as the National Parks Administration field offices and parks, rural schools, municipalities, etc. The project staff based in the field were available to receive questions or complaints from the local people and project beneficiaries. The PIU addressed questions and grievances as they were received. However, only five questions were received throughout the lifetime of the operation, and, in at least one case, a complaint was submitted through channels different than those set up by the project to that end.

C. BANK PERFORMANCE

Quality at Entry

100. **Project design constituted a joint effort between the Bank and APN and was the result of a long-standing engagement between the parties, despite of which it showed some weaknesses at entry**. The broad approach proposed for the project (outlined in the ToC section, above) enabled it to be adjusted to the specific needs of each focal region. This allowed for greater flexibility, although did not facilitate the *ex ante* specification of precise results indicators. Additionally, even though there was a delay between the project concept review and project approval, the necessary adjustments to the original design were not fully undertaken until the project was under implementation. Finally, the economic analysis at appraisal was incomplete as the benefits of subprojects could not be calculated in advance because these were demand driven. Although, there was, given global CDD experience, a very high degree of confidence that both the participatory processes and the projects themselves would contribute to the PDO.

Quality of Supervision

101. **The World Bank supervision benefited from relative continuity of the Task Team during the project lifecycle**. The Bank dedicated substantial resources to implementation support with 15 missions during project implementation, that included environmental and social supervision as well as financial and procurement specialist support. Implementation supervision and results reports (ISRs) were timely and aide memoires reflected the key issues flagged during implementation. Several additional follow up supervision meetings took place between missions, with special intensity close to project restructurings, when the PIU required more support. Bank procurement and FM staff were effective in resolving and providing solutions to issues as they arose, and in assisting counterpart staff with training in procurement processes. Bank fiduciary staff played a crucial role in working with the PIU to monitor budget allocation and planning, and disbursement progress.

102. **Through timely project restructurings and very closely handholding the PIU, the WB showed high proactivity and dedication to improve project performance and to address critical needs of the Project during the challenging contextual situations experienced (i.e., two changes in the national government administration; the macroeconomic imbalances and the fiscal management measures taken; and the COVID 19 pandemic)**. The Midterm review (MTR) conducted in 2018 provided strategic direction for the remaining

implementation period. It revised and rebuilt the broader project theory of change, enhancing the links between planned activities and the expected results. The MTR also served to build the PIU's Management capacities, as the TT and the PIU worked together to improve project planning and monitoring tools and practices, including the development of a comprehensive Annual Operational Plan considering the current country context.

103. **Broad and timely stakeholder engagement benefited directly not only women but indigenous peoples (IPs) (including 688 indigenous individuals of the Qom and Wichi peoples who were engaged**). The project engaged indigenous women and youth in its CCD subprojects making sure these responded to their specific needs and cultural aspects were integrated while adding innovation to the way communities use their resources. IPs were engaged in participatory dialogue and decision-making spaces for the formulation of management instruments for the rural corridors and the PAs, areas that historically have been used by these communities. Although, long standing conflicts existed between the APN and these IPs that gave rise to difficulties in advancing social safeguards compliance.

Justification of Overall Rating of Bank Performance

104. Overall World Bank Performance is rated **Moderately Satisfactory** given minor shortcomings in quality at entry.

D. RISK TO DEVELOPMENT OUTCOME

105. Risk to Development Outcome is assessed as **Moderate**.

- The support given to the formulation of several policy pieces for improving the planning and operationalization of the rural corridors strategy, is an opportunity to scale up the project results and bring more sustainability to the achievement.
- There is a strong ownership and commitment from APN and Provincial Protected Areas managers to implement the PAs Management Plans, although their full implementation is conditioned to the availability of funds, which has not been granted by the Project and will depend on future initiatives including the new WB operation and APN budget support.
- There is a need of strong political will, involvement, and ownership by the Provincial Governments of initiatives like the design and regularization of rural corridors. Upscaling the success of the Chaco Province to other Provinces remains to be seen.
- There is a risk that subprojects and stakeholder engagement will not scale-up across the biodiversity corridors and fade away as the resources from the project stop coming. Low-capacity communities might need a constant assistance from local authorities to ensure sustainable practices continue being implemented. Although, it is important to highlight that in parallel to the implementation of the Project, APN developed a program for the support on the Development of Sustainable Activities in rural populations through which this entity will finance similar initiatives to the CCD subprojects across the country. Additionally, the provincial and national governments are seeking to advance Payment for Ecosystem Services programs in the near future that may provide other financial incentives for conservation and sustainable production.
- The project supported the SIFAP by strengthening the relationships among the Provincial Protected Areas as well as the relationships with APN, the COFEMA and the Ministry of Environment and Sustainable Development. The formulated Action Plan and the facilitation of dialogue spaces were key to sustain

decision making in the short term. It is still to be seen if these activities were strong enough to be sustained in the medium and the long term.

V. LESSONS AND RECOMMENDATIONS

106. The following lessons learned are among the most important that have come out of this project:

- **There are trade-offs between the scope and the achievable impacts which are particularly relevant for projects, like this one, which have scarce resource, compared to the magnitude of the development challenges expected to address** (e.g., in this case, "biodiversity protection" and "climate change resilience building"). This project showed that a broad geographic scope, a generic definition of the prioritized problems to solve, and flexible intervention approaches or strategies that can be adapted to local circumstances, come with the risk of diffusion of efforts, impact dilution, and difficulties to measure, aggregate and communicate the resulting outcomes. In such cases, it is worth considering concentrating efforts and investments in fewer areas, to achieve more meaningful and transformative solutions, which can build significant learning and eventually be replicated in other sites, later. These types of projects should pay special attention to the early and explicit definition of their ambition when scoping their PDOs and expected outcomes. A clearly defined and focused PDO can significantly contribute to the design of a results framework that can pragmatically set and measure achievable impact targets, within the control of the project and in a reasonable timeframe.
- **The implementation of a project in a participatory manner is inherently challenging but pays-off when it comes to outcomes and their sustainability. Participatory processes are more effective and efficient in areas where these approaches are more familiar to the local stakeholders.** Finding balances among disparate interests and priorities is time-consuming. Such engagement with local stakeholders should be planned, resourced, and monitored (e.g., through specific performance indicators) to ensure it is conducted in a systematic way that can inform adaptive project implementation. Nonetheless, the process of stakeholder engagement is essential for building the coalitions required for the integrated management of landscapes, and for sustaining and scaling-up biodiversity conservation efforts. In the case of this project, visible participation of representatives of provincial governments was important to strengthen bonds and credibility among local actors; and led to enhanced impact. In the Gran Chaco region, which had been subject to participatory planning processes during a long time before project implementation started, the results achieved by the project are much more significant than those achieved in the Patagonian steppe and marine and coastal ecosystems, where such kind of processes are still not consolidated.
- **Suitable financial mechanisms and institutional arrangements should be built into the project investments design to ensure the sustainability of the outcomes derived from them.** In the case of this project, which extended its intervention beyond the area under direct jurisdiction of the National Parks Administration, this was particularly relevant for the investments made to influence the rural corridors in the provinces with lower capacities, or the less developed systems. Infrastructure investments in provincial protected areas have delivered the expected results in the short-term but their sustainability in the mid-term cannot be taken for granted. To ensure the outcomes derived from such works and other key equipment and goods aimed at enhancing protected areas management effectiveness can be continuously delivered in the mid-term (and as such, can continue contributing to the improved ecosystems protection and biodiversity conservation), their operation and maintenance costs should have been evaluated from the onset. With the same purpose, the managing capacities of the institutions benefiting from such investments should have been thoroughly assessed and strengthened as necessary; and commitments for the mid-term maintenance of the investments should have been formalized when transferring the ownership of such works, equipment, or goods to the

ultimate users. Likewise, financial sustainability strategies should also have been built into the CDD subprojects implemented, to ensure the benefits they produce are sustained beyond the project lifespan. Those sustainability strategies and mechanisms can be both developed at the individual subproject level, or at the general intervention strategy level (i.e., with a more programmatic approach, involving more than one subproject in a single sustainability strategy). Future operations may explore different strategies to induce the sustainability improvements referred, such adding value to subprojects' produce via transformation or aggregation (economies of scale); or supporting their access to markets and trade opportunities.

- **Robust monitoring and evaluation systems are crucial for timely project course correction and adaptive learning.** Timely availability of qualified expertise in M&E has proven to be a crucial element in this project, as reflected in the performance improvements derived from the hiring of a dedicated M&E specialist for the PIU; and from the different RF restructurings aimed at strengthening the focus of project implementation on results and outcomes, instead of inputs and stand-alone activities. Involving third parties in project monitoring could have been beneficial to keep the project on-track and could have served the communications with project beneficiaries and other interested parties. Participatory monitoring mechanisms can strengthen M&E systems to improve the project buy-in by the beneficiary communities and accountability by project executing entities. The implementation of CDD subprojects also requires strong M&E system that can provide information to ensure they meet the beneficiaries' project-related needs and facilitate the identification of the previously mentioned results sustainability mechanisms. Additional evidence of outcomes, beyond the project results indicators should also be systematically collected, whenever possible, as they are also useful to assess and communicate the project success.

ANNEX 1. RESULTS FRAMEWORK AND KEY OUTPUTS

A. RESULTS INDICATORS

A.1 PDO Indicators

Objective/Outcome: To increase the protection of vulnerable natural areas and conserve biological diversity within the

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Areas brought under enhanced biodiversity conservation (ha)	Hectare(Ha)	0.00 07-Apr-2015	882,000.00 26-May-2015	655,624.00 05-Nov-2020	631,204.00 31-Dec-2021

Comments (achievements against targets):

Interventions to bring areas under enhanced biodiversity conservation included the provision of infrastructure and equipment for selected protected areas (SPA) and the formulation of their Management Plans (Component 1). These interventions were recorded in a Tracking Tool that assessed for each SPA the area in hectares impacted by said interventions.

Impenetrable National Park (128,000 ha); Copo National Park (118,119 ha); Copo Provincial Park (50,756 ha); Loro Hablador Provincial Park (22,071 ha); Pampa del Indio Provincial Park (7,194 ha); Fuerte Esperanza Provincial Park (21,165 ha); Patagonia Austral Interjurisdictional Coastal Marine Park (104,812 ha); Makenke Interjurisdictional Marine Park (72,663 ha); and Patagonia National Park (106,424 ha).

The 24,419 ha that were not achieved correspond to the not completion of the civil works for the Operations Centre of the Copo Provincial Park.

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 07-Apr-2015	0.00 26-May-2022	226,376.00 05-Nov-2020	241,281.00 31-Dec-2021

Comments (achievements against targets):
This indicator reports the area brought under sustainable landscape management practices outside SPA. 18 Sustainable Development Sub-Projects, 4 Sustainable Development Sub-Projects and additional 46,054 ha were subject to improved livestock, apiculture and tourism practices in the Chaco Seco and Chaco Humedo Conservation Corridors.

Objective/Outcome: To implement measures to enhance biodiversity resilience to climate change

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Common Action Plan for corridors conservation between Federal and Provincial Authorities Adopted	Yes/No	No 07-Apr-2015	No 26-May-2015	Yes 31-Dec-2019	Yes 31-Dec-2021

Comments (achievements against targets):
Target achieved. The “SIFAP 2020-2022 Action Plan” was prepared, reviewed and agreed with the members of the Federal System of Protected Areas - SIFAP and sent by the President of SIFAP to the Biodiversity Commission of the Federal Council of Environment -COFEMA in October 2020.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Area benefiting from biodiversity resilience measures (ha)	Hectare(Ha)	0.00 07-Apr-2015	0.00 26-Nov-2015	5,513.00 05-Nov-2020	14,765.00 31-Dec-2021

Comments (achievements against targets):
The water whole built in Copo National Park was calculated to impact an area of 14,765 ha. This calculation was done using the Tracking Tool developed to measure the impacts of the project's intervention within SPA.

Objective/Outcome: To protect forest carbon assets

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Tons C eq. (aboveground) protected in Chaco forests	Number	0.00 07-Apr-2015	10,400,000.00 26-May-2022	10,400,000.00 05-Nov-2020	14,661,015.00 22-Oct-2021

Comments (achievements against targets):
The target indicates the reported forest carbon stocks protected through the support given to the Impenetrable National Park (6,187,956 Tons C eq) and through the implementation of 18 Sustainable Use Sub-Projects and 4 Sustainable Development Sub-Projects (8,473,059 Tons C eq).

A.2 Intermediate Results Indicators

Component: Component 1: Core Protected Areas

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
1.1. Increase of forests under improved forms of protection (ha)	Hectare(Ha)	0.00 07-Apr-2015	303,000.00 26-May-2015	128,000.00 05-Nov-2020	128,000.00 31-Dec-2021

Comments (achievements against targets):
This indicator was changed throughout the project implementation to finally reflect the area under protection within the Impenetrable National Park.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
1.2 Increase of marine environments under improved forms of protection	Hectare(Ha)	0.00 07-Apr-2015	279,000.00 26-May-2015	106,422.00 05-Nov-2020	106,422.00 22-Oct-2021

Comments (achievements against targets):
This target was revised and reduced when the steppe ecosystems were removed from the measure of the indicator to only reflect the area covered and supported with interventions within the Patagonia National Park.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
1.4 Updated or Prepared Protected Areas-Management Plans that include climate change mitigation and adaptation measures	Number	0.00 07-Apr-2015	6.00 29-May-2015	9.00 14-Sep-2018	9.00 22-Oct-2021

Comments (achievements against targets):
Project resources were used to update and/or formulate Management Plans for SPA. The Project managed to leverage additional resources that contributed to the development of the Management Plan for the Patagonia Austral Interjurisdictional Coastal Marine Park and the Management Plan for the Patagonia National Park.

Component: Component 2: Conservation Corridors in the Gran Chaco and the Patagonian Steppe and Coastal-Marine E

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
2.1 Framework for the implementation of Conservation Corridors endorsed by the Chaco and/or Santiago del Estero Provinces	Yes/No	No 07-Apr-2015	Yes 26-May-2015	Yes 14-Sep-2018	Yes 22-Oct-2021

Comments (achievements against targets):

The framework for the implementation of Conservation Corridors consisted in a i) Strategic Conservation Plan for the Chaco Biodiversity, approved by the Province authorities through the Resolution 465 and by APN through the Resolution 349; and ii) the Actualization of the Land Use Plan for Native Forest of the Santiago del Estero Province. The Strategic Conservation Plan was formulated between 2010 and 2014, as a result of a MoU signed between APN and the Chaco province. This MoU is a result of the conversations held during the preparation of the project and its first negotiations.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
2.2 Rural Corridors Strategic Plans prepared/updated	Number	0.00 07-Apr-2015	3.00 26-May-2015	3.00 05-Nov-2020	3.00 31-Dec-2021

Comments (achievements against targets):

1. Chaco Seco Corridor Action Plan - endorsed by the Provincial authorities through the Resolution 510 of 2021.
2. Chaco Húmedo Corridor Action Plan - endorsed by the Provincial authorities through the Resolution 510 of 2021.
3. Patagonia Arida Corridor Plan prepared.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
2.3 Proposal to expand conservation corridors to at least one new province of the Chaco region developed	Yes/No	No 07-Apr-2015	Yes 29-May-2015	Yes 14-Sep-2018	Yes 31-Dec-2021

Comments (achievements against targets):

This indicator measured the design of the Patagonia Arida Corridor Plan and a letter of intent signed between APN and the Cordoba Province to expand conservation corridors in said province (Conservation Corridors of Sierras Chicas).

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
2.4 New areas outside protected areas managed as biodiversity-friendly	Hectare(Ha)	0.00 07-Apr-2015	300,000.00 26-May-2015	226,375.00 14-Sep-2018	241,281.00 31-Dec-2021

Comments (achievements against targets):
This is a subset of the PDO Indicator 2. This measure the hectares impacted outside SPA and within Conservation Corridors in the Chaco Province, by the implementation of 18 Sustainable Use Sub-Projects, 4 Sustainable Development Sub-Projects and technical assistance provided to additional 46,054 ha. This indicator was used to measure areas with an improved use of biodiversity within production practices, including silvo pastoral approaches for livestock management, bee keeping practices with native and introduced species, eco tourism.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
2.5 Demonstration subprojects completed	Number	0.00 07-Apr-2015	3.00 26-May-2015	3.00 14-Sep-2018	4.00 31-Dec-2021

Comments (achievements against targets):
The four Sub-Projects finalized are the following:

1. PPI-07-18 - Promotion of meliponiculture.

2. PNCH 18-19 - Natural grasslands grazing

3. PPI 25-20 - Demonstration of schemes of management in small sustainable Livestock producers.

4. PNEI 15-19 - Demonstrative Tourism Subproject.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
2.6 Sustainable Development Subprojects Completed	Number	0.00 07-Apr-2015	17.00 26-May-2015	17.00 14-Sep-2018	18.00 31-Dec-2021

Comments (achievements against targets):
The sub-projects finalized are the following:

1. PPI-05-18. Walking towards a sustainable livestock of the Corridor; 2. PPI-06-18 Carob honey; 3. PPI 09-19 More hives and more forest; 4. PPI 12-19 Rational grazing to restore our grasslands; 5. PNEI-01-18. Forest is life; 6. PNEI-02-18. Producing taking care of our forests; 7. PNEI-03-18. Nature, our food; 8. PNEI-04-18. Sweet and green land; 9. PNFE 22-19 Producing while conserving our forests and our land; 10. PNEI 23-19 Organic Honey of the Impenetrable; 11. PPFE 08-19. Producing water for drought times; 12. PPFE 10-19 Organic Honeys of Fuerte Esperanza; 13. PPI 17-19 Rescue and production of native bees in Miraflores; 14. PNCH 19-19 Smart grazing to recover grasslands in central Chaco; 15. PPI 20-19 Carob Honey II; 16. COPO 13-19 Building together; 17. COPO 14-19 Proposal to Diversify Production; and 18. COPO 21-19 Producing honey in our land.

Component: Component 3: Collaboration for Corridors' Conservation

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
3.1 Provinces from the Project area that adhere to a unified and functional Information system related to conservation corridors	Number	0.00 07-Apr-2015	0.00 26-May-2015	18.00 14-Sep-2018	24.00 22-Oct-2021

Comments (achievements against targets):
Each of the 24 provincial protected areas systems uploaded new and updated geographic and thematic information to the website www.sifap.gob.ar.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
3.8 Analytical and knowledge products that contribute to strategic planning and the promotion of conservation corridors within the framework of SIFAP	Number	0.00 07-Apr-2015	0.00 26-May-2015	3.00 14-Sep-2018	3.00 31-Dec-2021

Comments (achievements against targets):
The three analytical and knowledge products include: 1) Analysis of the Provincial Systems of Protected Areas; 2) Financing mechanisms for conservation; 3) Analysis of conservation gaps nationwide.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
3.9 Protected areas staff trained by the Project on protected areas management planning and effectiveness evaluation	Number	0.00 07-Apr-2015	0.00 26-May-2015	200.00 14-Sep-2018	236.00 22-Oct-2021

Comments (achievements against targets):
Trainings held over the years:

Year 2: 110 people (Regional Strategic Planning Workshops; Federal Meeting of Park Rangers)

Year 3: 35 people (Training in "Preparation of Management Plans and management evaluation").

Year 4: 22 people (Training in "GIS - Initial level")

Year 6: 16 people (SIFAP training in “Conceptual bases and experiences of effectiveness in the management of protected areas in Argentina”) ; 50 people (Workshop for updating the geographic information uploaded to the national website www.sifap.gob.ar); and 3 people (Training on forest fire control).

Component: Component 4: Management, Monitoring and Evaluation

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
4.1. Direct project	Number	0.00	930.00	930.00	1,860.00

beneficiaries (number), of which female		07-Apr-2015	26-May-2015	14-Sep-2018	31-Dec-2021

Comments (achievements against targets):
The target reported (1860 people, 35 percent women) accounts for beneficiaries from trainings and regional workshops held on: fire management, camera trapping survey methodology and technics, strategic planning and native bee-keeping, protected areas management and management effectiveness assessment, SIFAP Training. Additionally, beneficiaries of the sustainable development subprojects and the demonstration subprojects. This target included the 1346 direct beneficiaries if the 18 Sustainable Use and 4 Demonstration Subprojects.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
4.4 Participants in consultation activities during project implementation	Number	0.00 07-Apr-2015	300.00 26-May-2015	300.00 14-Sep-2018	760.00 31-Dec-2021

Comments (achievements against targets):
The target measured the number of people consulted in the following spaces: Participatory Indigenous Plan for the Impenetrable National Park; Evaluation and supervision committees for the sustainable use and demonstrative subprojects; elaboration/update of the management plans of SPA; Monitoring and Evaluation Committees for SPA; meliponiculture sectoral round table; livestock roundtable; Ecotourism roundtable; Awareness Workshop in Santiago del Estero.

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

4.5 Beneficiaries that feel project investments reflected their needs	Percentage	0.00 07-Apr-2015	70.00 26-May-2015	70.00 14-Sep-2018	75.00 31-Dec-2021

Comments (achievements against targets):
The satisfactory survey was conducted on 1541 beneficiaries, where it was estimated that at least 75 percent of the respondents felt the project reflected their needs.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
4.6 People in forest&adjacent community with monetary/non-monetary benefit from forest	Number	0.00 07-Apr-2015	1,200.00 26-May-2015	1,200.00 05-Nov-2020	1,346.00 31-Dec-2021
People in forest&adjacent community with benefits from forest-female	Number	0.00 07-Apr-2015	600.00 26-May-2015	600.00 05-Nov-2020	639.00 31-Dec-2021
People in forest&adjacent community with benefit from forest - Ethnic minority/indigenous	Number	0.00 07-Apr-2015	600.00 26-May-2015	600.00 05-Nov-2020	650.00 31-Dec-2021

Comments (achievements against targets):

Monetary and non-monetary benefits were measured and certified for each of the 18 sustainable land use sub-projects and the 4 demonstrative subprojects.

B. KEY OUTPUTS BY COMPONENT

Objective/Outcome 1 The objective of the project is **to increase the protection of vulnerable natural areas and conserve biological diversity within the Gran Chaco Ecosystem and the Patagonian Steppe and Coastal-Marine Ecosystems and,** implement measures to enhance biodiversity resilience to climate change and protect forest carbon assets	
Outcome Indicators	PDO # 1. Areas brought under enhanced biodiversity conservation: 631,204 ha (96 percent of target) PDO # 2. Land area under sustainable landscape management practices: 241,281ha (106 percent of target)
Intermediate Results Indicators	1.1 Increase of forests under improved forms of protection: 128,000 ha (100 percent of target) 1.2 Increase of marine environments under improved forms of protection: 106,422 ha (100 percent of target) 1.4 Updated or Prepared Protected Areas- Management Plans that include climate change mitigation and adaptation measures: 9 (100 percent of target) 2.1 Framework for the implementation of Conservation Corridors endorsed by the Chaco and/or Santiago del Estero Provinces: Yes (100 percent of target) 2.2 Rural Corridors Strategic Plans prepared/updated: 3 (100 percent of target) 2.5 Demonstration sub-projects completed: 4 (133 percent of target) 2.6 Sustainable Development Sub-projects Completed: 18 (106 percent of target) 3.8 Analytical and Knowledge products that contribute to strategic planning and the promotion of conservation corridors within the framework of SIFAP: 3 (100 percent of target) 3.9 Protected areas staff trained by the project in protected areas management planning and effectiveness evaluation: 236 (118 percent of target) 4.1. Direct project beneficiaries (of which female): 1,860 (42 percent) (200 percent of target)
Key Outputs by Component (linked to the achievement of the Objective/Outcome 1)	**Component 1.** a. Infrastructure, vehicles, and equipment delivered to nine Selected Protected Areas. b. Management Plans for the following SPAs: Copo National Park, Impenetrable National Park, Copo Provincial Park/Copo Multiple Use Reserve, Pampa del Indio Provincial Park, Loro Hablador Provincial Park, Makenke Interjurisdictional Marine Park, Patagonia Austral Interjurisdictional Coastal Marine Park (presented as counterpart financed by IADB funds), and the Patagonia National Park. c. Extension in area of the Patagonia National Park – Sell script. **Component 2.** d. Conservation Corridors Strategic Plans endorsed by the Authorities (Resolution 510 of 2021) e. Chaco Seco Corridor Action Plan f. Chaco Húmedo Corridor Action Plan

	g. Patagonia Arida Corridor Plan h. Sustainable Livestock Action Plan for the Chaco Region i. Native Bees Sustainable Production Action Plan in the Chaco Corridors (2019-2023) j. Native Bees Sustainable Production Regulation (Resolution 0549 of 2019) k. CDD subprojects Closing Reports. **Component 3.** l. Conservation Gaps Assessment m. Financial Sources and Mechanisms for Protected Areas and Conservation Corridors Assessment n. Policy Analysis and guidelines for the sustainable use and conservation of forests in silvopastoral systems in the Chaco Corridors o. Forest Management Plans for Bee keeping in the Chaco Region p. 236 Protected areas staff trained in protected areas management planning. q. SIFAP Common Action Plan. **Component 4.** r. 1,860 people direct project beneficiaries.
Objective/Outcome 2 The objective of the project is to increase the protection of vulnerable natural areas and conserve biological diversity within the Gran Chaco Ecosystem and the Patagonian Steppe and Coastal-Marine Ecosystems and, **implement measures to enhance biodiversity resilience to climate change** and protect forest carbon assets	
Outcome Indicators	PDO # 3. Common Action Plan for corridors conservation between Federal and Provincial Authorities Adopted: Yes (100 percent of target) PDO # 4. Area benefiting from biodiversity resilience measures: 14,765 ha (268 percent of target)
Intermediate Results Indicators	2.1 Framework for the implementation of Conservation Corridors endorsed by the Chaco and/or Santiago del Estero Provinces: Yes (100 percent of target) 2.2 Rural Corridors Strategic Plans prepared/updated: 3 (100 percent of target) 2.3 Proposal to expand conservation corridors to at least one new province of the Chaco region developed: Yes (100 percent of target) 2.4 New areas outside protected areas managed as biodiversity-friendly: 241,281 (106 percent of target) 2.5 Demonstration sub-projects completed: 4 (133 percent of target) 2.6 Sustainable Development Sub-projects Completed: 18 (106 percent of target) 3.1 Provinces from the Project area that adhere to a unified and functional information system related to conservation corridors: 24 (133 percent of target)

	3.8 Analytical and Knowledge products that contribute to strategic planning and the promotion of conservation corridors within the framework of SIFAP: 3 (100 percent of target) 4.1. Direct project beneficiaries (of which female): 1,860 (42 percent) (200 percent of target) 4.4 Participants in consultation activities during project implementation: 760 (253 percent of target) 4.5 Beneficiaries that feel project investments reflected their needs: 75 percent (107 percent of target) 4.6 People in forest and adjacent community with (monetary and non-monetary) benefits from forest (percentage of female, percentage of ethnic/minority): 1346 (112 percent of target); 639 female (107 percent of target); 650 ethnic (108 percent of target).
Key Outputs by Component (linked to the achievement of the Objective/Outcome 2)	**Component 1.** 1. One water whole built in the Copo National Park **Component 2.** 2. Conservation Corridors Strategic Plans endorsed by the Authorities (Resolution 510 0f 2021) 3. Chaco Seco Corridor Action Plan 4. Chaco Húmedo Corridor action Plan 5. Patagona Corridor Plan 6. Letter of Intent of Cordoba Province for the expansion of conservation corridors. 7. Sustainable Livestock Action Plan for the Chaco Region 8. Native Bees Sustainable Production Action Plan in the Chaco Corridors (2019-2023) 9. Native Bees Sustainable Production Regulation (Resolution 0549 of 2019) 10. CDD subprojects Closing Reports. **Component 3.** 11. National Protected Areas website *www.sifap.gob.ar* 12. Policy Analysis and guidelines for the sustainable use and conservation of forests in silvopastoral systems in the Chaco Corridors 13. Forest Management Plans for Bee keeping in the Chaco Region **Component 4.** 14. 1346 People in forest and adjacent areas with benefits 15. At least 75 percent of beneficiaries that felt the project reflected their needs (results of Project Satisfaction Surveys)

Objective/Outcome 3 The objective of the project is to increase the protection of vulnerable natural areas and conserve biological diversity within the Gran Chaco Ecosystem and the Patagonian Steppe and Coastal-Marine Ecosystems and, implement measures to enhance biodiversity resilience to climate change **and protect forest carbon assets.**	
Outcome Indicators	PDO #5. Tons C eq. (aboveground) protected in Chaco forests: 14,661,015 TCeq (141 percent of target).
Intermediate Results Indicators	1.1 Increase of forests under improved forms of protection: 128,000 ha (100 percent of target) 2.5 Demonstration sub-projects completed: 4 (133 percent of target) 2.6 Sustainable Development Sub-projects Completed: 18 (106 percent of target)
Key Outputs by Component (linked to the achievement of the Objective/Outcome 3)	**Component 1.** 1. Management Plans for the Impenetrable National Park, and infrastructure, vehicles and equipment provided to the PA. **Component 2.** 2. Conservation Corridors Strategic Plans endorsed by the Authorities (Resolution 510 0f 2021) 3. Chaco Seco Corridor Action Plan 4. Chaco Húmedo Corridor Action Plan 5. CDD subprojects Closing Reports.

ANNEX 2. BANK LENDING AND IMPLEMENTATION SUPPORT/SUPERVISION

A. TASK TEAM MEMBERS

Name	Role
Preparation	
Peter Jipp	Task Team Leader(s)
Ana Maria Grofsmacht	Procurement Specialist(s)
Juan Carlos Serrano Machorro	Financial Management Specialist
Juan Martinez	Social Specialist
Francis V. Fragano	Environmental Specialist
Mi Hyun Miriam Bae	Social Specialist
Supervision/ICR	
Pablo Francisco Herrera	Task Team Leader(s)
Maria Elizabeth Grandio	Procurement Specialist(s)
Miguel-Santiago da Silva Oliveira	Financial Management Specialist
Paula Agostina Di Crocco	Financial Management Specialist
Catarina Isabel Portelo	Counsel
Mariana T. Felicio	Social Specialist
Lilian Pedersen	Social Specialist
Maria Elena Araneo	Procurement Team
Marcelo Roman Morandi	Environmental Specialist
Marcela Portocarrero Aya	Team Member
Antonella Celeste Perila	Procurement Team
Lucia Rossi	Environmental Specialist

B. STAFF TIME AND COST

Stage of Project Cycle	Staff Time and Cost	
	No. of staff weeks	US$ (including travel and consultant costs)
Preparation		
FY09	5.503	44,929.70
FY10	13.837	91,623.87
FY11	16.517	122,526.41
FY12	5.799	36,132.00
FY13	.767	3,549.49
FY14	.050	166.20
FY15	0	0.00
Total	**42.47**	**298,927.67**
Supervision/ICR		
FY15	3.840	33,105.59
FY16	2.332	13,206.03
FY17	7.794	39,972.90
FY18	14.564	74,453.41
FY19	19.003	98,739.38
FY20	6.517	34,484.10
Total	**54.05**	**293,961.41**

ANNEX 3. PROJECT COST BY COMPONENT

Components	Amount at Approval (US$M)	Actual at Project Closing (US$M)	Percentage of Approval (US$M)
Component 1: Core Protected Areas	3.19	3.32	104
Component 2: Conservation Corridors in the Gran Chaco and the Patagonian Steppe and Coastal-Marine Ecosystems	1.55	1.87	121
Component 3: Collaboration for Corridors' Conservation	.99	.46	46
Component 4: Management, Monitoring and Evaluation	.55	.63	114
Total	**6.28**	**6.28**	**100**

ANNEX 4. CHANGES TO THE INTERMADIATE INDICATORS FRAMEWORK

	Proposed changes - Restructuring 2018	**Proposed changes – Restructuring 2020**
Component 1 Core Protected Areas		
SC. 1.1 Protected Areas		
1.1 Increase of forests under improved forms of protection and conservation. End Target: 303,000 ha	**Revised.** The final target was increased from 303,000 to 376,624, capturing the area of forests within multiple SPAs. End Target: 376,624 ha	**Revised.** Increase of forests under improved forms of protection. The indicator's name was modified to include only protection (removed conservation) and for that reason the target has gone down compared to previous target reported. This indicator measures the area under protection of the Impenetrable National Park. End target: 128,000 ha
1.2 Increase of marine environments under improved forms of protection and conservation. End target: 279,000 ha	**Revised.** Increase of coastal, marine and steppe environments under improved forms of protection and conservation. The indicator was adjusted to capture the impact of the investments made in steppe environments (the Patagonia National Park). End Target: 279,000 ha	**Revised.** Increase of marine environments under improved forms of protection. This indicator removed steppe ecosystems and reduced its end target to reflect only the area protected (word conservation removed) under the Patagonia National Park (52,811 ha) and the Patagonia Austral Coastal-Marine Inter-Jurisdictional Park (104,812 ha). End Target: 106,422 ha
1.3 Strategy for CC mitigation and adaptation to support conservation adopted. End Target: Yes	**Dropped.** The indicator was removed as it measures the results that are substantially captured by indicator 1.4.	
1.4 Updated or Prepared PA-Specific Management Plans include climate change mitigation and adaptation.	**Revised.** Updated or Prepared Protected Areas Management Plans that include climate change mitigation and adaptation measures. The indicator was adjusted to reflect the measures previously included in indicator 1.3. The final target was changed from a total of 6 to 9, to reflect the increased number of protected	

End target: 6	areas where management plans were developed. End Target: 9	
SC. 1.2 Sustainable use Sub-projects		
1.5 Sustainable Development Sub-projects Completed. End Target: 17	**Dropped.** The indicator was renamed as the new indicator 2.6 since the activities that contribute to this indicator were relocated to Component 2.	
SC. 1.3 Consultation and Participation		
1.6 Annual review of participation processes and outcomes End Target: 4	**Dropped.** The indicator was eliminated since participation processes are inputs for the elaboration of Management Plans for Protected Areas and the Sustainable-Use Sub-projects and, as such, will be captured by indicators 1.1., 1.2., 1.4., 2.6.	
Component 2: Conservation Corridors in the Gran Chaco and the Patagonian Steppe and Coastal-Marine Ecosystems		
SC. 2.1 Steppe Corridor Strategic Planning and Analysis for an Implementation Framework		
2.1 Chaco implementation framework analysis completed. End Target: Yes	**Revised.** Framework for the implementation of Conservation Corridors endorsed by the Chaco and/or Santiago del Estero provinces. The indicator was re-written to specify its extent and intention. End Target: Yes	
2.2 Rural Corridors Strategic Plans prepared/updated. End Target: 3		**Revised.** No major changes done. The intermediate target for Project Year 3 of this indicator was change from 3 to 2. End Target: 3
2.3 Proposal to expand conservation corridors to four provinces of the Chaco developed. End Target: Yes	**Revised.** Proposal to expand conservation corridors to at least one new province of the Chaco region developed. The indicator was re-written to reflect the proposed reduction of the scope of this activity. End Target: Yes	
SC. 2.2 Chaco Corridor Conservation Outreach and Capacity Building		
2.4 New areas outside protected areas managed as biodiversity friendly.	**Revised**. The methodology for this	

End Target: 300,000 ha	indicator changed. The indicator measures only the area impacted by biodiversity management interventions within the sub-projects full area. The final target was then reduced from 300,000 ha to 226,375 ha. End Target: 226,376	
2.5 Demonstration sub-projects Completed. End Target: 3	**No changes made.**	
2.6. Sustainable Development Sub-projects Completed. End Target: 17	**New.** This new indicator replaces the original indicator 1.5 to reflect the relocation of the corresponding activities to Component 2.	
Component 3: Collaboration for Corridors' Conservation		
SC. 3.1 Institutional and financing structures of SIFAP		
3.1 Website for online information and registration systems developed and functional. End Target: Yes	**Revised.** Provinces from the Project area that adhere to a unified and functional Information system related to conservation corridors. The indicator was re-written to add clarity. As a result, the Boolean unit used to measure progress of this indicator would be replaced by quantities. The end target would become 18, and the intermediate targets for Project Years 3 and 4 would be 0 and 10. End Target: 18	
3.2 Analysis of PA Provincial Systems finalized. End Target: 1	**Dropped.** This indicator would be merged into a new indicator 3.8.	
3.3 Conservation gap analysis completed. End Target: 4	**Dropped.** This indicator would be merged into a new indicator 3.8.	
3.4 Study on sustainable financial mechanisms finalize. End Target: Yes	**Dropped.** This indicator would be merged into a new indicator 3.8.	
SC. 3.2 Provincial and national capacity strengthening		
3.5 Needs assessment studies. End Target: 100 percent	**Dropped.** This indicator would be merged into a new indicator 3.8.	
3.6 Regional and inter-provincial training visits.	**Dropped.** The indicator was deleted since it	

End Target: 8	does not add value to the information captured by indicator 4.1.	
SC. 3.3 Framework for public, private and community PAs		
3.7 Private and community PA framework proposal. End Target: Yes	**Dropped.** This indicator would be merged into a new indicator 3.8.	
3.8. Analytical and knowledge products that contribute to strategic planning and the promotion of conservation corridors within the framework of SIFAP. End Target: 3	**New.** The new indicator combined indicators 3.2, 3.3, 3.4, 3.5, and 3.7, and is measured according to the number of predefined products generated: 1) Analysis of the Provincial Systems of Protected Areas; 2) Financing mechanisms for conservation; 3) Analysis of conservation gaps nationwide. The targets would be set as 0, 0, 2, 3 and 3 respectively for the Project Years of 1 to 5.	
3.9. Protected areas staff trained by the Project on protected areas management planning and effectiveness evaluation. End Target: 200	**New.** This indicator would be created to measure the impact of the training events and alike. The targets would be set as 0, 0, 200, 200 and 200 respectively for the Project Years of 1 to 5.	
Component 4 Management and M&E		
4.1 Direct project beneficiaries, of which female. End Target: 930 (30 percent)	**No changes made.**	
4.2 Number of training events conducted. End Target: 21	**Dropped.** The was eliminated because it was more process oriented than results oriented.	
4.3 Number of people trained under the project. End Target: 540	**Dropped.** The indicator was removed since the information obtained by this indicator was not considered to add value to the information captured by indicator 4.1.	
4.4 Participants in consultation activities during project implementation. End Target: 300	**No changes made.**	
4.5 beneficiaries that feel project investments reflected their needs. End Target: 70 percent.	**No changes made.**	
4.6 People in targeted forest and adjacent communities with increased monetary or non-monetary benefits from forest.		**New.** This indicator was the original outcome Indicator 2, labeled as an intermediate indicator and identified significant to be monitored at the corporate level and

End Target: 1200		important for the portfolio of projects in Argentina.
• People in targeted forest and adjacent communities from forest – female End Target: 600		
• People in targeted forest and adjacent communities from forest – ethnic minority/indigenous End Target: 600		

ANNEX 5. ELIGIBLE EXPENDITURES CHANGES

Category	Amount of the Grant Allocated (US$) - Appraisal	Category	Amount of the Grant Allocated (US$) – Restructuring 2018	Amount of the Grant Allocated (US$) – Restructuring 2021
(1) Goods, works, training, consultants´ services, non-consulting services and Operating Costs (other that works under categories (2), (3) and (4), and goods, Training, consultants´ services, non-consulting services and Operating Costs under category (2).	4,973,630	(1) Goods, works, training, consultants´ services, non-consulting services and Operating Costs incurred on or before July 11, 2018	815,956	815,956
(2) Goods, works, training, consultants´ services, non-consulting services and Operating Costs under subprojects.	460,400	(2)Goods, works, training, consultants´ services, non-consulting services and Operating Costs under subprojects incurred on or after July 12, 2018	900,000	794,043
(3) Works under Part 1.A.(i) (a) of the Project (proposed Chaco Seco National Park)	590,000	(3)Operating costs incurred on or after July 12, 2018 (other than Operating Costs under Category (2))	184,208	70,544
(4) Works under Part 1.A.(i) (b) of the project (Impenetrable Chaqueno Provincial Multiple Use Reserve)	265,000	(4)Goods, works, training, consultants´ services, non-consulting services incurred on or after July 12, 2018 (other than goods, works, training, consultant's services, and non-consulting services under Category (2))	4,388,866	4,608,487
TOTAL	6,289,030		6,289,030	6,289,030

ANNEX 6. EFFICIENCY ANALYSIS

Overview

1. The Economic Analysis presents an incremental analysis of the economic (welfare) benefits generated by the proposed financing, including key benefits streams from the value of carbon sequestration through the protection of forest areas; from the ecosystem services provided by the areas brought under enhanced biodiversity conservation; and from the implementation of sustainable-use sub-projects, trainings and regional workshops that positively impact beneficiaries' earnings. Business training is one of the most common forms of active support provided to small firms and producers worldwide.[31] Some studies find significant impacts from training programs on profits or sales in developing countries.[32,33,34] Benefits included in this analysis are related to the additional benefits generated by the project, as those gained from the support to the creation and operationalization of protected areas, that aimed at lowering deforestation rates in Northern Argentina.

2. The project is designed to increase the protection of vulnerable natural areas (therefore their biodiversity), implement measures to enhance biodiversity resilience to climate change, and protect forest carbon assets within specific zones in Argentina (The Gran Chaco region, The Patagonian Steppe and Coastal Marine ecosystems). To achieve this, the project aims through its actions to improve forestry and biodiversity conservation management within Protected Areas (Component 1), and to promote sustainable development practices such as beekeeping, silvopastoral systems, and tourism in areas connecting Protected Areas (Component 2). Conservation corridors (Component 2) promote a comprehensive conservation of forestry resources and the development of CDD subprojects within local communities to maximize the resultant economic and social welfare equitability without compromising vital ecosystems' sustainability. By using a corridors approach, the project addresses measures to mitigate climate change through the protection of carbon sinks and improve adaptation measures by protecting habitats and biodiversity.

3. The project operated in prioritized pilot areas of Argentina. Ten protected areas were selected to benefit from the project. Selected areas from El Chaco region constitutes: (i) El Impenetrable National Park, (ii) Copo National Park, (iii) Copo Provincial Park, (iv) Copo Multiple Use Reserve, (v) Fuerte Esperanza Provincial Park, (vi) Loro Hablador Provincial Park, (vii) Pampa del Indio Provincial Park. From the Patagonian Steppe and Marine/Coastal Region: (viii) Patagonia National Park, (ix) Makenke Interjurisdictional Marine Park, and (x) Patagonia Austral Interjurisdictional Coastal Marine Park. These areas were selected by evaluating factors such as biodiversity value, costs, political and institutional will of national and provincial authorities to promote the creation of new protected areas (for the case of El Impenetrable and Patagonia National Parks) and an opportunity from existing efforts to be scaled up.

31 McKenzie, D. & Woodruff, C. (2013). What Are We Learning from Business Training and Entrepreneurship Evaluations around the Developing World? The World Bank Research Observer.
32 Calderon, G., J. Cunha, and G. de Giorgi. 2012. "Business Literacy and Development: Evidence from a Randomized Trial in Rural Mexico." Mimeo. Stanford University, Stanford, CA.
33 Attanasio, O., Guarin, A., Medina, C., & Meghir, C. (2015). Long Term Impacts of Vouchers for Vocational Training: Experimental Evidence for Colombia. NBER Working Paper Series, 1-38.
34 Ibarraran, P., Kluve, J., Ripani, L., & Rosas, D. (2015). Experimental Evidence on the Long-Term Impacts of a Youth Training Program. IZA Discussion Paper Series, No. 9136.

4. It is important to mention that the project suffered two main restructurings over the years, although, they did not affect the PDO or the scope of nature of project activities. Changes do not constitute a relevant alteration for the Economic Analysis.

Additionality of the project

5. In the absence of the project, environmental risks in high biodiversity forests and steppe areas would have been higher due to BAU unsustainable resources management practices, weak governance of protected areas, uncoordinated, and uninformed regional and local actions. Without funding, local government agencies would have lacked resources for improved conservation practices for regional natural assets, common knowledge and regulation standard for the protected areas systems in Argentina, a comprehensive corridor strategic planning strategy able to be scaled up across the nation, and regional cooperation frameworks to address existing systemic threats. All this would have brought increased forest and biodiversity loss, productive areas with reduced capacity to absorb carbon and increased unsustainable land management practices. The augmentation of all these risks would have made future recovery efforts more challenging, expensive, and complex. Country's NDC commitments would be likely challenging to comply, in a context of international cooperation to decrease carbon emissions. Carbon emissions will contribute to the detrimental effects of climate change including extreme temperatures which would also severely impact socioeconomic welfare. Higher temperatures and more variable rainfall would hamper productivity, increasing the risk of food and water insecurity among the most vulnerable populations.

6. For this analysis, a BAU baseline case assumes that future development trends follow those of the past, and no changes in policies and practices will occur. In this sense, the project areas would incur costs and losses due to the continuing detrimental trend of forest loss and carbon emissions that affects ecosystem services, and biodiversity. Without any intervention climate change will continue affecting the provision of ecosystem services such as the availability of freshwater and other water services, recreation; as well as the economic activities that benefit from them, such as agriculture, beekeeping, and tourism.

7. There are many benefits that this project can bring to the intervened zones. On one side, activities related to the strengthening of provincial and national parks institutional capacity and drafting proposals for common standards for protected areas in Argentina will provide the foundations for a solid federal system that will preserve the provincial protected areas.

8. Moreover, it will strengthen the coordination between national and provincial protected areas managers improving the effectiveness in the management of the country's PA system. However, these topics are usually difficult to measure due to the qualitative approach and limited literature. Likewise, there are some other activities promoted by the project that led to significant benefits that can be measured and, consequently, can be part of this analysis. These activities are related to the provision of training to CDD subprojects in beekeeping and agriculture activities, and the support for an improved management of protected areas, leading to the conservation of the forest and ensuring a proper flow of ecosystem services.

9. In this economic analysis, considerate was considered the measurable benefits that are directly related to the main activities of the project, given the current and available information, such as the carbon sequestration benefits associated, other ecosystem services provided by the protected areas and the skill training programs on direct beneficiaries and sub-projects. In the BAU scenario, it is assumed a 10 percent as a marginal benefit for the direct beneficiaries after receiving skill training programs;[35] and it is also assumed that 5 to 20 percent

[35] Attanasio, O., Guarin, A., Medina, C., & Meghir, C. (2015). Long Term Impacts of Vouchers for Vocational Training: Experimental Evidence for Colombia. NBER Working Paper Series, 1-38.

of the benefits coming from the provision of other ecosystem services (in a lower bound or upper bound scenario) are attributed to the project investments. This financing helped develop the necessary institutional capabilities, set up policy frameworks for protected areas, and developed sustainable practice's projects and operations.

Methodology, Main Assumption, and Cost Factors

10. The EFA presents assumptions considering the possible benefits in the project sites. The main benefits related to the key productive sectors of the project (forestry and biodiversity conservation, and sustainable beekeeping and cattle ranching) are the strengthening of management and governance of protected areas; the improvement of capacity building, the increase of sustainable agroforestry practices through land-use CDD subprojects; the conservation of biodiversity in the region; tourism attraction; and skills formation through training activities. There were identified three measurable economic benefit streams: (i) additional income for direct beneficiaries gained from skill training programs, (ii) the value of tons of carbon equivalent protected in the project region, and (iii) the value of other ecosystem services provided by the forest. Component 1 and 2 contributes to the second and third benefit streams because Component 1 focus on the giving support for the establishment of operational protected areas, by providing infrastructure and equipment, and on the development of instruments for the conservation of those selected protected areas. Component 2, focused on the development of CDD subprojects and the establishment of rural corridors. This contributes to the adequate protection of forest areas which enabled carbon sequestration and the provision of other ecosystem services. Component 2 also contribute to the first benefit stream through the implementation of trainings to improve smallholders and community land-use practices, giving them adequate training and capacity building.

Economic Benefits Generated by the Project

11. **Direct beneficiaries benefit stream by skill training programs**. For this benefit stream, skill and vocational training programs provide poverty alleviation (raising firm owners' incomes) or productivity enhancement.[36] These programs include business planning and training run/offered by the government, microfinance organizations, and NGOs worldwide. Specifically, this project provided training skills to participants of sustainable-use sub-projects and other direct beneficiaries about agroforestry and land-use practices, such as beekeeping activities. Currently, there are no studies of the impact of training programs for small producers, rural educators and wildlife agents in Argentina. However, it was considered the study of Attanasio et al. (2015) as a good reference for this economic analysis because they measure the impact of training programs for both women and men. They have found that the long-term impacts of youth vocational training vouchers increase their incomes by approximately 10.7 percent.[37] They used experimental data of a training program (*Jóvenes en Acción* program)[38] aimed at formal firms in 2005 in Colombia. It is recognized the limitations of this assumption, as it is focused on a vocational training program for formal firms, but it is the

[36] McKenzie, D. & Woodruff, C. (2013). What Are We Learning from Business Training and Entrepreneurship Evaluations around the Developing World? The World Bank Research Observer.
[37] Attanasio, O., Guarin, A., Medina, C., & Meghir, C. (2015). Long Term Impacts of Vouchers for Vocational Training: Experimental Evidence for Colombia. NBER Working Paper Series, 1-38. https://core.ac.uk/download/pdf/111020938.pdf
[38] It is a program of the national government, which seeks to encourage and strengthen the formation of human capital of the young population in conditions of poverty and vulnerability, through a model of conditional cash transfers (CCT), which allows access and permanence in education and training and strengthening of transversal competences.

best approximation to measure this benefit stream. In the same line, other studies find business training increases profits in the short term.[39,40,41]

12. To calculate this benefit stream, the number of direct beneficiaries, the income level, and the percentage considered additional income through the training was multiplied. The number of direct beneficiaries is based on the effective participants reported in the project's last ISR (November 2021), and the income per capita in El Chaco region is considered as the income level.[42] For the calculation, it is assumed that this benefit stream is homogenously divided and based on the triangular number distribution for a six-year project, that is, the total project area divided by 21.[43] To obtain the number of areas for each year, this triangular number factor will be multiplied by each number year (e.g. 1,2,3,4,5) and added to the total number areas of the previous year.[44]

Table 1: Overview of the Study Estimates on Direct Beneficiaries and income per capita in El Chaco region

	Number of direct beneficiarie	**Income per capita USD (2017)**	**Effect of training activities on incom**
Total	1,860	5,190	10.7%

Source: Own elaboration. 1/. Reported by the project's ICR. 2/. Ministerio de Hacienda 2017. 3/. Attanasio et al., (2015)

13. Carbon sequestration benefit stream related to the preservation and conservation of protected areas. One of the direct benefits coming from the establishment of of protected forest areas is the prevention of forest loss. In Costa Rica, Thailand and Latin America, the literature finds that protected areas reduce deforestation (Jhoppa and Phaff, 2010; Andam et al., 2010; Sims 2010). Protected areas are cornerstone of forest conservation policies in development countries, and they even have socioeconomic effects on the communities involved (Blackman et al., 2018). Moreover, forest annually captures big amounts of carbon emissions, contributing to mitigate the effects of climate change. The improved management of protected areas also guarantees carbon sequestration.

14. To isolate the benefits of protected areas on carbon sequestration attributed to the project, it was used the number of tons of carbon equivalent provided by the project's completion report (PDO Indicator 5). The indicator itself uses a methodology that captures the actual carbon provided by the project[45], considering a 20 percent attributed to the project. For these calculations, it is assumed again that the tons of carbon equivalent from protected areas is homogenously divided and based on the triangular number distribution for a six-year project, that is, the total project area divided by 21[46]. Each year, the project contributes to protect an amount of carbon until reach the effective outcome. It was also assumed that after reaching the project outcome (14,661,015 tons of C. eq) no more tons of C. eq can be attributed to the project as the amount of forest area is not increasing through time.

[39] Berge, Lars Ivar Oppedal, Kjetil Bjorvatn, Bertil Tungodden (2011) "Human and financial capital for microenterprise development: Evidence from a field and lab experiment", *NHH Discussion Paper Sam 1, 2011.*Valdivia 2012
[40] Calderon, Gabriela, Jesse Cunha, and Giacomo de Giorgi (2012) "Business literacy and development: Evidence from a Randomized Trial in Rural Mexico", Mimeo. Stanford University.
[41] Valdivia, Martin (2012) "Training or technical assistance for female entrepreneurship? Evidence from a field experiment in Peru", Mimeo. GRADE.
[42] We considered income per capita in El Chaco region in 2017, provided by Ministerio de Hacienda.
[43] The triangular number is n (n+1)/2, and for a six-year project this would be 6 x 7 / 2.
[44] The formula for year n is therefore: n x n (n+1) / 2.
[45] See Operational Manual, Annex on the methodologies for the estimation of each Results Framework Indicator.
[46] The triangular number is n (n+1)/2, and for a six-year project this would be 6 x 7 / 2.

15. For the valuation of carbon, two prices were used, considering them as part of a lower and upper bound estimation. For the lower bound case we consider a price of 5 USD per ton of C. protected (2 USD dollars higher than the global carbon price considered by the IMF[47] but closer to the voluntary market price). For the upper bound estimation, it was considered a price of 20 USD per ton of C. protected[48]. This amount is like the established by the IMF as a carbon price floor for low income EME countries[49]. Finally, to calculate the benefits, the amount of carbon protected each year was multiplied by the price, discounting the benefits to present value.

16. Other ecosystem services benefit stream. Besides the direct forest benefit coming from the protection of carbon emissions, forest also provide some other ecosystem services. Non-timber ecosystem services, for instance, refer to the benefits that forests provide in addition to timber production. They include products and services provided or supported by forests that contribute to wealth, such as non-timber forest products (NTFPs), recreation, hunting, fishing, habitat provision, and various regulating services, including hydrological services and carbon sequestration. According to Siikamaki et al., (2015)[50], the value of ecosystem services in Latin America is valued at 105.7 USD per hectare, depending on the services included. This value includes the value of recreation, NTFP, habitat and species protection and water services.

17. To estimate the value ecosystem services attributed to the project, it was considered the percentage suggested in the Operations Manual of the project (20 percent). However, as stated in the Manual, there is no explanation behind that assumption. It is believed that a 20 percent assumption on the effect of the project interventions is somehow ambitious and that a 5 percent would be a more conservative assumption in this matter. It was then included the 20 percent and 5 percent in the upper and lower bound estimations, respectively.

18. For calculations, it is assumed that the number of hectares brought under enhanced biodiversity protection due to the project is homogenously divided through the project duration. Based on the triangular number distribution for a six-year project, the total project hectares were divided by 21. To obtain the number of hectares for each year, this triangular number factor was multiplied by each number year (e.g. 1,2,3,4,5) and added to the number of hectares of the previous year.[51] Finally, to calculate this benefit stream, it was multiplied the number of hectares brought under enhanced biodiversity protection (PDO Indicator 1) by the value per hectare established by Siikamaki et al., (2015) and by the percentage attributed to the project (5 or 20 percent depending on the lower or upper bound scenario).

19. It is important to highlight that this benefit stream does not include the forest ecosystem services related to carbon sequestration to avoid double counting benefits included in the previous benefit stream.

Distribution of Costs and Benefits Over Time

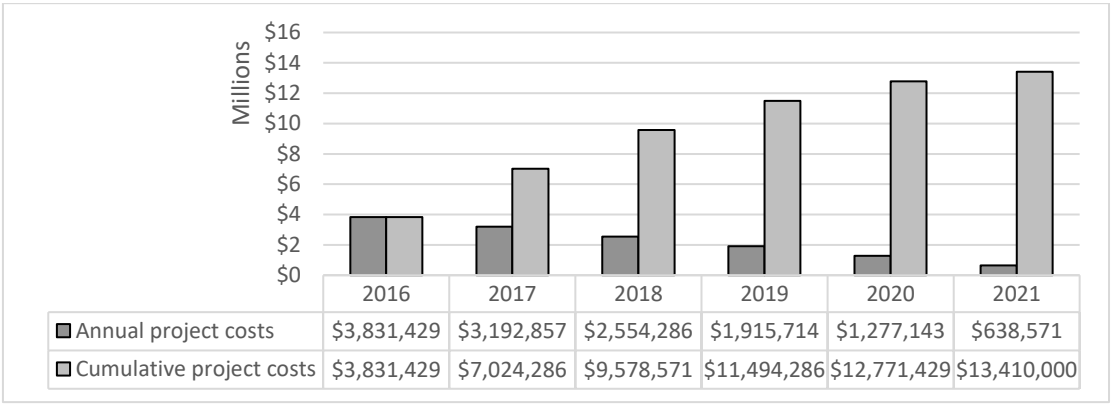
20. The economic feasibility assesses a 20-year period and no further incremental changes of project-generated benefits beyond the 20-year project evaluation period. While the project costs are only assumed to emerge for the six years of project implementation, the first benefit stream is assumed to generate benefits beyond this period. The second and third benefit stream are considered to stop after project completion as project activities does not include the plantation of new trees to increase forest cover. Total project costs over the

[47] IMF, 2020 Putting a Price on Pollution
[48] 20 USD per ton of C. eq is half of the minimum price range established by the World Bank.
[49] EME: Emerging Market Economies. IMF, 2021 Proposal for an International Carbon Price Floor Among Large Emitters.
[50] Siikamaki, J., Santiago-Avila, F., Vail, P. (2015) Global Assessment of Non-wood Forest Ecosystem Services.
[51] The formula for year n is therefore: n x n (n+1) / 2.

implementation period consider the project financing of US$ 13.4 million. Also, an assumption of an additional two percent, as an operating cost, was added along with the projection of a 20-year project evaluation for the incremental economic analysis.

21. Additionally, it was assumed that the benefits attributed to the project were not received immediately and took time to materialize. Benefits appeared progressively, starting at year 3 (2018) with 20 percent of its estimated potential, year 4, 40 percent of its estimated potential; and reaching full potential in the following years.

22. A sensitivity analysis was applied with the main simulation parameters, especially the discount rate and project horizon, to assess project robustness. For the discount rate, it was used alternative rates of six and nine percent. In addition to varying discount rates, simulation results were tested against changing the project horizon (15 and 20 years). This sensitivity assessment set enables a comprehensive analysis of the project's economic robustness concerning the changing or differentiated value parameters. All sensitivity analyses for all discount rate scenarios. Regarding the distribution of the project, costs follow a reverse pattern, based on the triangular number for six project years,[52] that is, the project divided by 21 to obtain the factor added to the growth of the previous year.[53] Given this, it presents a higher investment cost in the early years and a fading out of project investments in later project years, as shown in Figure 1.



	2016	2017	2018	2019	2020	2021
Annual project costs	$3,831,429	$3,192,857	$2,554,286	$1,915,714	$1,277,143	$638,571
Cumulative project costs	$3,831,429	$7,024,286	$9,578,571	$11,494,286	$12,771,429	$13,410,000

Source: Own elaboration by the World Bank Task Team.

Figure 2: Distribution of Project Costs (US$)

Results

23. Table 2 shows baseline results as well as the sensitivity analysis. The first panel shows the 20-year baseline scenario. The second panel decreases the project lifetime from 20 years to 15 years. The third panel reduces further project lifetime to 10 years. All the case scenarios are positive suggesting that the project creates more benefits than costs. Using more conservative estimates regarding carbon prices and contribution attributed to the project do not substantially affect the forecast. In fact, the upper bound scenario that assumes a 20 percent contribution of the project and 25 USD/ton as the value of carbon seems to be overestimated. As it was noted previously, considering a 20 percent contribution is more than optimistic. A more conservative estimate is 5 percent, used in the lower bound scenario.

Table 2: Net Present Values (NPV) (US$) and Benefit Cost (BC) Ratio under Different Scenarios

[52] The triangular number is n(n+1)/2, and for five years 5 x 6 / 2.
[53] The formula for years n is therefore: n x n (n+1) / 2.

Baseline Scenario, project lifetime 20 years and project costs included.

Discount Rate	Upper Bound		Lower Bound	
	NPV	BC-Ratio	NPV	BC-Ratio
6%	$168,179,982	14.52	$27,611,443	3.22
9%	$143,964,078	13.44	$22,352,161	2.93

Robustness Check 1, project implementation of 15 years and project costs included.

Discount Rate	Upper Bound		Lower Bound	
	NPV	BC-Ratio	NPV	BC-Ratio
6%	$166,633,879	14.39	$26,065,340	3.09
9%	$143,027,669	13.36	$21,415,753	2.85

Robustness Check 2, project implementation of 10 years and project costs included.

Discount Rate	Upper Bound		Lower Bound	
	NPV	BC-Ratio	NPV	BC-Ratio
6%	$165,143,316	14.27	$24,574,777	2.97
9%	$141,990,962	13.27	$20,379,046	2.76

Conclusions

24. The incremental economic analysis for the Rural Corridors and Biodiversity project shows substantial benefits for beneficiaries in areas served by the Project, and substantial benefits for the Argentinian society. Overall, the Net Present Value (NPV) is projected to reach US$ 22 million (lower bound), and US$ 168 million (upper bound) in the baseline scenario (20 years, between 6 and 9 percent discount rate). The investments evaluated for the economic and financial analysis will generate a benefit-cost ratio between 14.52 and 2.93; and an Internal Rate of Return (IRR) between 55.88 percent (lower bound) and 166 percent (upper bound). Overall, the economic and financial analysis shows that if project implementation is effective and efficient, project-supported investments will bring substantial financial and economic benefits to local communities in the project area and Argentina in general.

25. Throughout the analysis, our preferred estimation is the lower bound, as it includes a conservative assumption (5 percent) for the percentage of the project's contribution on the value of ecosystem services. A contribution of 20 percent is highly optimistic in a context of deforestation and ecosystem services, but it was included it in the analysis as an upper bound to be in line with what was suggested in the projects' Operations Manual.

26. The results of the quantitative simulations are robust in terms of sensitivity analyses, assuming a 15-year project, the NPV varies between US$ 21 million and US$ 166 million, a benefit-cost between 2.85 and 14.39, and an IRR between 55.86 percent and 166.14 percent (between 6 and 9 percent discount rate). Results for the 10-year project, still show positive impacts; the NPV varies between US$ 20 million and US$ 165 million, a benefit-cost ratio between 2.76 and 14.27, and an IRR between 55.75 percent to 165.14 percent (6 and 9

percent discount rate). Throughout the analysis, the benefit assumptions are based on recognized studies related on ecosystem services and carbon prices, the Operations Manual and the ISR of the project.

27. The lower bound estimates represent the benefit streams derived from Component 1 and 2, applying a very conservative approach. The project's economic value is likely to be higher since the analysis did not include other non-economic global and local benefits such as the value of the biodiversity enhanced and preserved within the protected areas, tourism benefits, among others.

28. It is expected that Components 3 and 4 will have additional benefits, but they are difficult to measure due to the qualitative approach related to capacity strengthening and project management. Worth noting, these last components were needed to carry out the other components efficiently and the overall project activities to achieve the desired results through the strengthening of governance and capacity for sustainable protected areas and the project coordination, monitoring, and evaluation. Additional incremental benefits can be associated with the country's compliance with international green commitments, and incremental economic benefits from better public environment, ecosystem and natural areas resulting from the conservation of protected areas investments for the local communities and the future generations. In summary, this project will benefit Argentina's green economic growth, providing long-term benefits to local communities and global public goods.

ANNEX 7. BORROWER, CO-FINANCIER AND OTHER PARTNER/STAKEHOLDER COMMENTS

1. *"…iii) the establishment of a website for online information and registration system, and the design of a management effectiveness evaluation tool for protected areas"*. Where it says that a management effectiveness evaluation tool for protected areas was developed, it should say instead that it what was done to train the provinces to develop their own evaluation tool.
2. *"a Forest Management Plan for Bee keeping was developed"*. The consultancy that developed the Forest Management Plans for Bee keeping, is called "Development of Forest Management Plans with Beekeeping and Meliponikeeping and Honey Typing purposes". This consultancy developed a proposal of regulation for the financing of forest management plans under Law 26,331 of Minimum standards for the Protection of Native Forests. In addition, the consultancy, assessed the potential of the rural corridors for beekeeping and meliponi production, the melisopalynological origin of the honeys, and the honeys produced by Apis and Meliponi. We understand that the result of the consultancy is worded in an incorrect way.
3. *"The second restructuring, dated September 30, 2018 (as part of the project mid-term review, MTR), was due to the identification of three key challenges that the project was facing: (i) some changes in the context, in terms of the protected areas to be supported by the project (in terms of legal status and investment needs); (ii) a complex design with many activities that dispersed the Project Implementation Unit (PIU) efforts over a very diverse set of fronts; and (iii) poor management capacity" (page 32).* According to the note sent by the vice president of APN to the Ministry of Finance of Argentina, the restructuring was due to: (i) the prioritization of activities to be developed in the future; (ii) reducing the scope of some activities to better align them to Project's objective; and (iii) simplifying the procurement and contracting processes by grouping activities. "Poor management capacity" or "weak monitoring and evaluation framework" were not presented as reasons for restructuring. In addition, according to the Aid Memoire of the 6th Project's supervision Mission, specific issues that needed to be better defined were addressed to proceed with the intended restructuring, these include: (i) the project's design simplification proposal was reviewed together with the vice president of APN and the National Director of Conservation to prioritize and validate proposed activities; (ii) the matrix of intermediate results indicators was reviewed, making adjustments to intermediate indicators and their verification means; (iii) the operational planning of activities until the project's closing date; (iv) reallocation of remaining budget among expense categories. Here there are no mentioning of issues related to "poor management capacity" or "weak monitoring and evaluation framework".
4. *"Despite a slightly improved performance and progress towards the achievement of the PDO, a third restructuring, dated November 11, 2020, was needed to overcome specific circumstances that had delayed the implementation of many activities, and some implementation challenges identified by the Task Team*". The 2020 restructuring, which included an extension of the closing date, was requested based on specific situations that affected the implementation of the Project: (i) two management changes at the provincial and national level; (ii) key personnel from the PIU leaving the project between 2018 and 2019; and (iii) the outbreak of the Covid 19; as mentioned in the letter the Government submitted requesting the Project restructuring. Therefore, we do not agree with the following conclusion: "Additionally, deficiencies in the implementation of social safeguards and the M&E system, that were affecting the progress towards the achievement of the PDO, required additional time to be properly addressed". In the aforementioned letter was explained that the extension was requested to fully comply with the Project's development objectives

to materialize the commitments adopted in signed and projected contracts; finalize the Project Investments; and make a full use of the Grant funds. These statements are not mentioned in the conclusions of the Aide Memoire of the Project´s supervision Mission of August 18-25 of 2020.

5. *"Restructurings in 2018 and 2020 were responsive and focused on addressing specific implementation and project management weaknesses".* As already explained, we do not agree with all references to "project management weaknesses" as there is no evidence of it in any of the Project documents.

6. *"The PDO Indicator (5) used as proxy for this PDO Outcome is: Aboveground carbon protected in Chaco forests. To reach this result, the project reported the following activities" (page 63)*. As informed in other sections of the ICR, the goal was achieved by the creation of the Impenetrable National Park (6,187,956 TC) and by the 22 CDD subprojects (8,473,059 CT), as reported in due time. It is not correct to include activity ii: conservation actions and the supply with infrastructure, equipment and trained personnel, for the protection of 139,000 ha (3,035,244 TCeq) of forested lands in the protected areas of Pampa de Indio, Loro Hablador, Fuerte Esperanza Provincial Parks, and the Copo Provincial and National Parks.
7. *"…there were infrastructure works in the Copo Provincial Park, that could not be completed before the project closing date"*. We request to include in the ICR that although these works could not be completed, APN will finish them with its own budget.
8. *"There was a delay between the first negotiation period (2011) and the final negotiation period (2015), due to internal mandates to put on hold any decision to be taken about this project. Project design was something the Bank could have addressed better by calibrating activities to the existing capacities of the PIU".* This paragraph does not reflect the situation at that time. It should be clarified that the gap between both negotiations was not due to specific issues of this Project regarding its design, activities, or capacities of the PIU, but due to a decision of the local office of the World Bank. In fact, in the final negotiation, no modifications were done to the original Project design.
9. *"Although, despite the conceptual design of the M&E system, the Bank failed to request APN the inclusion of a M&E specialist from the begging of the project implementation, and by overlooking the results framework that had shortcomings that were difficult to address regardless the restructurings".* The Results Framework was prepared by both parties (WB and APN) during the design of the Project. This paragraph does not reflect that situation.
10. *"To monitor the accomplishment of the PDO Indicator 1. Areas brought under enhanced biodiversity conservation, the PIU adjusted the original GEF Biodiversity Tracking Tool (TT) used at appraisal, aiming at better reflecting the needs of the project and the area impacted by its interventions. However, this tracking tool was misleading and focused the attention on indicators that did not support the achievement of the outcomes and were stronger on reporting outputs"*. The use of the Tracking Tool was agreed between the PIU and the World Bank team during the 2nd semester of 2018. For its use, the "Tracking the indicators of the TT applied to the Rural Corridors and Biodiversity Project" guideline was prepared as well as its corresponding spreadsheet jointly by WB staff and the PIU. In addition, according to the Aide Memoire of the Project supervision Mission of May 2019, "the methodologies and tools underlying the computation of each of the indicators were reviewed (e.g. Tool derived from the Tracking Tool applied to this project; Method to estimate the Tons of Carbon protected by the project; Methodology to identify the monetary and non-monetary beneficiaries of the project, etc.). The proposed methodologies were tested to ensure they were realistic and responsive to project progress. As a result of this work, a proposal for a new matrix

of results indicators was generated with their respective definitions, which is attached as Annex 6, and will be used as input to restructure the Project". This shows the joint work between the WB and the PIU on this matter.

11. *"The RF and the PDO Indicator 1 and PDO Indicator 5 tracking tools constituted the main M&E elements. These were used to report on the project implementation status during the implementation support missions conducted by the WB, and to support the MTR. However, they were hardly used by the PIU in the bi-annual progress reports, or to adapt Project implementation"*. We do not agree with this statement. The updates of the Tracking Tool, as well as the value of the Carbon target were timely reported in the Indicators report that was sent in the reports to the Bank prior to each of the project supervision missions. On the other hand, it should be clarified that the methodology for measuring the PDO3 Indicator. "Tons of C (stored in aerial biomass) protected in the Chaco forests" was a calculation based on a methodology validated by the World Bank and not based on a Tracking Tool.
12. *"Not having a M&E specialist in the PIU until* 2021". We request this sentence to be corrected as in 2020 the M&E Specialist Josefina Paz was hired, who was later replaced by Federico Rosales in March 2021.
13. *"PDO Indicator: Areas brought under enhanced biodiversity conservation (ha). The 24,419 ha that were not achieved correspond to the not completion of the civil works for the Operations Centre of the Copo National Park"*. It should say "Copo Provincial Park".
14. *"Intermediate Results Indicator 2.3. This indicator measured the design of the Patagonia Arida Corridor Plan and a letter of intent signed between APN and the Cordoba Province to expand conservation corridors in said province (Conservation Corridors of Sierras Chicas)"*. Only the Sierras Chicas Corridor corresponds to this indicator.
15. *"Intermediate Results Indicator 4.1. The target reported (1860 people, 35 percent women)"*. The correct percentage to be informed is 42% (779 women out of 1860 beneficiaries).

ANNEX 8. SUPPORTING DOCUMENTS (IF ANY)

World Bank Documents:

All disclosed documents related to the project can be found at the World Bank external website at *https://projects.worldbank.org/en/projects-operations/document-detail/P114294* and all internal documents in the World Bank Operations Portal.

- Project Appraisal Document (59628-AR) ***PAD P114294.pdf***
- Grant Agreement ***Countersigned Grant Agreement.pdf***
- Grant Agreement amendment ***GA amendment TF0A0233.pdf***
- Implementation Supervision Reports (ISRs) - **World Bank Operations Portal.**
- Restructuring Papers (REPORT NO.: RES31586; RES37519; RES47907) ***Restructuring Paper 2018.pdf Restructuring Paper 2020- P114294.docx Restructuring Paper - 2021.pdf***
- Supervision Aide Memoires - **World Bank Operations Portal.**
- Semester Progress Reports presented by APN ***Semester Progress Reports - APN***
- *Final Project Report presented by APN* ***Informe Final APN Proyecto GEF 0A0233 - AR.pdf***
- Beneficiary Surveys Reports ***Beneficiary Survey***
- Financial Management Supervision Reports - **World Bank Operations Portal.**
- Audit Reports - **World Bank Operations Portal.**
- Operations Manual ***P114294 Op Manual.docx***
- Country Partnership Strategy FY15-18 (Report No. 81361-AR) - **World Bank Operations Portal.**
- Country Partnership Strategy FY19-FY22 (Report No. 131971-AR) ***CPF 2022.pdf***
- Systematic Country Diagnostic, Argentina: Escaping Crises, sustaining growth, sharing prosperity, 2018. ***SCD - ARG Scaping Crisis.pdf***

Project-Produced Reports and other documents:

Component 1

- Tracking Tool Results *PDO 1.* ***Tracking Tool.xlsx***
- SPA Management Plans ***SPA Management Plans***

Component 2

- Rural Corridors Strategic Plans endorsed by the Authorities ***Conservation Corridors Resol. Nº 510-21 - Aprobacion Planes Estrategicos Corredores con Anexos.pdf Resol. Nº 510-21 - Planes Estrategicos con Anexos.pdf***
- Patagonia Corridor Plan ***Conservation Corridors***

- Letter of Intent of Cordoba Province for the expansion of rural corridors ***Sierras Chicas***
- Monetary and non-monetary benefits reports ***Monetary and Non Monetary benefits Reports***

Component 3.

- Conservation Gaps Assessment ***Analytical Documents***
- Financial Sources and Mechanisms for Protected Areas and Rural Corridors Assessment ***Analytical Documents***
- Policy Analysis and guidelines for the sustainable use and conservation of forests in silvopastoral systems in the Chaco Corridors ***Analytical Documents***
- Forest Management Plans for Bee keeping in the Chaco Region ***Analytical Documents***

Project visibility in media.

Project general Information:
https://www.youtube.com/watch?v=Z01MHHQMCK8

El Impenetrable National Park:
https://www.youtube.com/watch?v=aFN3W2ey0GMhttps://www.youtube.com/watch?v=5yjO4zaqQ9U
https://www.theguardian.com/environment/2021/may/25/a-huge-surprise-as-giant-river-otter-feared-extinct-in-argentina-pops-up-aoe
https://www.argentina.gob.ar/noticias/el-impenetrable-recibe-dos-nuevos-cachorros-de-yaguarete
https://www.nationalgeographicla.com/animales/2019/09/argentina-primeros-registros-de-un-yaguarete-en-el-parque-nacional-el-impenetrable
https://www.pagina12.com.ar/219202-un-geolocalizador-para-el-yaguarete-de-el-impenetrable?gclid=EAIaIQobChMIhvXwtIWq8wIVB5yzCh2A6w01EAAYASAAEgL1sfD_BwE
https://www.diarionorte.com/178606-el-yaguarete-dejo-ver-sus-huellas-en-el-impenetrable
https://chaco.tv/detalleNoticia/1959
Fire response
https://www.chacodiapordia.com/2020/10/05/tras-cinco-dias-lograron-controlar-el-incendio-en-el-parque-nacional-el-impenetrable/
Waterholes:
https://www.posibl.com/es/news/medio-ambiente/argentina-construyen-aguadas-en-el-parque-nacional-copo-de-santiago-del-estero-para-mitigar-las-sequias-30746400
Management Plans:
http://barranquerasonline.com.ar/el-parque-nacional-el-impenetrable-tiene-en-pleno-desarrollo-su-plan-de-gestion-y-un-proyecto-de-reintroduccion-del-yaguarete/
https://noticiasambientales.com/compromiso-ambiental/turismo-y-naturaleza-los-planes-para-el-parque-nacional-el-impenetrable/
Sub-Projects:
https://www.elfederal.com.ar/chaco-se-viene-el-ecoturismo-comunitario-en-el-impenetrable/
https://www.chacodiapordia.com/2020/09/19/ecoturismo-comunitario-en-el-parque-nacional-el-impenetrable/
https://chacoenlineainforma.com/fuerte-esperanza-entrega-de-equipos-del-proyecto-gef-de-

corredores/
http://elmunicipalweb.com.ar/sitioweb/index.php/locales/5759-reserva-provincial-copo-trabajan-en-proyectos-que-promueven-la-produccion-local
https://larevistadelchaco.com.ar/contenido/243/el-ecoturismo-vuelve-a-las-actividades-con-la-reapertura-de-los-parques
SIFAP:
https://prensa.cba.gov.ar/informacion-general/miramar-cordoba-recibio-a-representantes-de-areas-protegidas/
https://inta.gob.ar/eventos/seminario-virtual-gestion-de-paisajes-sustentables-la-conectividad-biologica-conceptos-e-implicancias
http://www.elsemiarido.com/areas-protegidas-encuentro-federal-de-guardaparques-en-mendoza/
https://www.revista-airelibre.com/2017/12/07/encuentro-federal-guardaparques/
https://dailyweb.com.ar/noticias/val/28292-9/encuentro-federal-de-guardaparques-en-mendoza.html
https://www.lamañanaonline.com.ar/noticia/17379/personal-de-la-reserva-natural-formosa-participo-del-encuentro-federal-de-guardaparques-en-mendoza/
https://www.lanacion.com.ar/opinion/corredores-rurales-y-de-biodiversidad-nid2119735/
http://proyungas.org.ar/proyungas-presente-en-las-primeras-jornadas-de-conservacion-del-chaco-semiarido/
Infrastructure
http://diariodelsudoeste.com.ar/index.php/sociales/8144-la-intendencia-del-parque-nacional-el-impenetrable-cuenta-con-un-galpon-de-servicios
Rural corridors
https://es.mongabay.com/2020/07/argentina-corredores-biologicos-chaco-no-avanzan/

ANNEX 9. ADDITIONAL PROJECT OUTCOME INFORMATION

A. Explanation on methodology PDO Indicator 1 - *Areas brought under enhanced biodiversity conservation (ha)* – TAKEN FROM THE PROJECT'S OPERATIONS MANUAL

1. This methodology estimates the surface of provincial and national lands in the ecosystems of Gran Chaco and Patagonia (Steppe and Marine and Coastal areas) that are legally designated as protected areas (with support of the project), and/or existing protected areas that achieved an improvement of effectiveness, leading to an improvement in biodiversity conservation. This indicator is quantified in hectares.

2. The tool used to define the baseline, set the goal, and calculate intermediate progress is an adaptation of the "GEF Biodiversity Tracking Tool" (hereinafter TT).

3. The methodology consists of 4 steps:

   a) Application of the TT tool to the protected areas where the project is implemented and identification of the aspects to be strengthened thanks to the investments of the project.

   b) Estimation of the baseline and final scores for each aspect in each SPA.

c) Estimation of the progress of the identified aspects due to the implementation of project's activities.

d) Estimation of the total hectares that represent the progress of each aspect.

Further information on each of the steps listed is provided below.

4. **Step 1**:

- SPAs of Component 1: Chaco region: (i) Impenetrable National Park, (ii) Copo National Park, (iii) Copo Provincial Park, (iv) Copo Multiple Use Reserve, (v) Fuerte Esperanza Provincial Park, (vi) Loro Hablador Provincial Park, (vii) Pampa del Indio Provincial Park. Patagonian Steppe and Marine/Coastal Region: (i) Patagonia National Park, (ii) Makenke Interjurisdictional Marine Park, (iii) Patagonia Austral Interjurisdictional Coastal Marine Park. For each PA, local responsible monitoring agents carried out an initial evaluation of the area using the TT tool, according to the forms available in the WB evidence documentation system.

Table 1. Selected Protected Areas and their aspects to be strengthened through the project are:

	1. Legal Status	6. Limits demarcation	7. Management Plan	10. Control Systems	11. Research	12. Resource Management	18. Goods	27. Visitor infrastructure
Impenetrable NP	X		X	X	X		X	
Copo NP			X	X	X	X	X	X
Copo PP / Copo Multiple Reserve			X	X	X		X	
Loro Hablador NP			X	X	X		X	
Pampa del Indio PP			X	X	X		X	
Fuerte Esperanza PP			X	X	X		X	
Patagonia Austral Interjurisdictional Coastal Marine Park				X			X	
Makenke Interjurisdictional Marine Park			X	X			X	
Patagonia NP	X	X	X	X			X	

5. **Step 2:**

- Regarding the protected areas and aspects specified in Step 1, a baseline was estimated (column "Baseline TT value") back on August 26, 2010. For this case the status of the assessed aspects indicators for that year was used as the baseline for the project. Exceptionally, for the provincial protected areas (PP) of the Chaco region (Pampa del Indio, Fuerte Esperanza, and Loro Hablador), the baseline was established in 2018, as there was no information from years before.

- Based on the criteria and ranges of the TT, the total value that the aspects acquired at the end of the project was estimated (column "Projection of Intermediate Indicator Value Dec. 2020") as well as the final score that each protected area obtained at the end of the project (column "Additional points added by the GEF Project as of Dec. 2020"). The additional points added by the Project were added to the baseline value and resulted in the total points that each aspect could get (column "Projection…").

Protected Area	Aspect	Baseline Year	Baseline in the TT	Projection of Intermediate Indicator Value Dec. 2020	Additional points added by GEF Pr Dec. 2020

IMPENETRABLE NP	1.1	2010	2	14	12
	1. Legal Status: Creation of the Protected Area	2010	1	3	2
	7. Management Plan	2010	0	3	3
	10. Control Systems	2010	0	3	3
	11. Research	2010	1	2	1
	18. Goods	2010	0	3	3
COPO NP	1.1	2010	8	15	7
	7. Management Plan	2010	2	3	1
	10. Control Systems	2010	1	3	2
	11. Investigation	2010	2	3	1
	12. Resource Management	2010	1	2	1
	18. Goods	2010	2	3	1
	27. Visitors Infrastructure	2010	0	1	1
COPO PP	1.1	2018	3	11	8
	7. Management Plan	2018	0	3	3
	10. Control Systems	2018	1	3	2
	18. Goods	2018	1	3	2
	11. Research	2018	1	2	1
LORO HABLADOR PP	1.1	2018	4	11	7
	7. Management Plan	2018	1	3	2
	10. Control Systems	2018	1	3	2
	18. Goods	2018	1	3	2
	11. Research	2018	1	2	1
PAMPA DEL INDIO PP	1.1	2018	4	11	7
	7. Management Plan	2018	1	3	2
	10. Control Systems	2018	1	3	2
	11. Research	2018	1	2	1
	18. Goods	2018	1	3	2
FUERTE ESPERANZA PP	1.1	2018	4	11	7
	7. Management Plan	2018	1	3	2
	10. Control Systems	2018	1	3	2
	11. Research	2018	1	2	1
	18. Goods	2018	1	3	2
Patagonia Austral IMP	1.2	2018	3	6	2
	10. Control Systems	2018	1	3	2
	18. Goods	2018	2	3	0
MAKENKE IMP	1.2	2018	0	8	8
	7. Management Plan	2018	0	3	3
	10. Control Systems	2018	0	2	2
	18. Goods	2018	0	3	3
PN PATAGONIA	1.2	2018	5	15	9
	1. Legal Status: Creation of the protected area	2018	2	3	0
	6. Limits Demarcation	2018	1	3	2
	7. Management Plan	2018	0	3	3
	10. Control Systems	2018	1	3	2
	18. Goods	2018	1	3	2

6. Step 3:

- For each instance of evaluation, the progress of the aspects was estimated according to the implementation of project activities. The results were entered in the monitoring form available in the WB's evidence documentation system. The points that were added to each aspect were associated with pre-established criteria and a score range in the TT tool referred to in Step 1. The “Projection of Intermediate indicator value” and “Additional points added by the GEF” columns were manually completed. Note that “Additional points added by the GEF” result from the difference between “Intermediate indicator value” and “Baseline TT value”.

Protected Area	Aspect	Baseline Year	Baseline in the TT	Projection of Intermediate Indicator Value Dec. 2020	Additional points added by GEF Pr Dec. 2020
IMPENETRABLE NP	1.1	2010	2	8	6
	1. Legal Status: Creation of the Protected Area	2010	1	3	2
	7. Management Plan	2010	0	0	0
	10. Control Systems	2010	0	2	2
	11. Research	2010	1	1	0
	18. Goods	2010	0	2	2
COPO NP	1.1	2010	8	9	2
	7. Management Plan	2010	2	3	1
	10. Control Systems	2010	1	1	1
	11. Investigation	2010	2	2	0
	12. Resource Management	2010	1	1	0
	18. Goods	2010	2	2	0
	27. Visitors Infrastructure	2010	0	0	0
COPO PP	1.1	2018	3	3	0
	7. Management Plan	2018	0	0	0
	10. Control Systems	2018	1	1	0
	18. Goods	2018	1	1	0
	11. Research	2018	1	1	0
LORO HABLADOR PP	1.1	2018	4	4	0
	7. Management Plan	2018	1	1	0
	10. Control Systems	2018	1	1	0
	18. Goods	2018	1	1	0
	11. Research	2018	1	1	0
PAMPA DEL INDIO PP	1.1	2018	4	4	0
	7. Management Plan	2018	1	1	0
	10. Control Systems	2018	1	1	0
	11. Research	2018	1	1	0
	18. Goods	2018	1	1	0
FUERTE ESPERANZA PP	1.1	2018	4	4	0
	7. Management Plan	2018	1	1	0
	10. Control Systems	2018	1	1	0
	11. Research	2018	1	1	0
	18. Goods	2018	1	1	0
Patagonia Austral IMP	1.2	2018	3	4	0
	10. Control Systems	2018	1	1	0
	18. Goods	2018	2	3	0

MAKENKE IMP	1.2	2018	0	1	1
	7. Management Plan	2018	0	0	0
	10. Control Systems	2018	0	0	0
	18. Goods	2018	0	1	1
PN PATAGONIA	1.2	2018	5	5	0
	1. Legal Status: Creation of the protected area	2018	2	2	0
	6. Limits Demarcation	2018	1	1	0
	7. Management Plan	2018	0	0	0
	10. Control Systems	2018	1	1	0
	18. Goods	2018	1	1	0

7. Step 4

- Since the end target of the PDO Indicator 1 is given in "number of hectares", it was necessary to estimate the total number of hectares that represented the progress of each of the assessed aspects. The number of hectares impacted by the project's interventions was calculated based on the total area (in hectares) of each PA and the maximum points that each PA could have got due to project interventions (see Step 2, Column Additional points added by the GEF Project). For example, investments for the Impenetrable National Park, with a surface of 128,000 hectares, would allow a score of maximum 12 points achieved exclusively from project contributions. Each point then, had a value of 10,667 hectares (this results from dividing 128,000 hectares by the 12 points that the project would contribute).

Protected Area	2020	Total Area (ha)	Value/ha
Impenetrable NP	12	128.000	10667
Copo NP	7	118.119	16874
Copo PP / Copo Multiple Reserve	8	67.675	8459
Loro Hablador NP	7	25.750	3679
Pampa del Indio PP	7	8.633	1233
Fuerte Esperanza PP	7	28.220	4031
Patagonia Austral Interjurisdictional Coastal Marine Park	2	104.812	52406
Makenke Interjurisdictional Marine Park	8	72.663	9083
Patagonia NP	9	106.424	11825
TOTAL			

8. Finally, to estimate the total number of hectares that represented the progress in the assessed aspects, the total score for each protected area at a given time was multiplied by the Value/ha. For example, if at the moment of the evaluation, the actions of the project in the Impenetrable National Park had attributed 6 points, then, the area impacted by the project and that was taken into account for the achievement of this PDO Indicator was of 64,000 hectares (6points x 10,667 hectares).

9. This calculation was done for each SPA until the end of all project interventions.

B. *Explanation on methodology PDO Indicator 5. Aboveground carbon protected in Chaco forests* - TAKEN FROM THE PROJECT'S OPERATIONS MANUAL.

1. This indicator measures the carbon stock in forest biomass above ground (tons) protected with the support of the project in 3 different ways: (i) by the creation/declaration of new protected areas; (ii) by improving the management of existing protected areas; and (iii) by improving the management of forest lands outside protected areas.

2. For newly declared protected areas, the indicator accounts the total forest carbon stock in the entire protected area. For existing protected areas, the improvement in management effectiveness is accounting

by estimating the carbon stock in 20 percent of the protected area (the percentage was by the project carbon expert).

3. For the calculation, the information provided by the Argentina's Third Communication to the United Nations Framework Convention on Climate Change was used, specifically the information presented in Annex II: Emission factors. Said Annex contains the Table A2.10: Reference values for the Category "Forest Land" used in the estimation of emissions and absorptions of the Land use change and forestry Sectors of the 2012 Green House Gases Inventory (INVGEI). In this Inventory were presented the values of dry matter biomass above ground for each type of forest and the conversion factors to transform these biomass data into Tons of Carbon (TCeq).

4. The above-ground biomass value for "Parque Chaqueño" is 129.03 T of dry matter/ha and the conversion factor to C is 0.48. With these data, it is possible to calculate the Carbon stored in the forest of the National and Provincial Parks, and Reserves, Sustainable Use Sub-projects, Demonstrative (SD) and other surfaces that may be linked to Project actions in the Chaco region.

5. The 'Land Use Zoning of Native Forests in the National Protected Areas of Northeast Argentina' document,[54] serve to calculate the different areas and distribution of each type of forest in each region of intervention.

6. For example, for the Impenetrable National Park, the figures correspond to:

Table 1: Classification of environments for the Impenetrable National Park

FOREST ECOSYSTEMS	**Area ha**	**Area %**
High forest of two quebrachos	30134,39	23,70
Low forest of white quebracho and palo santo	53351,61	41,96
Carob forest	9357,48	7,36
Low forests, other thickets	11100,87	8,73
Floodable palm grove	401,08	0,32
Shrubland and riparian forest	316,26	0,25
Peel, scrape	2033,27	1,60
TOTAL FOREST ECOSYSTEMS	**106694,96**	**83,91**
NON-FOREST ECOSYSTEMS	Area ha	Area %
Open savana	14475,45	11,38
Pastureland	1239,48	0,97
Marsh vegetation	4215,19	3,32
Bermejo flood area	88,70	0,07
Water	435,27	0,34
TOTAL NON-FOREST ECOSYSTEMS	20454,08	16,09
TOTAL AREA	**127149,04**	**100,00**

[54] 2018. Biodiversity Information System of the National Parks Administration.

- Calculating only forested lands (high forest of two quebrachos, low white quebracho and palo santo and carob trees), the total area is of 93,843.48 ha.

- The 93,843.48 ha were multiplied by the amount of C/ha (61.92 T) estimated for this type of forests, giving the total of Ceq in the forest lands of this PA: 5,748,868. (5.75 million T of Ceq).

- Calculating the following four types of ecosystems that correspond to Other Forest Lands, additional 13,851.48 ha were obtained. These 13,851.48 ha were multiplied by the amount of C/ha (31.60 T) estimated for this type of forests, giving a total of C in Other Forests 437,751.09.

- The aerial biomass of carbon stored in the Impenetrable National Park's Forest is of 6,187,956 T of Ceq.

7. To calculate the protected Carbon in the existing protected areas and in the lands involved in the Sustainable use Sub-projects and Demonstrative Sub-projects and other lands, the number of hectares of forest within each PA was calculated, as well as the forest area within each of the land plots in which the Sub-projects were implemented.

8. The carbon stock values in the above ground forest biomass for each Protected Area can be seen in Table 2.

9. Depending on the investments and actions of the Project in these Protected Areas aiming at increasing the protection of the forests, the contribution to the permanence of the Carbon stock could be estimated and referenced as "avoided emissions". An increase in forest protection could be attributed to the investments that strengthened the control and surveillance capacity of protected areas due to the improvement of facilities for park rangers and staff member, including operational centers or the purchase of housing modules and specific kits for the prevention and control of forest fires. The contribution to the effective management of protected areas through the preparation and implementation of management plans must was also considered.

10. It is considered the fact that the project contributed to sustaining the forest biomass of the core protected areas of the Chaco Pilot Corridors, with 20 percent of this being accounted for as avoided emissions. This percentage arises from qualitatively assessing the avoided risk of forest fires and the protection of the forest ecosystem thanks to a strengthened planning of protected areas. The 20 percent is considered a conservative number.

11. The calculations found in Table 2 show a value of 3.03 million tons of Carbon, which added to what was reported for the Impenetrable National Park (6.17 million T of Ceq) gives a total of 9.23 million T of Ceq. According to the target value of the PDO Indicator 5 (10.4 million T of Ceq), 1.17 million T of Ceq would remain to be reported, which would be completed with the forest areas protected by the interventions of the Sub-projects and other actions in the Rural Corridors.

12. Table 3 presents the calculation for additional 1.2 million T of Ceq in land plots where Sub-projects were implemented (this for the First Stage of the project - six SUS and one DS).

Table 2: Calculation of Carbon accumulated in the aerial biomass of the forests of the Protected Areas

Provincia	Áreas protegidas	Sup. Boscosa (ha)	Sup. No Boscosa (ha)	Sup. Total (ha)	Porcentaje de bosque	Biomasa T/ha	Factor conversión	T de C	20% C
Chaco	PP Pampa de Indio	8051	582	8633	0,93	129,03	0,48	498.634	99.727
Chaco	PP Loro Hablador	30483	267	30750	0,99	129,03	0,48	1.887.946	377.589
Chaco	PP Fuerte Esperanza	27965	255	28220	0,99	129,03	0,48	1.731.995	346.399
Sgo. Del Estero	RP + PP Copo	72106	20114	92220	0,78	129,03	0,48	4.465.842	893.168
Sgo. Del Estero	PN Copo	106432	12495	118927	0,89	129,03	0,48	6.591.802	1.318.360
Chaco	PN El Impenetrable	106695	20454	127149		129,03	0,48	**6.187.956**	
		245.037		**278.750**					**3.035.244**
Total T de C en APs									**9.233.200**

Table 3: Calculation of Carbon accumulated in the aerial biomass in the forests of the properties involved in the Community Driven Development Subprojects

Código	Nombre	Actividad productiva principal	Superficie total predios afectada al Sus	Criterio de delimitación	Superficie afectada de bosque	Biomasa T/ha	Factor conversión	T C
PNEI-01-18	Monte es vida	Forestación algarrobo, apicultura	20.600	Propiedad comunitaria de 20,000 has (bajo acuerdo de lineamientos generales de manejo)	15.660	129,03	0,48	969.893
PNEI-02-18	Producir cuidando nuestros bosques - Toñañapto toy totheya tokatanhi	Forestación algarrobo, apicultura						
PNEI-03-18	Naturaleza, nuestro alimento - Tañi Toj Tachenpe Honat, Totolotoj	Forestación algarrobo, apicultura						
PNEI-04-18	Tierra dulce y verde - Hunhat tojis-wet watsan	Forestación algarrobo, apicultura						
PPI-05-18	Caminando hacia una ganadería sustentable del Corredor	Ganadería en monte y pastizal natural	3.340	Sumatoria de predios individuales de productores	1.733	129,03	0,48	107.332
PPI-06-18	Miel de algarrobal	Apicultura orgánica	2.490	Área del apiario bajo certificación orgánica	1.911	129,03	0,48	118.357
PPI-07-18	Impulso a la meliponicultura	Meliponicultura	2.120	Area del meliponario definida según pecoreo de meliponas	81	129,03	0,48	5.017
			28.550		**19.385**			**1.200.598**

C. Infrastructure and civil works photographs

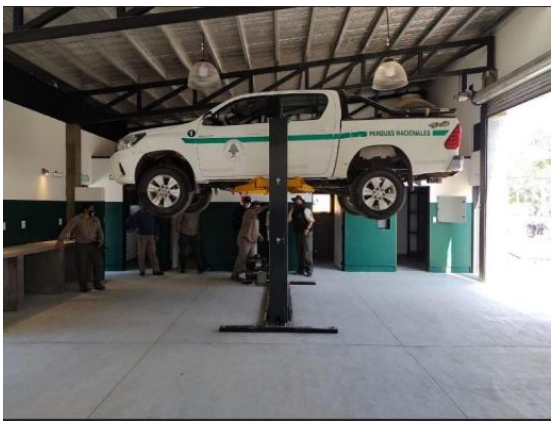
Chaco Region

Copo National Park - Housing Units, antenna and solar panel, water tanker (Santiago del Estero Province)



Copo Provincial Park – fire fighter system (Santiago del Estero Province)

Impenetrable National Park – storage units (El Chaco Province)

Impenetrable National Park – motorcycles (El Chaco Province)

Loro Hablador Provincial Park – Operations Center (El Chaco Province)

Patagonia Steppe Region

Patagonia National Park – housing units (Santa Cruz Province)

Marine/Coastal Region

Makenke Interjurisdictional Marine Park - Operational Center (Santa Cruz Province)

Patagonia Austral Interjurisdictional Coastal Marine Park - housing and storage units (Chubut Province).

D. Water whole (Robles Dam) in the Copo Provincial Park and its associated biodiversity

E. Camera Traps photographs

Impenetrable National Park, Bermejo River. 2019.

Impenetrable National Park, Bermejo River. 2020.

F. List of Community Driven Development Subprojects.

Code	Name	Productive Activity	Community involved	Number of beneficiaries (t,w,i*)
PNEI-01-18	Forest is life	Carob Tree afforestation, beekeeping	Community Association *Lanchetas*	49,25,49
PNEI-02-18	Producing taking care of our forests	Carob Tree afforestation, beekeeping	Community Association *Polenon*	55,24,55
PNEI-03-18	Nature, our food	Carob Tree afforestation, beekeeping	Community Association *Pozo del Toba*	36,22,36
PNEI-04-18	Sweet and green land	Carob Tree afforestation, beekeeping	Community Association *Rosa Supaz*	36,12,36
PPI-05-18	Walking towards a sustainable livestock of the Corridor	Forest Livestock and natural grasslands	Civil Association *Sociedad Rural Pampa del Indio*	38,16,0
PPI-06-18	Carob honey	Organic Beekeeping	Bee keeping Association *Juan José Castelli*	48,19,48
PPFE-08-19	Producing water for drought times	Forest Livestock	Civil Association *Sociedad Rural Ganadera Fuerte Esperanza*	77,31,0
PPI-09-19	More hives and more forest	Organic Beekeeping	Bee keeping and farming cooperative *La Miskand Shumaj Ltda.*	36,17,0

PPFE-10-19	Organic Honeys of Fuerte Esperanza	Organic Beekeeping	Civil Association *Consorcio Productivo de Servicios Rurales Nº 36.*	68,27,0
PPI-12-19	Rational grazing to restore our grasslands	Grassland livestock, forage improvement	Civil Association *Sociedad Rural Pampa del Indio*	34,13,0
PPI-17-19	Rescue and production of native bees in Miraflores	Beekeeping	Civil Association *Montes Nativos*	132,61,0
COPO-13-19	Building together	Land use management and diversification of production activities	*Asociación Colegio Graduados Forestales.*	38,16,38
COPO-14-19	Proposal to Diversify Production	Land use management and diversification of production activities	*Asociación Colegio Graduados Forestales.*	51,22,51
PNCH-19-19	Smart grazing to recover grasslands in central Chaco	Implementation of sustaimable production schemes to obtain economic profits	Rural Association *Presidencia de la Plaza*	10,5,0
PPI-20-19	Carob Honey II	Beekeeping	Producer cooperative *Productores Apícolas Limitada - COPAL*	67,54,67
PNEI-23-19	Organic Honey of the Impenetrable	Organic Beekeeping	Community Association *Wichi- El Pintado*	144,53,69
PPFE-22-19	Producing while conserving our forests and our land;	Acquisition of tools for improved collective land management	Civil Association *El Jabalí*	51,18,0
CO-21-19	Producing honey in our land	Beekeeping	*UPPSAN. Asoc. Colegio Graduados Forestales*	57,29,57
PNEI-15-19	Demonstrative Tourism Subproject.	Sustainable use of wild fauna and flora		210,137,106
PPI-07-18	Promotion of meliponiculture	Meliponiculture		64,31,38
PNCH-18-19	Natural grasslands grazing	Implementation of sustaimable production schemes to obtain economic profits		10,0,0
PPI-25-20	Demonstration of schemes of management in small sustainable Livestock producers.	Grassland livestock		35,7,0

*t- total, w- women, i- indigenous.

Community Driven Development Subprojects - photographic evidence

Subproject PPI06-18. Honey and extraction facilities

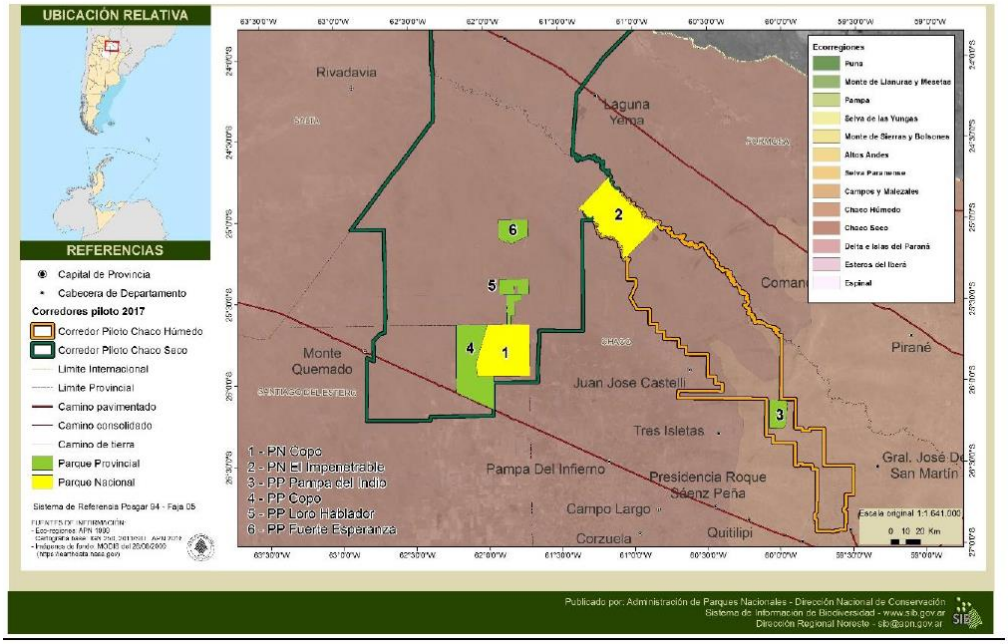

Subproject PPI 17-19. Honey fractioning room. Miraflores.

Subproject PPI-2019 Artisans – Sales room.

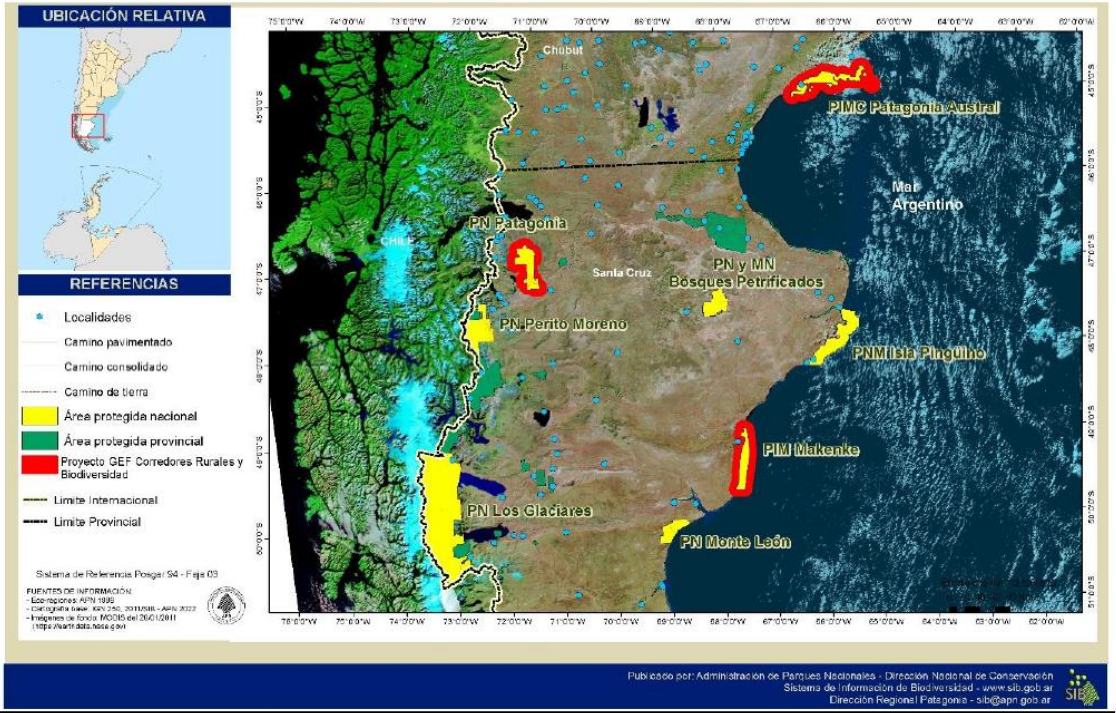

Subproject 15-19 – Observation platform and deck


G. Visual Aids, Maps of the Project Intervention areas.

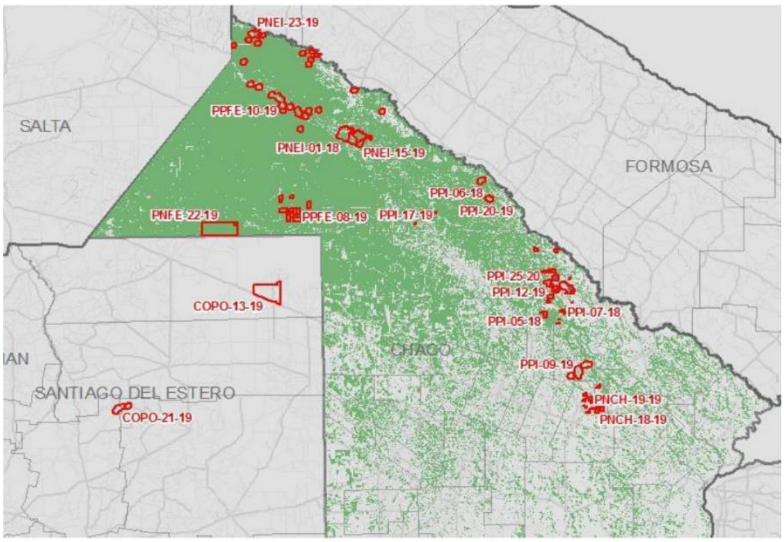
1. Rural Corridors and Selected Protected areas of the Grand Chaco Region and



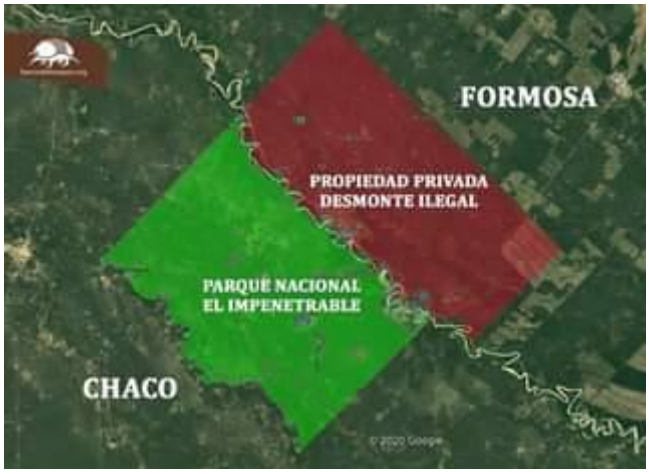
2. Selected Protected Areas in the Patagonia Steppe Region and Coastal ecosystems.



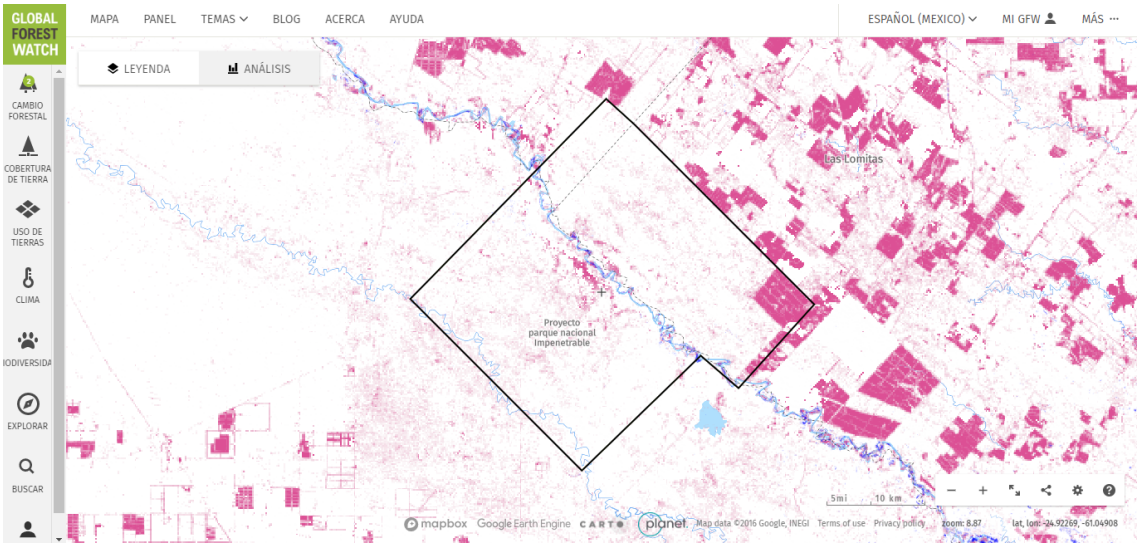
3. Location of Sustainable Use and Demonstrative Sub-Projects – Grand Chaco Region.



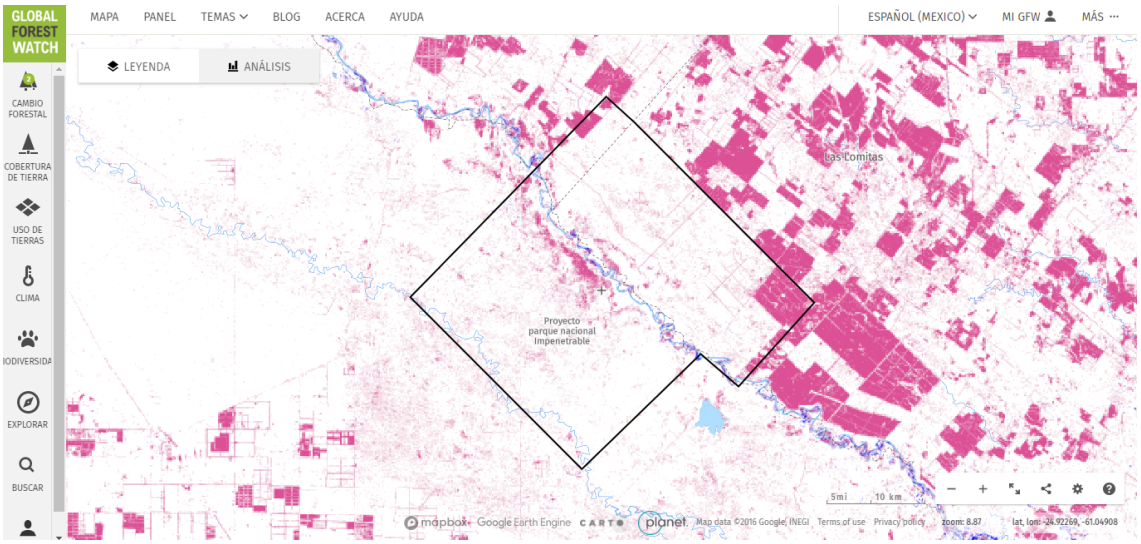
4. Image of the Impenetrable National Park and surrounded deforested lands.



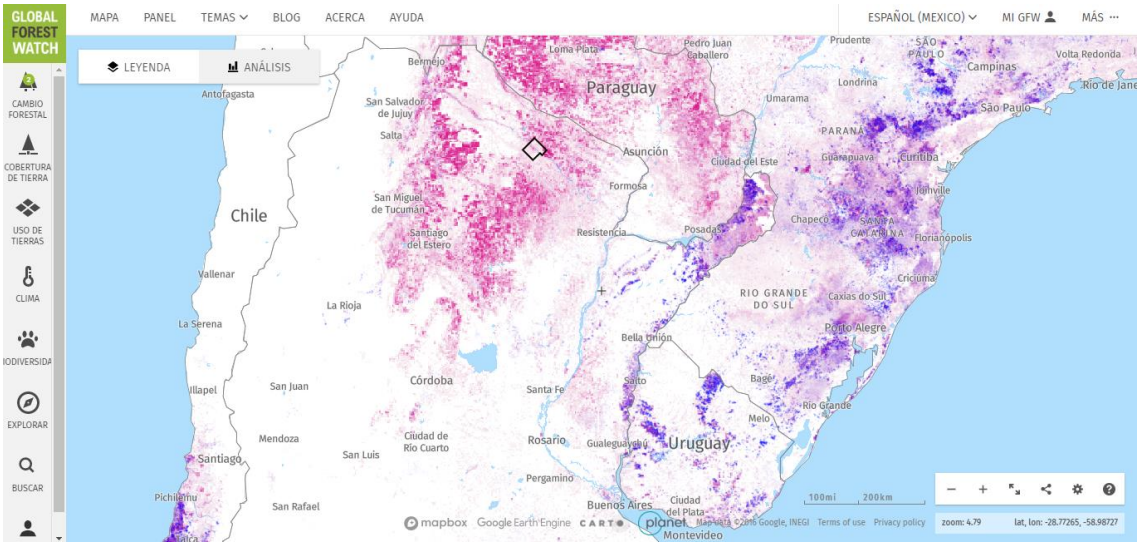
a) Impenetrable National Park - Chaco Province (green); private property La Fidelidad ranch – Formosa province (red). The Estancia rnach has no legal protection. Both areas are separated by the Bermejo River.



b. Deforestation areas (pink) in the Impenetrable NP and La Estancia ranch in 2015 (Appraisal).



c. Deforestation areas (pink) in the Impenetrable NP and La Estancia ranch in 2021 (las image available). Deforestation reported along the southern side of Bermejo River is due to the natural hydrological dynamics of the river.



d. General view of the deforestation in the region

ANNEX 10. DISTRIBUTION OF EFFORTS AMONG REGIONS AN PROVINCES

	Gran Chaco		Patagonian Steppe and marine and coastal
Budget allocation	34%		36%
	Chaco Province	Sgo. del Estero Province	
	27%	7%	
APN Staff allocation	46%		0%
	Chaco Province	Sgo. del Estero Province	
	33%	13%	
Landscape or sector planning instruments developed	4		1
	Approved by Chaco Province	Approved by Sgo. del Estero Province	Approved by authorities
	4	0	0
Areas brought under enhanced biodiversity conservation (ha)	347,335 ha (55%)		283,869 ha (45%)
	Chaco Province	Sgo. del Estero Province	
	28%	27%	
Land area put under sustainable landscape management practices by the project	241,281 ha (100%)		0 ha
	Chaco Province	Sgo. del Estero Province	
	211,281	29.450	
	88%	12%	