



Project UNDP – PIMS Nr.4716– GEF ID 4846

ATLAS Nr. 00107731



Terminal Evaluation – TE of Project:

A landscape approach to the conservation of threatened mountain ecosystems

PIMS 4716

Evaluation Team:

Eduardo Durand

Janet Rojas

December, 2022

Acknowledgements

The present evaluation assignment has been possible thanks to the technical and logistical support received from the officials of the UNDP Offices in Havana and Panama, and from the officials and technicians of the AMA, the IES, and especially the Management Unit of the Project 'Connecting Landscapes'.

The evaluation team expresses its gratitude to all those interviewed, as from the state and non-state sector, international and local actors, as well as to local stakeholders and people representatives - whose full list is included in this report - who were kind enough to give their time and dedication to contribute valuable ideas and responses for the purposes of the mission.

In particular, we underscore UNDP support by Ms. Grisel Acosta, Ms. María Rosa Moreno, Ms. Elizabeth Céspedes, and Mr. Johan Navarro; the governmental support provided by Mrs. Maritza García, President of the AMA; and, especially, by Mrs. Lázara Sotolongo and the dedicated staff of professionals and technicians that she directs, for their willingness to accompany the process and facilitate access to contacts and documentation of the Project.

Finally, we both Janet Rojas and Eduardo Durand express our satisfaction for having had the opportunity to participate in the evaluation of a project of such interest and relevance for Cuba, and for the enrichment of knowledge and experiences in the conservation of biological diversity and ecosystems at the level of the Caribbean region and at the tropical world as a whole .

We hope for the best outcome of the results and achievements of the Project and for its sustainability for the benefit of Cuba and the Latin American and Caribbean Region.

i. Contents

i.	Contents	3
ii.	Acronyms and abbreviations.....	5
1.	Executive Summary	7
1.1.	Project Information Table	7
1.2.	Project Description.....	8
1.3.	Summary Table of Project’s Achievements and Ratings	9
1.4.	Concise Summary of Conclusions.....	10
1.5.	Summary Table of recommendations	14
2.	Introduction.....	16
2.1.	Purpose and objective of the Terminal Evaluation (TE)	16
2.2.	Scope	16
2.3.	Methodology	17
2.4.	Data collection and analysis.....	17
2.5.	Ethics	18
2.6.	Restrictions to the evaluation process	18
2.7.	Structure of the final evaluation report.....	18
3.	Project Description	20
3.1.	Start and duration of the Project	21
3.2.	Development context	22
3.3.	Problems that the Project seeks to address.....	24
3.4.	Immediate development objectives	25
3.5.	Expected Results	26
3.6.	Main interested parties	27
3.7.	Theory of Change	28
4.	Findings.....	29
4.1.	Project design and formulation	29
4.1.1.	Analysis of the results framework	29
4.1.2.	Assumptions and risks.....	29
4.1.3.	Lessons from other relevant projects incorporated into design	30
4.1.4.	Anticipated Stakeholder Involvement.....	31
4.1.5.	Linkages between the project and other interventions within the sector.....	31
4.2.	Project Implementation	33
4.2.1.	Adaptive management.....	33
4.2.2.	Actual stakeholder participation and partnership arrangements.....	34
4.2.3.	Financing and co-financing.....	35

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

4.2.4.	Monitoring and Evaluation	41
4.2.5.	UNDP implementation / oversight, Implementing Partner execution and overall assessment of implementation / oversight and execution	43
4.2.6.	Risk management and social and environmental safeguards	44
4.3.	Project Results and Impacts.....	46
4.3.1.	Progress Towards Objective and Expected Outcomes	46
4.3.2.	Relevance	48
4.3.3.	Effectiveness	49
4.3.4.	Eficiencia.....	50
4.3.5.	Overall Project Outcome	52
4.3.6.	Sustainability	52
4.3.7.	National Implication	55
4.3.8.	Cross-cutting issues	56
4.3.9.	Gender Equality and Women's Empowerment	57
4.3.10.	GEF Additionality.....	58
4.3.11.	Catalyst function and replication effect	59
4.3.12.	Progress toward Impact.....	59
5.	Main conclusions, recommendations and lessons learned	61
5.1.	Conclusiones.....	61
5.2.	Recommendations	65
5.3.	Lessons learned	67
6.	ANNEXES	69
	ANNEX A. Matrix of progress towards the objective and expected outcomes.....	70
	ANNEX B. ToR of the contract for the TE	86
	ANNEX C. TE Mission itinerary and list of persons interviewed.....	97
	ANNEX D List of documents reviewed	99
	ANNEX E. Evaluation Question Matrix.....	100
	ANNEX F. Questionnaire Guide for interviews.....	106
	ANNEX G. Co-financing table.....	108
	ANNEX H. Rating scales	109
	ANNEX I. Signed Evaluation Consultant Agreement form	111
	ANNEX J. Signed UNEG Code of Conduct form	112
	ANEXO K Audit trail	114
	ANEXO L Terminal Evaluation Term of Reference.....	114
	ANEXO M. Clearance	115

ii. Acronyms and abbreviations

Abbrev/Acron.	Meaning in Spanish	Meaning in English
AMA	Agencia de Medio Ambiente	<i>Environment National Agency</i>
ANAP	Asociación Nacional de Agricultores Pequeños	<i>National Association of Small Farmers</i>
ANP / NPA	Área(s) Natural(es) Protegida(s)	<i>Natural Protected Area(s)</i>
AP / PA	Áreas Protegida(s)	<i>Protected Area(s)</i>
BASAL	‘Bases Ambientales para la Seguridad de la Alimentación Local’	<i>Environmental Basis for Local Food Security.</i>
CDN	Comité Directivo Nacional	<i>National Oversight Committee</i>
CEO	Oficial Ejecutivo en Jefe	<i>Chief Executive Officer</i>
CGB	Cuerpo de Guardabosques	<i>Rangers Corps</i>
CITMA	Ministerio de Ciencia, Tecnología y Medio Ambiente	<i>Ministry of Science, Technology and Environment</i>
CPD	Documento de Programa País (PNUD)	<i>PNUD Country Program Document</i>
EAN	Estrategia Ambiental Nacional	<i>National Environmental Strategy</i>
EMT / MTR	Evaluación de Medio Término	<i>Mid Term Review</i>
ET / TE	Evaluación Terminal / Final	<i>Terminal Evaluation</i>
FAF	Fincas Agroforestales	<i>Agroforestry Farms</i>
FMAM / GEF	Fondo para el Medio Ambiente Mundial	<i>Global Environment Facility</i>
FONADEF	Fondo Nacional de Desarrollo Forestal	<i>National Fund for Forestry Development</i>
GMM	Granjas Medicinales de Montaña	<i>Mountain Medicinal Farms</i>
IES	Instituto de Ecología y Sistemática	<i>Institute of Ecology and Systemics</i>
InfoGEO	Proyecto Gestión de la información y del Conocimiento para Planificación	<i>Knowledge & Data Management for Planning Project</i>
JP / PB	Junta del Proyecto	<i>Project Board</i>
METT	Herramienta de Seguimiento de la Efectividad de Gestión	<i>Management Effectiveness Tracking Tool</i>
MINAG	Ministerio de Agricultura	<i>Ministry of Agriculture</i>
MINAL	Ministerio de Industrias Alimentarias	<i>Ministry of Food Industries</i>
MINFAR	Ministerio de las Fuerzas Armadas	<i>Ministry of Armed Forces</i>
MININT	Ministerio del Interior	<i>Ministry of Internal Affairs</i>

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

ONIP	Oficina Nacional de Inspecciones de Pesquerías	<i>National Agency for Fishery Control</i>
PIR	Reporte de Implementación del Proyecto	<i>Project Implementation Report</i>
PMU	Unidad de Manejo del Proyecto	<i>Project Management Unit</i>
PNDES	Plan Nacional de Desarrollo Económico y Social	<i>National Plan for Economic and Social Development</i>
PNS	Programa Nacional de Silvicultura	<i>National Forestry Program</i>
PNUD / UNDP	Programa de las Naciones Unidas para el Desarrollo	<i>United Nations Development Programme (UNDP)</i>
PPG	Fondo de Preparación de Proyecto	<i>Project Preparation Fund</i>
ProDoc	Documento de Proyecto	<i>Project Document</i>
REDS	Regiones Especiales de Desarrollo Sostenible	<i>Special Regions of Sustainable Development</i>
SAT	Sistema de Alerta Temprana	<i>Early Warning System</i>
SEF	Servicio Estatal Forestal	<i>State Forestry Service</i>
SES	Análisis Social y Ambiental	<i>Social and Environmental Screening</i>
SESP	Procedimiento de Análisis Social y Ambiental	<i>Social and Environmental Screening Procedure</i>
SNAP	Sistema Nacional de Áreas Protegidas	<i>National System of Protected Areas</i>
TdR / ToR	Términos de Referencia	<i>Terms of Reference</i>
TdC / ToC	Teoría del Cambio	<i>Theory of Change</i>
UMP / PMU	Unidad de Manejo del Proyecto	<i>Project Management Unit</i>

1. Executive Summary

1.1. Project Information Table

Name of Project	A landscape approach to the conservation of threatened mountain ecosystems – ‘Connecting Landscapes’		
Project Details		Project Milestones	
Project UNDP ID (PIMS#)	4716	Date of PIF approval:	Jun 15, 2012
GEF Project (PMIS#)	4846	Date of CEO endorsement	Jul 14, 2014
ATLAS Business Unit (Award # Project. ID)	00107731	Date of signature of Project Document (ProDoc) (date of project start)	Dec 11, 2014
Country:	Cuba	Date of contract of Project Director	May 15, 2015
Region:	LAC	Date of Project Inception Workshop	Mar 17, 2015
Focal Area	Biodiversity	Date of conclusion of Mid Term Review	Jul 15, 2019
GEF Focal Area (Strategic Objective):	Ecosystems	Estimated date of conclusion	Dec 11, 2022
Funding	GEF- TF	In case of review, new proposed date for end of project..	N.A.
Implementing Agency	UNDP -CO Cuba		
Other implementing partners	Government of Cuba		
Project Financing	At the CEO endorsement date (USD)	At the TE date: (USD) *	
1. GEF	7,481,944	7,481,944	
2. Government	58,336,630	140,147,429	
3. UNDP	800,000	800,000	
Total Cofinancing (2+3):	59,136,630	140,947,429	
TOTAL COST OF PROJECT (1+4)	66,618,574	148,429,994	

(*) According to PIR 2022 and PMU records

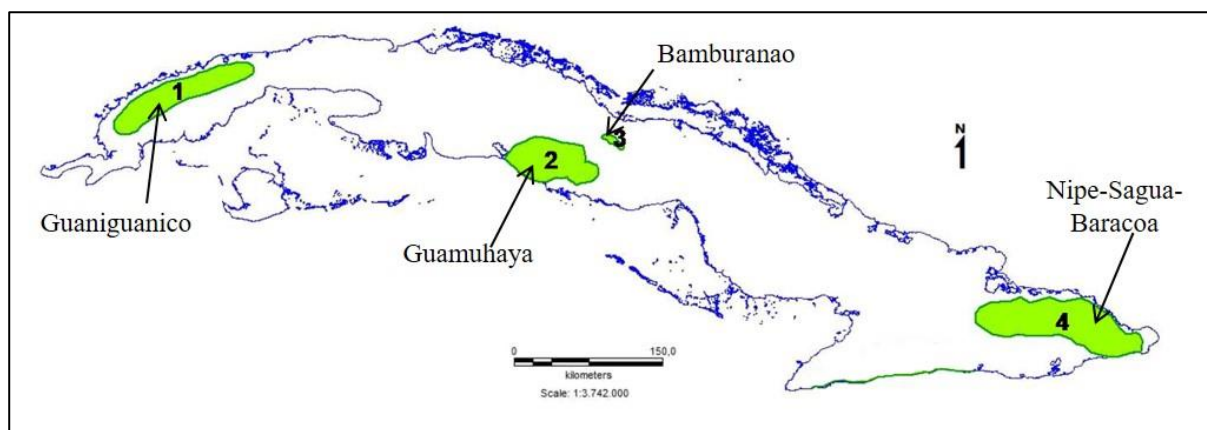
1.2. Project Description

The Project¹ ‘Connecting Landscapes’ is well described as the pursuit of a paradigm shift in the biodiversity conservation strategy and the management of protected natural areas (NPA/PA) in Cuba, from a conventional site-specific vision, to an innovative approach to integrating landscapes of the PAs and their areas of influence, in order to “... *protect core refuges for biodiversity, managing fragmentation as a whole, including the ones caused by productive practices in the landscape, and minimizing threats such as fires and pollution that have their origins in the usual practices employed in the productive sector*”.

The Project proposes a strategic landscape approach to strengthen the management of the National System of Protected Areas (SNAP), promoting the functional connectivity of altitudinal areas and gradients ('From the Top to the Coast'); and protecting biodiversity refuges. This approach addresses the causes of fragmentation caused by inadequate production practices; thus, combating the threats of fire and pollution resulting from such practices

“Connecting Landscapes” focuses on threatened mountain ecosystems in the main mountain ranges of the country (Guaniguanico, Guamuhaya, Bamburanao, and the Nipe-Sagua-Baracoa set), legally considered as ‘Special Regions for Sustainable Development (REDS)’. These areas are managed by multi-institutional entities led by the Tripartite Commission of the Ministries of Agriculture (MINAG), Science, Technology and Environment (CITMA), and the Armed Forces (MINFAR). Each one executes interventions in the Protected Areas (PA) of the area and in the sectors of agricultural activity, and other specific ones. . The Project covers a territorial extension of 1,457,540 ha, 13% of the country, and includes a total of 9 provinces and 45 municipalities, where approximately 8% of the total population of the country resides (See **Figure 1**)

Figure 1. Mountain massifs prioritized for Project implementation



Source: Project Document, (page. 15).

The Project is funded with a full-size GEF grant of USD 7,481,944 (11%), government co-financing of USD 58,336,630 (89%), and an additional UNDP grant of USD 800,000. It began with

¹ To refer in short to the project in this document, it will be named as ‘the Project’ or ‘Connecting Landscapes’, to avoid misunderstandings as other projects are mentioned. .

the signature of the Project Document on December 11, 2014, and should end on December 11, 2022, with an execution period of eight years.

The Project is carried out under the national implementation modality (NIM), with UNDP as the implementing agency, and the Government of Cuba as the implementation partner, through the Ministry of Science, Technology and Environment (CITMA), and the Ministry of Agriculture (MINAG), with the leadership of the Institute of Ecology and Systematics (IES) and the participation of other government actors, academia and non-state stakeholders. The Project involves the proactive participation of various sectors of society: Ministries and their corresponding central and decentralized agencies; local governments, state-owned enterprises, producers, and academic institutions that play various roles as service providers, implementers, and beneficiaries, among others.

1.3. Summary Table of Project’s Achievements and Ratings

Table 1 summarizes the evaluation rating and achievements of the Project at the time of Terminal Evaluation (TE), using the standard qualification for GEF-UNDP projects (see **Annex H**). Full description of the scope of each type of rating is detailed in **Annex A**, and in section 4. of this report.

Table 1. Summary of Achievements and Ratings

1. Monitoring and Evaluation (M&E)	Rating
M&E at start	S
M&E Implementation Plan	S
General Quality of M&E	S
2. Agency Implementation (AI) and Implementing Partner (IP)	Rating
Implementation/Vigilance quality of UNDP	S
Execution quality of Implementing Partner	HS
General quality of Implementation / Execution	HS
3. Evaluation of Outcomes	Rating
Relevance	S
Effectiveness	HS
Efficiency	S
Project General Rating	HS
4. Sustainability	Rating
Financial Sustainability	ML
Socio-political Sustainability	L
Institutional framework and governance sustainability	L
Environmental Sustainability	L
General rating for Sustainability	L

1.4. Concise Summary of Conclusions

Project design and formulation

- The design of the Project has been pertinent and original, since it has been generated and proposed from the reality of the country itself to address a problem of national interest, and which in turn contributes globally to the state of the art of conservation and development of mountainous areas in tropical regions. The design of the Project has aimed at a paradigm shift and has energized the evolution of the conservation of protected areas and biodiverse ecosystems, by positively integrating and interrelating natural habitats with local production systems, considering the interests of the population of the area of influence.
- The central concept of the Project is the construction of natural resilience, considering the impacts of climate change on ecosystems and their services in PAs, and the needs of production and sustainable use of natural resources. It is an approach of great breadth and complexity whose evolution requires time and synergies that exceed those of the execution of isolated and short-term projects. Therefore, the extension of the execution period to eight years has been functional and effective as a good practice.
- An explicit 'Theory of Change' with conceptual models and clarity of interactions and synergies was not included in the design of the Project. However, theory is conceptually implicit in the shaping of components, products, activities and indicators. One can speculate on the advisability or not of covering, as from the beginning, such a wide and diverse geographical extension, as opposed to the convenience of concentrating efforts and results in an appropriate area, and then deriving replication schemes. The alternative taken, judging by its results, has been rational
- The experience of the Project has also required an extensive and necessary inter-institutional, inter-actor, and territorial negotiation, in order to ensure the social basis for intersectoral and community management. This process has been key to successful implementation, and has required time for adaptive processes. Experience suggests that, necessarily, long execution times benefit from periodic reviews and flexibility for adaptive measures, such as those introduced in this case after the EMT, with the readjustment of indicators and goals.

Implementation and Risks Management

- The Project faced multiple risk situations, which were largely mitigated by sound solutions: taking advantage of experiences and lessons learned from parallel or completed projects; sound governance management, including appropriate entities and institutions at subnational territorial levels; decentralization of activities; and, coordination based on local SNAP experience, among other adaptive actions.
- The overall role of the implementing entities is considered highly satisfactory (**HS**). In the case of UNDP, there has been a strong commitment to support the Project, throughout the implementation period, in overcoming difficulties of importing equipment, coordination crises

and personnel changes. Inter-agency coordination has been consolidated both intersectoral and territorially.

- It is evident, through the evaluation of results, the greater awareness of the population, technicians and decision makers in incorporating the issue of risks in planning instruments, in the approaches to address them; in field actions; and environmental education and training for key population groups, especially women. This is a finding that can be systematized and applied in similar projects, or in the expansion of actions already established.
- The Covid-19 pandemic was not foreseeable, and its impact caused disruption of activities and plans of the Project, and derived effects on the life and health of residents. Adaptive measures in this regard were immediate and well organized; and although this external aspect has been the main cause of the delays and difficulties in executing the planned activities, the results indicate that it was possible to overcome the challenge, complete the execution of the Project and achieve its global goals on time.

Participation and collaboration of interested parties

- The Project has achieved collaboration and effective participation of entities at the national and local levels, both state and productive bases and non-state social organizations, and has established key synergies with other concurrent or related projects in the country and in the region. The national government in Cuba has a capacity for effective articulation and promotion of the joint work of its institutions, both in intersectoral and territorial articulation; an asset that is not common in the context of the Latin American and Caribbean region. This capacity has been decisive to achieve the level of demonstrated collaboration and the results of the Project.

Gender approach

- With regard to gender approach, the Project is aligned with national and multilateral donor policies, has made progress in the design of methodologies, and in training on the subject for groups of technicians and local actors; which favors the increase of the participation of women in the activities and benefits of the Project. Interviews with stakeholders and women involved in productive activities and environmental improvements revealed a genuine and enthusiastic involvement and commitment. The participation of women in the management of the Project also reaches a significant proportion, even majority, in technical and administrative aspects.

Social and environmental safeguards.

- The Project has performed satisfactorily, in terms of social and environmental safeguards, due to the positive affinity of its actions for these purposes, aiming to expand and improve the scope of conservation actions, and the strengthening and training in the institutions involved. In this regard, it is worth mentioning the reduction of forest fires, the reduction of violations in the use of PA resources, the expansion of the number of protected areas, the treatment to avoid pollution downstream from the places of agricultural production; participation and public consultations with stakeholders, gender mainstreaming; and other achievements outlined in this document.
- In terms of social impacts, technical support, training and provision of equipment for productive activities, all aimed at greater economic and social well-being of the local population, are considered highly positive. In addition, are also positive the contribution to better knowledge

about climate change, and means and ways to better conservation of ecosystems’ services and natural resources, from a landscape approach, with greater economic efficiency and future sustainability.

Financing and Cofinancing

- There is no evidence of critical situations in the availability of financial resources for the Project activities. Expenditure execution through the GEF grant, administered by UNDP, has been efficient, so financial closure would be achieved with 100 per cent execution, judging by progress in implementation and financial reporting of the Project.
- According to the figures provided, the performance in the use and application of co-financing has far exceeded ProDocs amounts, by up to 240%. Financial subvention from the Ministry of Agriculture, and to a lesser extent from CITMA, have been crucial to achieving the goals and results of the Project.
- In short, in addition to the GEF subvention of USD 7,481,944, and the UNDP contribution of USD 800,000, the Government of Cuba has contributed an amount equivalent to USD 140,147,429. This financial arrangement has contributed to laying the foundations for the sustainability of the Project's actions and the synergy with other convergent projects dealing with environmental issues, ecosystem conservation, and similar mountainous areas.

Outcome achievement

- Regarding the Project Objective, the achievement of the expected results until the end of the operations is considered **highly satisfactory (HS)** in terms of: conceptual bases established and strengthened in the environmental, agroforestry, and land use regulatory frameworks; strengthening of PA conservation actions and the engagement in the task by surrounding population; and advances in the introduction of clean and environmentally sound production practices in front of PA.
- For **Outcome 1** evaluation shows a positive and **satisfactory** progress (**S**) towards regulatory and systematization work, evidenced in the territorial planning plans throughout the scope of the Project, and in the management plans of the pilot corridors and environmental management proposals, still in execution. Likewise, coordination and inter-institutional work in the intervention areas have been strengthened, in addition to achieving the initial goals of investments with a landscape approach.
- Progress towards **Outcome 2** is rated as **highly satisfactory (HS)**, generated by the good base of work in PA in the country, which has allowed to exceed with breadth the management goals in all the intervened areas, through work with communities and schools, training and dissemination of values. The goal of creating 8 new APs was exceeded, with 9 APs with a larger than planned total extent, covering connectivity areas, and better scoring goals.
- In **Outcome 3**, the one with the greatest expression of paradigm shift, and the one with the largest number of diverse and innovative products, a **satisfactory** achievement is appreciated (**S**). The indicators show that the goals were achieved, and mostly exceeded in various activities, still in development, such as promotion of plantations, enrichment of ecological connectivity,

good productive management practices, water care, fire reduction, reduction of illegal activities, and incorporation of benefits and families benefited by Project actions, including 59% of women.

- In balance, the overall rating of the achievements of the Project rated between **satisfactory** to **highly satisfactory**, depending on the final activities at the end of the Project to achieve the best rating.

Monitoring and evaluation.

- Project implementation has satisfactorily met the prescribed GEF and UNDP standards for monitoring and evaluation of its activities, with up-to-date records and information. The monitoring instruments have also been applied and kept updated through the tools and instruments of the Tracking Tool and SESP, the results of which are attached in special annexes to this report. Information and documents have been provided for the TE that are in orderly fashion, revealing diligence and appropriate methods on the part of the PMU.

Sustainability of achievements, replicability and scaling.

- The sustainability of the Project's achievements lies mainly in the consolidation of the alliances and commitments already reached with all actors and in all areas of intervention; as well as in the continuation and improvement of the application of good practices. In this sense, the analysis of the TE on overall sustainability (financial, socioeconomic, institutional and environmental), is qualified as **Likely** as a balance of the four aspects.

1.5. Summary Table of recommendations

Rec #	Recommendations	Responsible Entities
A	<i>For priority and immediate action</i>	
A.1	Formulate in advance and implement, an exit strategy of the Project in front to each type of actor or participating institution; including viable convergence prospects and funding commitments to continue the actions, prior to financial close.	CDN / IES PMU UNDP
A.2	The exit strategy should include holding events or workshops at REDS headquarters level, to consolidate progress, identify lessons from the field and good practices, strengthen partnerships and designate support groups – including the state, non-state and community sectors – engaging them in the continuation of developing actions.	CDN / IES PMU UNDP
A.3	Invest in the preparation of a Project report with its results, experiences, lessons learned and testimony of achievements, including the dissemination of improvements and innovations, and describing current and potential synergies and their benefits. Memory should be shared throughout the LAC region through UNDP, UNEP, FAO, ECLAC, IUCN, and similar organizations.	CDN IES PMU UNDP
A.4	Promote an international event to present and discuss the results and contributions of the Project for conservation and environment, with the support of UNDP and the agencies and conventions of the system (UNEP, FAO, DB and CC Conventions) and international cooperation projects (i.e., Euroclima, EU Horizon, IUCN, and others).	CDN IES UNDP
B	<i>For an efficient operative closing in the short term</i>	
B.1	Coordinate and optimize use of remaining resources with administrative programming by UNDP-GEF, prioritizing the completion of key activities, ensuring commitments that can be met until financial closure.	CDN PMU UNDP
C	<i>To ensure long term effectivity and impact of actions</i>	
C.1	Propose and seek the inclusion of follow-up activities and support for the achievements of the Project, through related projects in progress or in preparation, and in current and future sectoral budgets, in a systematic and organic process.	CITMA / IES MINAG UNDP
C.2	Develop a strategy and coordination pathways to include the landscape approach in key national planning instruments (e.g., national land use planning scheme for massifs, National System of Protected Areas Plan, derived regulations, rural extension plans).	CITMA / IES MINAG CNAP IIAF
D	<i>For the sustainability of outcomes in the Project intervention areas</i>	
D.1	Promote and carry out studies and research derived from the Project, on local impacts of climate change at the scale of the territories and	CITMA / IES IIAF MES

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

Rec #	Recommendations	Responsible Entities
	ecosystems of the country, with attention to species displacement, changes in habitat and in interspecific relationships, or roles of key species in ecosystems; and on anthropic influences that affect ecosystem services.	
D.2	Support social and financial sustainability of the Project outcomes, evaluate the feasibility of national and external funding to continue monitoring and expanding implementation of REDS, such as the Small Grants Program (SGP), FONADEF, Fund for Soil Management; or incorporating Project methodologies and good practices Project into others.	CITMA CDN IES PMU UNDP
E	<i>For optimization of gender and intercultural approaches</i>	
E.1	Promote, in environmental projects and especially in mountainous areas, visible gender mainstreaming, and empowerment of women, which in the Project were little visible, despite favorable results to the approach and its positive effects. Beyond quantification of participant and beneficiary women, capitalize on the concept with training, technology transfer, and strengthening self-confidence in the conduct of family activities.	CITMA MINAG UNDP
F.	<i>For scaling up and replicability of Project achievements</i>	
F.1	Continue updating the cartography elaborated in the REDS, and extend its use to new REDS and PAs, based on homogeneous structures that allow subsequent comparative analyses, which facilitate management of conservation. Likewise, expand to other areas diagnostics and applications for the management of spatial information and the protection of geospatial data resulting from the Project; as well as the training of specialists and users.	CITMA / IES CNAP
F.2	Promote the implementation of the newly approved Environmental Law, which includes innovative concepts to be applied in the country and validated in the Project, such as biological corridors, along with other connectivity and landscape criteria. In this sense, the catalytic function of the Project extends to new regulatory frameworks on local development, benefiting from well-managed biological corridors which add to sustainable development.	CITMA / IES CNAP
F.3	Replicate the successful experience of the farm schools (<i>Fincas Escuelas</i>) , in other areas of the territory, as a mechanism of extension of social, family and productive scope, and as an integrated practice to the national education system.	CDN MINAG IIAF Municipalities
F.4	Given the context in Cuba regarding importation of technological equipment, the operational risk related to the acquisition of such equipment must be carefully considered and mitigated from the outset (including in project design). Consultancy should be sought to support procurement processes; systematically update tender plans; and constant monitoring, to detect and identify possible delays in this regard.	CITMA Ministries UNDP

2. Introduction

El presente documento corresponde a la versión borrador del Informe de Evaluación Terminal, tercer entregable del contrato respectivo, en virtud de los Términos de Referencia del encargo (Ver **Anexo B**), en el marco del Proyecto PNUD/FMAM “Un enfoque paisajístico para la conservación de los ecosistemas montañosos amenazados” (Conectando Paisajes), PIMS 4716 implementado a través de Agencia de Medio Ambiente (AMA).

2.1. Purpose and objective of the Terminal Evaluation (TE)

As described in the GEF Evaluation Policy and UNDP procedures, TE are mandatory for all medium-sized and regular projects funded by the Fund after completion of implementation, and are an important tool of the monitoring and evaluation plan.

As outlined in the GEF and UNDP guidelines, this TE has the following complementary purposes: (i) to promote accountability and transparency; (ii) synthesize lessons that can help to improve the selection, design, and implementation of future GEF-funded and UNDP-supported initiatives; and improving the sustainability of benefits and assistance in the overall improvement of UNDP programming; (iii) assess and document project outcomes and the contribution of these results to the achievement of GEF strategic objectives for overall environmental benefits; and, (iv) measure the degree of projects’ convergence with other priorities within the UNDP country programme.

2.2. Scope

The approach of the TE focuses on the critical analysis of the planning and strategy of formulation of the Project, its territorial coverage, based on PA landscapes, its components, expected results, products and indicators of success formulated according to the theory of change implicit applied to the design of the Project. While an explicit and formal outline of the theory of change (ToC) is not described in ProDoc as it was not a requirement in GEF 5, the content is conceptually guiding and consistent with the objective and expected outcomes.

The evaluation is in turn part of the GEF and UNDP guidelines and directives on the alignment of approaches with national directives and policies, the rationality of the expected change, the relevance and consequence of components and results, and the quality of the proposed indicators of success, with reference to the S-M-A-R-T² qualification standard.

The TE report covers the entire period of project implementation and is based on official information available until the start date of the evaluation process (August 2021). Its content is complemented by the Annexes required by the ToRs and contained in the table of contents, as well as by the special annexes that are not part of the body of the report and that will be added to the final version of the report.

² S.M.A.R.T stands for: Simple, Measurable, Attainable, Realistic, and Timebound.

2.3. Methodology

The evaluation methodology has been aligned with the regulations and guidelines of the GEF and UNDP³ for the case, as well as the ToR of the assignment to the consulting team. Accordingly, the reports and technical, administrative and management documents available (See **Annex E**), provided after the kick-off meeting of the TE have been reviewed, and presentation and dialogue with the main actors of the PMU involved in the execution of the Project was carried out.

The mission stage of the evaluation was based on semi-structured interviews, face-to-face - as far as possible - or combined with virtual assistance when necessary. The interviews were conducted with questionnaires appropriate to each type of participant, that were introduced in the Initiation Work Plan submitted. In this phase of the evaluation these inputs constitute an important aspect of information that has been contrasted and corroborated, during the subsequent process, with documentary evidence (financial, administrative, governance and others), in order to support and confirm the preliminary findings and formulate conclusions and final recommendations.

The national evaluator consultant was present at interviews conducted at Project headquarters or UNDP; while the participation of the international consultant was limited to the virtual format, but still both constituting a coordinated work team in each instance. The national consultant did the follow up necessary inquiries and conversations with the interested parties in each case.

Interviews with field staff, originally planned as part of visits to implementation sites, had to be conducted remotely and virtually (telephone or WhatsApp conference) due to unforeseen difficulties and barriers (weather and energy conditions) that arose at the time of the assessment mission.

In total, it was possible to set up and conduct 34 interviews, 29 individual and 5 in group, to a total of 43 people (maximum 3 per interview), of which 24 (56%) were women in different positions and functions. The interviewees belong to 20 institutions involved in the Project, including national government entities, local governments, universities, research institutes, associations and representatives of UNDP in the country and in the region, agricultural producers, non-state sector producers, and project coordinators, among others.

2.4. Data collection and analysis

Data collection and analysis is in line with the evaluation process and deadlines. For the collection of information, the following techniques have been used:

- **Kick-off meeting:** led by the PMU, where the Project was introduced, as well as main activities and results for each component. This session also served to prepare the implementation plan for the TE.
- **Documentary review:** based on the reading and consultation of ProDoc; review of physical and financial progress reported and documented through reports, and consistency with the fulfillment of goals and achievements as compared to the baseline indicators; annual progress and status to date of the TE (See **Annex E**).

³ *Guidance for Conducting Terminal Evaluations of UNDP (for GEF supported Projects)*

- **Semi-structured interviews**, based on specific guide-questionnaires according to the roles of the interviewees and their function in the Project (See **Annex F**). Some topics emphasized during the interviews are those of cross-cutting nature that affect the results, such as gender approach and stakeholder involvement. Due to travel restrictions because of the pandemic, part of the interviews has been carried out in virtual mode. The interviews were conducted by the evaluators without participation of UNDP or Project staff, to ensure confidentiality for the interviewees. The duration of the interviews was 30 to 45 minutes.
- **Direct observation**, which includes a synthetic assessment of the social, economic and political context of the national and international scope of the Project, in order to raise useful reflections and recommendations on the results and impacts of the Project and its future prospects, in terms of the expected effectiveness of the measures.

The evaluation team contrasted the information obtained from the application of the aforementioned methods, in order to triangulate and corroborate the information and, therefore, guarantee their accuracy and robustness.

2.5. Ethics

In accordance with rules and instructions regarding the ethics of the evaluation, the process has been conducted with the corresponding discretion and confidentiality in the treatment of the information provided by both UNDP and the Project team, as well as by individual or group interviews, during which the confidential quality of the opinions expressed was expressly indicated to be considered as anonymous in each case.

On the other hand, the conduct of the evaluation team has been subject at all times to the guidelines for TE, both in the treatment of information and the professional relations with the staff of the institutions involved.

2.6. Restrictions to the evaluation process

The content of this evaluation is mainly based on a thorough review of the documents that were made available to the evaluators, as well as on a series of interviews with relevant actors of the Project. In spite of the detailed evaluation carried out, some restriction arose as a result of the pandemic and the energy crisis in the country, that have prevented, on the one hand, the visit to the intervention sites, and also the possibility of conducting face-to-face interviews with the actors in the field.

2.7. Structure of the final evaluation report

As said before, this document contains the final or terminal assessment (TE) of the Project "A landscape approach to the conservation of threatened mountain ecosystems", hereinafter referred to as 'the Project' or 'Connecting Landscapes'. The TE covers the processes from its conception, formulation and start on December 11, 2014, until its foreseen operational closure date on December 11, 2022. The structure of the TE report follows the GEF-UNDP guidelines contained in the ToR of the assignment, and includes the following sections:

1. *Executive Summary*
2. *Introduction*
3. *Project Description*
4. *Main Findings*
 - 4.1. *Project design and formulation*
 - 4.2. *Project execution*
 - 4.3. *Project outcomes and impacts*
5. *Main conclusions, recommendations, lessons learned.*
6. *Annexes prescribed by the TE TdR*

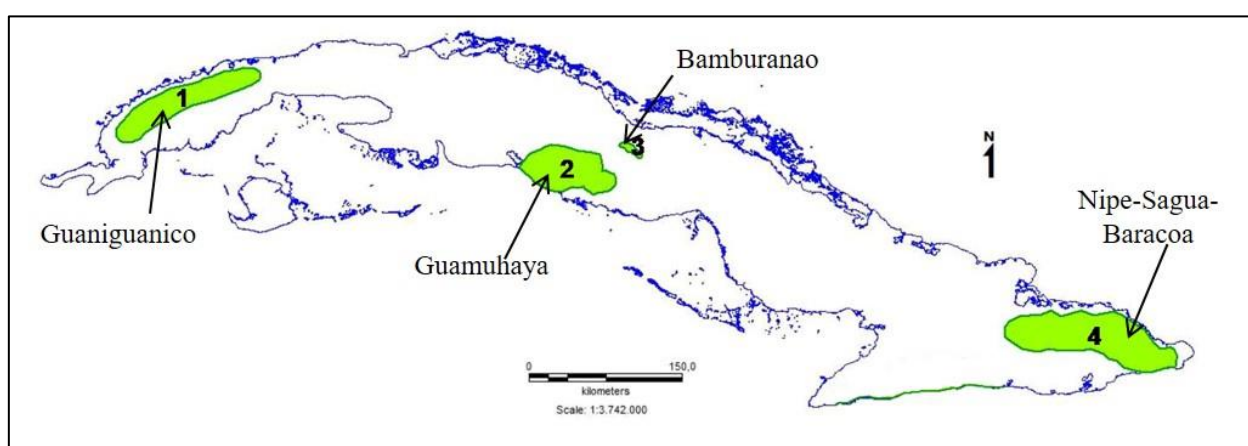
3. Project Description

The 'Connecting Landscapes' Project is described as the pursuit of a paradigm shift in the biodiversity conservation strategy and the management of natural protected (NAP/PA) in Cuba, from a conventional site-specific approach, to an innovative approach to integrating landscapes of the APs and their areas of influence, in order to *"... protect core refuges for biodiversity, managing fragmentation as a whole, including that one caused by productive practices in the landscape, and minimizing threats such as wildfires and pollution that have their origins in the current practices employed in the productive sector"*.

The purpose of the Project, through this strategic approach to landscape, is to strengthen the effectiveness of the management of the National System of Protected Areas (SNAP) by promoting the functional connectivity of the areas through altitudinal gradients ('from the top to the coast'). This approach will protect biodiversity refuge hotspots, and target fragmentation caused by inadequate production practices across the landscape; threats of wildfires and pollution resulting from such practices, shall also be combated. The Project proposes to achieve this paradigm shift in the management of biodiversity and protected areas of the Republic of Cuba.

"Connecting Landscapes" focuses on threatened mountain massifs ecosystems located in four of the main mountain ranges of the country (Guaniguanico, Guamuhaia, Bamburanao, and the Nipe-Sagua-Baracoa complex), that are legally considered as Special Sustainable Development Regions (REDS), and are managed by Mountain Organizations (multi-institutional entities led by a Tripartite Commission formed by the Ministry of Agriculture (MINAG), the Ministry of Science, Technology and Environment (CITMA), and the Ministry of the Armed Forces (MINFAR). In each of them, interventions are carried out in the PAs embraced, and in the zones of agricultural activity or with other specific sectors. The Project covers a territorial extension of 1,457,540 ha, 13% of the country, with a total of 9 provinces and 45 municipalities where approximately 8% of the total population of the country resides. (See **Figure 2**)

Figure 2. Priority Mountain Massifs for Project execution



Source: adapted from ProDoc..

The Project aims at the effective protection of biodiversity against current and future threats in mountain landscapes, "from top to coast", for which it is structured in three components to achieve the following results:

- *Systemic landscape management framework.*
- *Management effectiveness for PAs, considered as core areas in the context of integrated landscape management as a whole; and.*
- *Production systems compatible with conservation in threatened mountain ecosystems and in conservation corridors leading to the coast.*

The Project is funded with a full-size GEF grant of USD 7,481,944 (11%), government co-financing of USD 58,336,630 (89%), and an additional UNDP grant of USD 800,000. It began with the signing of the Project Document on December 11, 2014, and should end on December 11, 2022, with an execution period of eight years.

It is executed under the modality of national implementation (NIM), with UNDP as implementing partner, and by the Government of Cuba as implementing partner, through the entities that conform the Ministry of Science, Technology, and Environment (CITMA), with the leadership of the Institute of Ecology and Systematics (IES) and the participation of other government and academic sectors.

The design and development of 'Connecting Landscapes' are framed in the implementation of the policies, strategies and sectoral and national management plans of the government of Cuba, as well as in the international commitments and agreements contained in provisions such as the National Plan for Economic and Social Development to 2030 (PNDES); State Plan to Confront Climate Change (*Tarea Vida*); National Environmental Strategy; National Programme on Biodiversity; National Environmental Education Program; Plan of the National System of Protected Areas; Food Sovereignty and Nutrition Education Plan; and others.

The Project involves the proactive participation of stakeholders in various sectors of society: Ministries and their corresponding central and decentralized agencies; and local governments, state-owned enterprises, producers, and academic institutions that play various roles as service providers, implementers, and beneficiaries.

3.1. Start and duration of the Project

The Project was generated with the merger of three other projects, two of CITMA (one of the National Center of Protected Areas, and another of the Institute of Ecology and Systematics) and one of the Ministry of Agriculture, which were reformulated in a consolidated project that, from an integrative vision, articulates the main objectives of the aforementioned projects, with a common basis in the conservation of the environment.

In March 2012, the preparation phase (PPG) of the Project began. In July of that year, the concept note (PIF) was approved by the GEF. In December 2013, it was due to close the PPG phase and submit it to the GEF, with an expected duration of 18 months; this period was however extended longer than planned and, after 29 months, approval was obtained from the GEF CEO (Endorsement Request) in December 2014. The ProDoc was signed on December 11, 2014, the date that marks the official start of the Project, foreseeing a duration of 96 months (eight years), with a closing date of December 11, 2022.

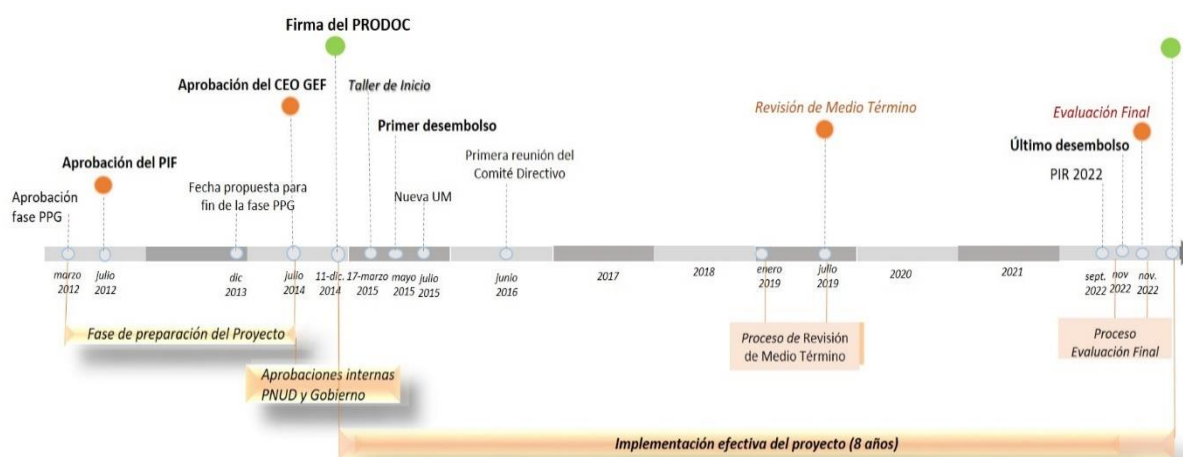
The long period between the approval of the PIF and the signing of ProDoc is due to the fact that there were stages of approval at the national level, which involved UNDP and the Government of Cuba, which required a high level of conciliation concerning the territories and the participating

institutions. Finally, the parties reached consensus, and the ProDoc was signed, assigning to the Institute of Ecology and Systematics (IES) of CITMA, the general coordination of the Project.

Three months later, in March 2015, the Project Inception Workshop was held; and in May the first disbursement took place and, with this action, began the effective implementation. After the Inception Workshop, there was an almost complete change of the PMU, due to personal decisions of its members. The formation of the new team included the creation of the position of Technical Coordinator, which did not exist, this being an application of the good practices of the UNDP-Cuba collaboration project known as ‘*Sabana-Camagüey*’ that, since the start of ‘Connecting Landscapes’, have been incorporated into most of the projects of the Environment Agency (AMA).

The Project implementation has lasted eight years, as scheduled, without requiring or requesting an extension of the closing deadline. Project milestones are described in a timeline in **Figure 3**.

Figure 3. Timeline and milestones in Project implementation



3.2. Development context

Cuba is the largest archipelago in the Caribbean (109,886km²) and is, biologically, the richest in this region. It is classified as a biogeographic zone with a high variety of ecosystems ranging from semi-desert areas to humid tropical forests. Its terrestrial biodiversity is estimated at 25,733 species (*Mancina and Cruz 2017*), of which 8,378 are endemic. The Cuban archipelago has between 7,000 and 7,500 species of plants, so it is among the richest island territories in vascular flora worldwide; an analysis of 4,627 taxa showed that 46.31% are in some category of threat (*González Torres et al. 2016*).

The areas that still maintain their main natural biotic resources, with ecosystems and landscapes that show a high degree of naturalness and representativeness, are mainly located in mountain areas and swamps. The mountains and their foothills constitute approximately 35% of the national territory. The country's five mountain ranges are critical reservoirs of significant biodiversity, with approximately 2,000 species of vascular plants, of which 778 are classified under some form of threat; and 457 are endemic, which have a vital role in terms of the biogeography of

the island, functioning as refuges whose isolation has led to the formation of a large number of endemic species.

The productive sector in the mountain massifs is formed mainly by the forestry, coffee, cocoa and honey sectors, mining, and vegetable production for local consumption. The Project expressly mentions agroforestry and silvopastoriles systems.

There is a political will and a legal and administrative framework that favors the achievement of the results and objectives of the Project under evaluation. Since 1995, the National Center for Protected Areas was created, and since then has kept a guiding role in methodologies even after the subsequent creation of the National System of Protected Areas of Cuba (SNAP), directed by the General Directorate of Environment (DGMA) of CITMA, which brings together PA administrators and state and non-state institutions with related roles to contribute to *in situ* conservation of Cuban natural heritage.

The SNAP has a Plan as a strategic, normative and methodological instrument, which through objectives, standards and programs, establishes the actions to be carried out in the short and medium term for the management of SNAP. At the same time, there are other entities of vital importance for the administration of PAs, among which are: the National Directorate of Forestry; the State Forestry Service (SEF) and the National Business Group for the Protection of Flora and Fauna, both attached to MINAG, that are in charge of directing and controlling the country's forestry policy; the Forest Ranger Corps (CGB) of the Ministry of the Interior (MININT); the National Bureau of Fisheries Inspections (ONIP) and the National Bureau of Fisheries Regulations (ONIP), now attached to the Ministry of Food Industry (MINAL).

Environmental regulation, supervision and supervision are the responsibility of the CITMA Environmental Inspection and Control Center, the MININT Forest Ranger Corps and the MINAL Office for Maritime Control and Regulation. In the case of the mountain massifs, these are organized into "Mountain Organs", which include representatives of all provincial and municipal governments present in the areas.

There is a legal framework that favors the results and objectives of the Project, since as from the 80s of the last century, the legal bases for the formation of a national network of PA were established by Law 33 of 1981 on the Protection of the Environment and the Rational Use of Natural Resources. Subsequently, Law 201 of 1999 established the legal regime for the administration and control of the system (SNAP), as well as the categories and processes of administration to propose and declare PAs.

The Project is also nourished by the National Environmental Strategy (EAN), the guiding document of environmental policy in Cuba, from which territorial strategies are adapted, and the conduct of actions is promoted in order to achieve the goals of sustainable development, qualitatively raise complementation, and articulate them with other strategies, plans and programs. as well as to enhance the management of territories in the prevention of the environment. In the case of the Project, the EAN also ensures the application of the ecosystem-based approach to environmental management, with particular emphasis on the relationships between watershed management and coastal zones..

Among the national programs and plans is the National Forestry Program (PNS) of the Ministry of Agriculture (MINAG), which ensures the continuation and updating of the forestry inventory, covering more wooded land in the country, and establishing more hectares of

plantations, with a survival ratio of at least 85%, through its National Forestry Development Fund (FONADEF).

The '*Turquino Plan*' is conceived as a Program for the Sustainable Development of Mountains, by which CITMA promotes sustainable use practices, the development and protection of forests, soil conservation, waste recycling, and application of agroforestry-pastoralist practices in order to increase food production and achieve the sustainability of local communities. On the other hand, the MINAG's National Soil Improvement and Conservation Programme supports the reduction of soil degradation and soil rehabilitation, the updating of the inventory of areas affected by degradation, and the training of farmers and producers.

The design and development of the Project are framed in the implementation of policies, strategies, and sectoral or national management plans of the Government of Cuba, as well as in the international commitments and agreements contained in the following provisions: National Economic and Social Development Plan to 2030 (PNDES), a guidance document that conceptualizes the Cuban economic and social development model; Economic and Social Policy guidelines to 2030; Government Plan for the Prevention and Confrontation of Crimes and Illegalities that affect natural resources, flora and fauna; Food Sovereignty and Nutrition Education Plan; National Programme on Biological Diversity, and National Environmental Education Programme.

All of the above, in turn, contributes to the achievement of the objectives and tasks of the State Plan for Confronting Climate Change, called '*Tarea Vida*' ('Life Task'), aimed at the solution, in the short, medium and long term, of specific environmental, social and economic problems, related to vulnerabilities, mitigation and adaptation to climate change

3.3. Problems that the Project seeks to address

The main cause of biodiversity loss in Cuba is the degradation and fragmentation of natural habitats. The biodiversity of the target areas of the Project and their capacity to generate environmental services are especially subject to a wide variety of threats, which may vary over time due to climatic, demographic, economic, productive, political, or cultural factors. In this sense, the landscapes of the target mountain massifs, given their nature, intrinsically fragile to a greater or lesser degree, are particularly vulnerable to such changes.

The starting point of the Project focused on threats to the biodiversity of Cuba's mountain ecosystems, including: farmer-started fires, contamination of water bodies from several dispersed sources (e.g. coffee pulping plants, pig farms), inadequate hillside farming practices, open-pit mining, and climate change.

At the time of the elaboration of the Project, Cuba already had solid bases for landscape planning, in the sectors in general and in the target areas in particular (*Plan Turquino*; National Environment Plan, previous projects such as 'The Environmental Bases for Local Food Security' (BASAL) funded by the European Union; the program "Perfection of the National Education System"). However, these and other initiatives lacked integrated approaches to environmental issues, including the relationships between conservation and production (PAs and production landscapes and their respective joint contributions to conservation and connectivity), as well as specific environmental issues and challenges in vulnerable mountain areas.

However, and despite the existence of plans, regulations and control mechanisms such as the Strategic Plan for the SNAP period 2014-2020, security mechanisms and control of illicit

activities and fires, by the Forest Ranger Corps (CGB) in collaboration with other institutions; as well as national priority programs such as "Climate Change in Cuba: Impacts, Mitigation and Adaptation" (which would later become the State Plan "*Tarea Vida*"), there was still a need for greater effectiveness of the administration in the PAs within the context of fragile mountain landscapes.

From another perspective, the conservation of production systems compatible with threatened mountain ecosystems and conservation corridors leading to the coast, was required. In this sense, the main constraint was the lack of integration between sectoral programmes, necessary to effectively address cross-cutting threats across the landscape, taking into account the holistic nature of agricultural production systems.

The Project determined that the initial projects and the actions carried out were not sufficient to solve in the long term the threats that affect the biodiversity of the priority mountain areas in Cuba; therefore, a paradigm shift from the site-based approach to a landscape- and ecosystem-based approach that integrates the PA with surrounding areas, protecting the central refuge, and promoting connectivity at the landscape level was considered essential.

In this sense, the intervention of the Project faced fundamental barriers in three aspects of the process:

- **Inadequate management framework for mountain ecosystems:** Limited access to information for landscape-level planning; limited development and implementation of environmental land-use planning; limited focus on outreach support; and limited experience with the participation of the various beneficiaries and in institutional coordination in landscape-level processes).
- **Limitations in the design and effectiveness of protected area management** (Inadequate provision for landscape level considerations; inadequate provisions for connectivity across the landscape inadequate training of PA staff).
- **Insufficient advice and support to farmers for the implementation of productive practices** compatible with biodiversity conservation (Inadequate technical capacities among producers; Limited institutional capacities to ensure compliance; and inadequate institutional capacities for fire management).

3.4. Immediate development objectives

The overall objective of the 'Connecting Landscapes' Project is the **effective protection of biodiversity against current and future threats in mountain landscapes, "from top to coast"**. To this end, four indicators of achievement of this Objective were designed:

- **O.1** Area of the main vegetation types in the four target REDS.
- **O.2** Ecosystem integrity index in the 19 priority PAs of importance such as shelters in prioritized connectivity zones within the REDS.
- **O.3** Indices of species diversity and abundance in priority areas of connectivity of the 4 REDS, reflecting habitat/connectivity conditions. in these areas, and ability of species to venture outside and travel between basic shelters.
- **O.4** Cumulative width of non-forest spaces separating habitat blocks in prioritized connectivity zones

To achieve the objective and its respective indicators of achievement, the Project has been designed and implemented in coordination with other programs and projects converging in its design or that are in the execution phase, with which it exchanges information, carries out training activities, incorporates lessons learned, shares common intervention sites, and articulates with them a wide diversity of state and non-state actors.

Therefore, the achievement of the proposed goals and objectives, both in the design phase and in the implementation, has had the complement and added value of several GEF initiatives that coincide geographically with its area of influence, such as: the project "Conservation of Sustainable and Dominant Biodiversity in Three Productive Sectors of the 'Sabana Camagüey Ecosystem'; the GEF Small Grants Programme (SGP); the maritime and coastal PA project; the project "Improving the Prevention, Control and Management of Invasive Foreign Species in Vulnerable Ecosystems", Country Pilot Society (SPP) in Sustainable Land Management; the National Programme to Combat Desertification and Drought; the project "Integrating the obligations of the Rio Conventions into national priorities by strengthening information and knowledge management to improve planning and decision-making" (InfoGEO); and the project "Building coastal resilience in Cuba through natural solutions for adaptation to climate change", among others.

At the national level, the Project was originally aligned with the UNDP Cuba 'Country Document Program (CPD) 2014-2018', in contribution to Outcome 7, on strengthening the integration of productive and service sectors into environmental considerations, including energy and adaptation to climate change in their development plans. The Project also remains aligned with the new CPD of UNDP Cuba, which covers the period 2020-2024, in particular the Outcome of Cooperation Framework 3, referring to institutions, productive and service sectors, territorial governments and communities that improve the protection and rational use of natural resources and ecosystems, resilience to climate change and comprehensive disaster risk reduction management. It also contributes to UNDP's Corporate Strategic Plan 2018-2021, on "building resilience to shocks and crises". Under the latter, programme output 3.1 is relevant to the project: "Strengthened capacities of key actors for the sustainable management of natural resources and ecosystems, and improvement of environmental quality".

The Project also responds to 22 articles of the 113 Guidelines for the Economic and Social Policy of the Party and the Revolution, approved by the National Assembly in August 2011, which includes "... *[emphasis on] the conservation and rational use of natural resources, such as soils, water, beaches, atmosphere, forests and biodiversity, as well as the promotion of environmental education and local sustainable development.* It also contributes to the achievement of the following strategic objectives of Aichi Biodiversity: Strategic Objective A (addressing the underlying causes of biodiversity loss by dominant biodiversity through government and society); Strategic objective B (reduces direct pressures on biodiversity and promotes sustainable use); Strategic objective C (improve the state of biodiversity by safeguarding ecosystems, species and genetic diversity); and Strategic Objective D (enhance benefits to all biodiversity and ecosystem services).

3.5. Expected Results

The Project execution is divided into three components:

Component 1 focuses on the systemic framework of landscape management. Its activities deal with operationalizing the REDS (composed of PAs and the surrounding landscapes), through

the establishment of an institutional support framework, effective decision-making structures and mechanisms to engage communities in the sustainable management of natural resources.

Component 2 addresses the effectiveness of management for key PAs within the context of fragile mountain landscapes, taking into account that these will act as the central refuge for overpopulation of high priority species of global conservation from, and among which, species will be able to migrate and relate across the landscape as a whole, taking advantage of the increased hospitality and landscape connectivity that will result from the Project interventions under Components 1 and 3.

Component 3 addresses the conservation of compatible production systems in threatened mountain systems and coastal conservation corridors, focusing primarily on the four mountain massifs covered by the Project, and existing 'ecological connectivity networks'.

In a structured manner, the expected results of the Project (with reference to the Components described), are the following:

Outcome 1: Systemic landscape management framework.

Outcome 2: Management effectiveness for PAs, considered as core areas in the context of integrated landscape management as a whole.

Outcome 3: Conservation-compatible production systems in threatened mountain ecosystems and in conservation corridors leading to the coast.

3.6. Main interested parties

The Project is implemented in threatened ecosystems of Cuba's main mountain ranges, legally categorized as 'Special Sustainable Development Regions' (REDS). The four prioritized mountain massifs are: Guaniguanico, Guamuhaya, Bamburanao, and the Nipe-Sagua-Baracoa complex; and in each of them, interventions are carried out in the PAs included, in the sectors of agricultural activity, and other specific ones.

The Project involves the participation of stakeholders in various sectors: Ministries and their corresponding central and decentralized agencies, local governments, state enterprises, non-state sector, producers and academia; and, playing different roles as service providers, implementers and beneficiaries, among others. The interdisciplinary and interinstitutional nature of the Project required involvement of representatives from approximately 39 major institutions; most of which are part of other GEF projects; This is an additional opportunity to promote their coordination with other projects, within their institutions.

The Project is conducted under the overall direction of a National Steering Committee (CDN in Spanish, or 'Project Board'), which is responsible for making crucial executive decisions and therefore the final authority regarding official review and approvals, including annual operating plans and budget. The Committee consists of representatives of CITMA, MINCEX, UNDP, MINAG and INOTU (formerly IPF). Implementation is the responsibility of a Project Management Unit (PMU), led by a Coordination body consisting of a General Coordinator, a Technical Coordinator, and National Coordinators from each of the main participating institutions (IES, CNAP, INAF, DNF).

3.7. Theory of Change

As from the end of 2019, the GEF is requiring that design of projects be based on the construction of a logical, specific and consistent 'Theory of Change' (ToC). Therefore, in November 2020, the Scientific and Technical Advisory Panel of the Global Environment Facility (STAP) published a 'Primer' (or "definitive guide") document on how GEF projects could develop their respective Theories of Change.⁴

Although the 'GEF's 2020 TOC Primer' is a guideline publication, it mentions that there is diversity in the way a ToC is defined, and that organisms vary in terms of the use of internal or generic guidelines. Therefore, there is nothing 'right' or 'wrong' in the way of developing a ToC, so the Guide is not totally prescriptive in the relationship between those elements, and in how each ToC should be tailor-made and unique to suit the situation of each project.

The approval of the CEO Endorsement Request for 'Connecting Landscapes' predates 2019, a period from which GEF expectations for ToCs became more stringent; therefore, the ToC of the Project cannot be rigidly evaluated following the current criteria contained in the Guide. However, in the ET phase, it is important to assess whether the ToC of the Project was minimally robust, and how it served to guide the development of the project strategy.

In this sense, the theory of change, implicit in the Project, bases its coherence on three design criteria: (i) selection of mountain massifs that cover the country's ecological variety from northwest to southeast, and ensure consistency with the diversity of ecosystems and homogeneity of management approaches; (ii) anchoring the design of components and results in the national and subnational capacity of state action, ensuring the continuity and sustainability of future actions; (iii) innovation in the relationship of PAs with the population and productive activities in each area of intervention, accompanied by training, promoting connectivity, technological innovation, and the strengthening of surveillance and control, articulated to the technical presence and good relations with the inhabitants, all within a reasonable period of time appropriate to the pace of incorporation of cultural and behavioral changes (8 years).

⁴ Stafford Smith, M. 2020. Theory of Change Primer, A STAP Advisory Document. Scientific and Technical Advisory Panel to the Global Environment Facility. Washington, D.C

Note: Recently, STAP has also published a Supplement to ToC, with a brief Review of literature an annotated bibliography, plus other useful content, that can be consulted in : <https://www.stapgef.org/resources/advisory-documents/theory-change-primer>.

4. Findings

4.1. Project design and formulation

4.1.1. Analysis of the results framework

As a result of the studies and knowledge achieved in the country on the state of ecosystems, the level of environmental degradation and its impacts on biological diversity, the Project is based on solid quantified and monitored information. This has made it possible to identify gaps, needs for concentrated action and priorities, in order to design the components and activities relevant to the objective. In addition, there has been a national learning process and lessons learned from previous programmes and projects, as outlined below in section **4.1.3**.

Some imperfections of the adopted results framework were noted during the Project MTR, and the need to improve the definition of results and establish more appropriate, realistic and quantifiable indicators was suggested. The Project Management approved the modifications within the Steering Committee, by consensus with the technical actors, which has been an improvement, verified in this TE, of the results framework.

Except for such changes, the results framework targets and indicators are consistent and realistic, and generally respond to S.M.A.R.T. standards. Thanks to a more far-reaching than usual GEF implementation time and the efficiency demonstrated by the Project in its implementation, most targets have been exceeded by a wide margin, despite the limitations imposed by the pandemic on field activities.

In summary, and as will be seen below in the detail of the following sections, the structuring of the results framework responds to a convergence of actions towards the objective, highlighting the incorporation of **Outcome 3**, on which rests the paradigm shift introduced by the Project, which articulates productive activity to conservation and ecosystem environmental management.

4.1.2. Assumptions and risks

UNDP currently employs a Social and Environmental Screening Procedure (SESP) to identify potential social and environmental risks and opportunities associated with a project⁵. To do so, it applies a Categorization system to take into account the significance of potential social and environmental risks and impacts, and to determine the appropriate type and level of social and environmental assessment; depending on their type, location, scale, sensitivity and the magnitude of their potential social and environmental impacts. Based on the assessment, UNDP classifies projects according to the scale of potential social and environmental risks and impacts (low, moderate, substantial and high), with management measures commensurate with the level of social and environmental risks and impacts.

In the design and formulation phase of the Project, this procedure, as part of the UNDP SEPS tool, was not yet mandatory; in this sense, the Project identified five risks with a 'Medium' category, for which a mitigation strategy was formulated, but which is far from the current UNDP requirements (See **Table 10**, in section **4.2.6**).

⁵ See UNDP's Social and Environmental Assessment Procedure, including guidance on the application of the SESP at https://info.undp.org/sites/bpps/ses_toolkit/default.aspx

The evaluation team considers the identified risks to be adequate. However, it considers that, given the particular conditions and characteristics of the import process in the country, it was appropriate to identify an operational risk related to the acquisition of imported equipment, according to the agreed deadlines and technical requirements. This process in Cuba is made complex by the existing economic and financial blockade by the United States; and by other internal aspects related to the importing companies in the country; and, more recently, by the Covid pandemic that made it even more difficult to import equipment and technology. Although these risks were not taken into account in the design of the Project, it was found that they caused some delay, which was later compensated with adaptive management measures, in what is considered a minor deficiency in the Project's design.

It is a recurrent practice to present the assumptions (hypotheses) and risks of a project in its Results Framework, for better understanding and subsequent analysis of mitigation measures based on assumptions, which in the case of 'Connecting Landscapes' was limited to listing the assumptions (hypotheses).

4.1.3. Lessons from other relevant projects incorporated into design

The Project design considered lessons learned and methodologies from several preceding projects, mostly supported by GEF/UNDP, such as the project "Conservation of Sustainable and Dominant Biodiversity in Three Productive Sectors of the 'Sabana-Camagüey Ecosystem'; the maritime and coastal PA project; "Capacity Building for the Coordination of Information and Monitoring Systems / SLM in Areas with Water Resources Management Problems" (Project 2 (OP2) of "Country Partnership Program" (CPP OP-15) in "Support to the implementation of the National Program to Combat Desertification and Drought of the Republic of Cuba"); and the project financed by the European Union 'Environmental Basis for Local Food Security' (BASAL).

In the case of the 'Sabana-Camagüey' project, its experience in incorporating biodiversity considerations in agriculture, forestry and tourism sectors in landscapes characterized by ecological vulnerability and productive importance, was taken into account. In this regard, the Strategic Environmental Assessment (SEA) methodology for Sabana Camagüey, developed by the Tropical Geography Institute (IGT) as coordinating institution, for land use planning and sustainable development, was adopted in the formulation of 'Connecting Landscapes'. This project also worked on the identification and establishment of biological corridors, which also nourished the present Project to be evaluated; as well as on the initial systematization of the payment for environmental services, an aspect that was used to address specific strategic actions of 'Connecting Landscapes', such as the payment schemes for this type of services. In addition, the figure of the technical coordinator, which was incorporated into the Project in 2015, was another of the good practices adopted from the previous experience, and which has been maintained to date in most of the AMA projects.

The GEF-UNDP Marine and Coastal PA project generated data on coral reef health. This indicator was used to measure the effectiveness of 'Connecting Landscapes' in reducing the sediment load discharged into coastal waters, especially in the case of the Cabagan River peak-to-shore analysis.

From project 2 (OP2) of CPP OP-15, experiences and practices linked to sustainable management, soil conservation and financial incentives were replicated, incorporating elements linked to biodiversity and landscape in a general sense.

The BASAL project took lessons learned that contributed to systemic aspects of the Connecting Landscapes Project and in the planning of its instruments with production sectors, in order to maximize the benefits of agroforestry and silvo pastoralist systems in terms of productive flexibility and ecosystem-based adaptation to climate change. The methodology used by BASAL to carry out Environmental Management Plans was also incorporated and adapted to mountainous areas. The experience of installing biodigesters, which in the case of BASAL were isolated and isolated within a farm (Yaguajay municipality), was taken and the Project expanded it to the rest of the farms, forming a network that benefited the community of La Bomba and a school. In addition, the Training Farms, created by BASAL for agricultural sustainability aspects linked to climate change adaptation, were used as a basis, and the School Farms were created with a landscape approach that, in a more comprehensive way, incorporated connectivity and landscape aspects in general.

4.1.4. Anticipated Stakeholder Involvement

The integrative and holistic nature of a landscape approach, from the top to the coast, demands the participation of a wide and varied number of state, non-state, and community stakeholders in the Project.

From the institutional point of view, the main stakeholders foreseen were the Ministry of Science and Technology (CITMA), and within this, the Environment Agency (AMA), the Institute of Ecology and Systematics (IES), the National Center for Protected Areas (CNAP), the Institute of Tropical Geography (IGT) and the Institute of Oceanology. In addition, the Ministry of Agriculture (MINAGRI), with its mountain production units, the Institute of Agroforestry Research (INAF), the National Business Group for the Protection of Flora and Fauna, and the Mountain Bodies, as well as the Local Development Center and the municipalities.

At the local level, stakeholders are represented by community organizations such as the Popular Councils and the Committees for the Defense of the Revolution (CDR). The other civil society organization is the National Association of Small Farmers (ANAP), which represents the interests of small farmers, including those who do not belong to state-run enterprises or other organized models of production, such as Basic Production Units (UBPC). In this sense, the beneficiaries comprise coffee producers and farmers from the Agroforestry Farms and their respective families; producers from other farms that adopt the practices demonstrated in GFI; as well as workers from agricultural enterprises with Mountain Medicinal Farms. Likewise, the productive entities and individual farmers in the Project implementation areas in the four massifs (CCSF, CPA, UBPC, livestock enterprises, coffee pulping plants and swine production units), as well as the general population in the target municipalities, were included in the project from its formulation phase, which denotes the inclusive and participatory nature of the proposal.

4.1.5. Linkages between the project and other interventions within the sector

The ecosystem and landscape approach promoted by the Project demands the need to establish relationships with other related projects in order to learn from their good practices and lessons learned, but also to use the capacities already created. This is an element that the Project has taken into account both in its formulation and implementation, by working in common intervention sites with other completed or ongoing projects, drawing on existing technical, structural, organizational and human resource capacities. The intervention sites in common with other projects were the following:

- Project OP15. El Sijú Farm, Manicaragua municipality, Villa Clara province.
- BASAL Project. La Espinita Farm, Yaguajay municipality, Sancti Spíritus province.
- FREE Renewable Energy Sources Project, to support local development in the municipalities of Cumanayagua and Fomentos, Sancti Spíritus province.
- Coastal Resilience Project, Chambas municipality, Ciego de Avila province.
- *MásCafé* Project (MINAG), in the municipalities of Il Frente and San Luís, in the province of Santiago de Cuba; Maisí in Guantánamo and Sagua de Tánamo in Holguín.
- Third National Communication, in this case for training on climate change and its impacts, for the Project's interventions in the coffee areas of Santiago de Cuba.

This has served to take advantage of the capacities created and to continue strengthening and/or perfecting the work carried out by other experiences, thus speeding up the achievement of the expected results and, in turn, avoiding duplication of activities and unnecessary expenditure of resources.

On the other hand, it has contributed to the fulfillment of environmental strategies, plans or policies, such as the aforementioned National Environmental Strategy (EAN), whose principles include the application of an ecosystem-based approach to environmental management, as well as the National Biodiversity Strategy and Action Plan (PAEBN) 2006-2010 and 2011-2015; through the development of methodologies and tools for assessment and economic valuation and integrated BD management, filling information gaps, and improving environmental communication and education, which are all lines on which the Project worked.

For both CITMA and the country in general, climate change is a priority issue. Connecting Landscapes' has been aligned with other actions that contribute to its adaptation and mitigation, both from a theoretical-methodological and practical point of view. One of them was its linkage with the National Climate Change Group to contribute to the preparation of the Third National Communication (2020), commitments that the country assumes under the United Nations Framework Convention on Climate Change (UNFCCC). Through bidirectional participation, training activities and joint scientific publications were carried out, as well as the incorporation of good practices of Connecting Landscapes in academic programs. During the implementation of the project, the State Plan for Addressing Climate Change ‘*Tarea Vida*’ (2017) was approved, to which the Project has been in full correspondence for the achievement of its tasks and objectives.

In addition to establishing close links with other institutions and projects related to environmental issues, the Project established strong alliances with the Ministry of Agriculture (MINAG), which contributed to achieving the objectives of several agricultural programs such as the National Forestry Program and the *Turquino Plan* (conceived as a Program for the Sustainable Development of Mountains). It also coordinated with several research institutes, such as the Soil Institute and the Agroforestry Research Institute, to develop extension and integrated training modules for producers and decision-makers in cooperatives and other producer organizations, focusing on BD-friendly production practices. ‘Connecting Landscapes’ took on, among other best practices, MINAG's Integrated Agroforestry Farms, considered the smallest unit of sustainable forest management within the country's Forest Business System.

4.2. Project Implementation

4.2.1. Adaptive management

The Project has been executed in alignment with the norms and procedures established for an adaptive management, typical of the complexity and innovative nature of its actions, with which it seeks a paradigm shift in the conservation of biodiversity and PA management in Cuba, from a specific site approach to a landscape approach that integrates the areas and their zones of influence. Adaptive management is characterized by an intentional approach to making decisions and adjusting in response to new information and changes in the context. For this reason, different adaptive actions are recognized, throughout the implementation, as response measures to unforeseen situations, or in an effort to consolidate the strategy to achieve the desired impact.

The main adaptive actions were taken in response to unforeseen situations that are attributed to conditions external to the Project. In the first place, the economic-commercial situation of the country due to the economic blockade of the United States, which affects commercial and financial relations and continues to be a critical element for the planning of activities and proposed modalities of intervention.

The main impact in this regard has been the complexity of the acquisition processes for imported goods. During the first year of the Project, the national procurement approval processes were delayed, which in turn delayed the purchase of important equipment, including vehicles to reach some of the remote areas. In 2016, the state company in charge of imports was changed; but in subsequent years, this risk has persisted and has affected financial execution. As an adaptive measure, the PMU and the UNDP Country Office agreed with the Government on alternative ways to facilitate direct purchase by UNDP.

Secondly, the Project's response to face the consequences of the pandemic is relevant, which not only slowed down field actions and made logistical tasks difficult, delaying acquisitions, but has also posed a significant risk to the health of the team. The limitation of work and mobility forced the adaptation to a virtual environment, with the use of alternative means for holding meetings, coordination, monitoring and follow-up of activities. With this, it has been possible to confront Covid-19 in the intervention areas, highlighting the donation of food to agroforestry farms and support in the purchase of supplies for health care in the intervened localities. The previous measures have made it possible to maintain the functionality of the Project, but with a low financial execution.

Given the conditions of delay in financial execution, the involvement of government organizations was achieved, UNDP proposed holding quarterly meetings of the Ministry of Foreign Trade, with CITMA, AMA, the PMU and the Importing Company, to monitor import processes and identify bottlenecks and solutions. This initiative has been key and is part of the adaptive management regarding the Project.

Adaptive actions were also identified to improve the strategic approach of the Project. The MTR pointed out certain shortcomings and recommended corrections that were addressed by the Steering Committee and the PMU; consequently, changes in the results framework and indicators of achievement of the objective were managed. The readjustments resulted in a clearer definition and a more realistic quantitative scope. The present TE, and the evidence shown in the subsequent reports and PIRs, indicate that there has been significant progress since then.

4.2.2. Actual stakeholder participation and partnership arrangements

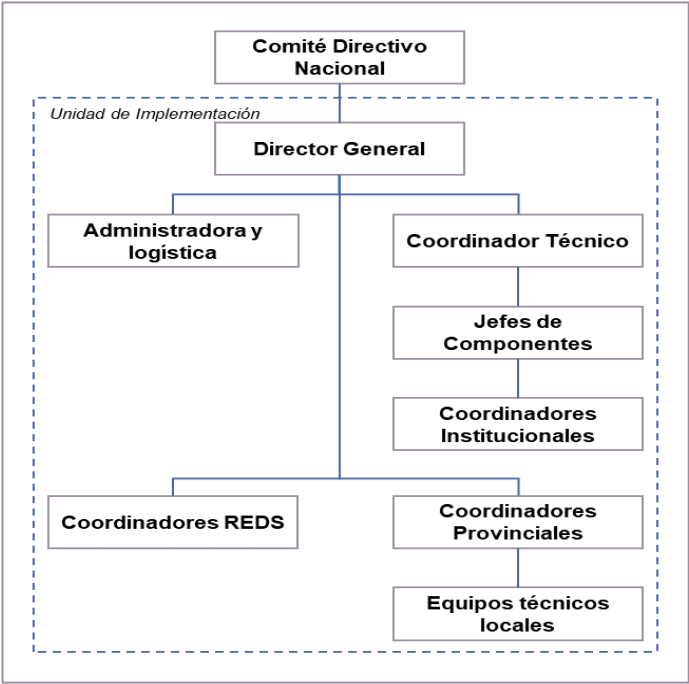
Given the coverage of the intervention and the number of actors involved, the Project team defined various relationship strategies with the interested parties that have made it possible to advance in the achievement of results and promote effective participation. For the analysis of this section, the following classification of actors is considered: The Steering Committee, the PMU, and the final beneficiaries.

The Project has an organizational structure headed by the Steering Committee and where the execution is in charge of the Implementation Unit, which includes the National Director, those in charge of administration and logistics, the Technical Coordinator, the Chiefs of the Components, the Institutional Coordinators, the REDS Coordinators, the Provincial Coordinators and the Local Technical Team. The Steering Committee is made up of eleven members who mainly represent the different government institutions with jurisdiction over the Project's activities; as for the PMU, it has 24 members. (See **Graphic 1**).

Graphic 1. Organizational structure of the Project

The PMU, led by the person who assumes the role of Director, is responsible for the execution of the Project. The configuration of this group responds to three important elements: (i) monitoring of the activities arranged by component; (ii) the operation of the target territories under the REDS approach; and, (iii) the extension of the intervention and particularities of each area intervened. Therefore, the decision to have Heads of each component, REDS Coordinators and Provincial Coordinators is positive as a strategy for decentralization of actions; as well as the inclusion of Institutional Coordinators, which enables rapid response by government agencies to daily implementation situations.

Graphic 1. Organizational structure of the Project



Source: PMU

The final beneficiaries are the actors who ultimately receive the impact of the Project. Included in this group are peasants, producers, farmers, cooperatives, among others. The configuration of the PMU has been important in promoting the participation of this group, mainly through the local technical team, due to their ability to coordinate in the field, their greater understanding of the intervened sites and availability to generate constant interaction with the beneficiaries.

The stakeholders have declared that it has been key to strengthen the commitment of the beneficiaries from an early stage, exposing the value proposition and benefits of the Project, added to the continuous accompaniment, even beyond the workplace, in contexts that did not allow face-to-face interaction, and through messaging channels or phone calls.

4.2.3. Financing and co-financing

Project management evidences responsible and efficient financial management of resources under UNDP administration, which is notorious in expense reports and interviewees' testimonials. The existence of financial controls for the allocation of budgets for activities, under the responsibility of the PMU, is recorded. In addition, the ability to adapt budgets to changing conditions derived from the context of the country and the impact of the pandemic is highlighted. The financial management of the Project presents some changes since the beginning of the Project, for which reason it is necessary to carry out a detailed review. Three concepts on which the analysis is built are defined below:

- **Initial budget:** corresponds to the estimated budget at the time of project design, that is, the amounts assigned according to the approved ProDoc. This budget considers an execution period of eight years and amounts to a total amount of \$7,481,944.00 (**Table 2**).
- **Programmed budget:** corresponds to the expenditure projected annually according to the planning of activities, a procedure in charge of the PMU that begins in the last months of the year prior to the one to be planned. The information is consolidated in the POAs and presented to the Steering Committee. A total amount per Component is not included, since it is a planning (Error! Reference source not found.).
- **Executed budget:** corresponds to the actual cost of the Project, which is recorded from the year 2015 until the end of 2021. The information for the year 2022 has not been included. The information for this case has been provided by the PMU (**Table 4**).

The analysis of the information reveals a difference in the composition of spending over the years between the initial budget, the programmed budget, and the executed budget. In all cases, it can be seen that Component **3** receives most of the financing, followed by Component **2**, Component **1**, and finally the expenses for project management (indicated as Component **4**). However, the actual expenses per year do not conform to what is indicated even in the programmed budget, especially for the period 2017-2020 (**Table 3**). Due to the time window, this behavior may be related to the delays caused by the dynamics of imports of goods necessary for the development of activities, a risk that is reviewed and detailed in the section **4.2.6**.

Despite what was stated in the previous paragraph, the evolution of total spending suggests a greater alignment between the initial, programmed, and executed budget, which would indicate a review of the prioritization of spending for each component, but which, as far as possible, has

tried to maintain the sum available for the evaluated year. Likewise, the value of cumulative financing compared shows a similar evolution in all cases (**Graphic 3**).

Regarding the executed budget, at the end of 2021, 88.32% of the total amount of the Project has been obtained, which is equivalent to \$873,673.20 remaining for 2022. At the date of approval of the 2022 PIR, it is revealed that the execution has amounted to 94.22%, with a remaining amount of \$432,456.36. This balance is committed to cover the activities that are part of the exit strategy. Based on this information, an administrative closure is projected, with an expense of the total budgeted, in December 2022.

14 budget adjustments have been made, most of which correspond to updates associated with the planning of activities for the following year corresponding to the POA. In addition, it is important to note that, although the impact of the pandemic on Cuba and the resulting restrictions have been an operational and financial risk for the Project at some point between 2020 and 2021, the financing review exposes the progress in the execution of the expenditure, even under these conditions. This demonstrates the adaptive management of the team and the correct planning capacity.

Regarding co-financing, the actors involved are MINAG, CITMA and additionally a part financed by UNDP. National institutions initially committed \$35,536,630 and \$22,000,000. As of the approval date of the 2022 PIR, the materialized co-financing is \$115,085,259 and \$25,062,170 respectively (**Table 1**). The variation of the official exchange rate declared by the Central Bank of Cuba must be taken into account, by virtue of the Ordinance Task, in force in the country as of January 1, 2021. This implies that the co-financing was initially arranged with a rate of 1 USD = 1 CUP, while from 2021, 1 USD = 24 CUP.

The accounting monitoring of the co-financing, systematically recorded by the PMU, provides sufficient evidence to consider that the proposed structure is functional, since in all cases the actors have complied with and even exceeded the amounts initially committed in the CEO Endorsement. Likewise, it is possible to attribute certain achievements of the Project related to co-financing, such as the experience of the Municipality of Yaguajay, in the REDS Bamburanao, for the construction of infrastructure for the management of pig waste and related activities.

Table 1. Co-financing of the Project (USD)

Co-financing sources	Name of the co-financing entity	Type of co-financing	Amount co-financed at the date of CEO authorization (USD)	Amount actually contributed as of the TE date (USD) ⁶	Actual Percentage of Expected Quantity
National government	MINAG	<i>Subvention</i>	35'536,630	115'085,259	323.9%
National government	CITMA	<i>Subvention</i>	22'000,000	25'062,170	113.9%
International cooperation	UNDP	<i>Subvention</i>	800,000	800,000	100.0%
Total			58'336,630	140'947,429	241.6%

⁶Source: PIR 2022.

Table 2. Initial budget, according to signed ProDoc (USD)

	1st year	2nd year	3rd year	4th year	5th year	6th year	7th year	8th year	Total
Component 1	142,200.00	184,310.00	302,469.00	176,970.00	170,640.00	166,590.00	150,600.00	131,350.00	1,425,129.00
Component 2	246,400.00	440,250.00	436,050.00	352,550.00	355,550.00	261,500.00	235,550.00	222,409.00	2,550,259.00
Component 3	297,750.00	557,400.00	502,700.00	446,800.00	361,200.00	362,100.00	328,550.00	293,759.00	3,150,259.00
Component 4	44,097.00	121,600.00	34,800.00	32,000.00	35,500.00	30,500.00	29,000.00	28,800.00	356,297.00
Total	730,447.00	1,303,560.00	1,276,019.00	1,008,320.00	922,890.00	820,690.00	743,700.00	676,318.00	7,481,944.00

Table 3. Programmed budget, according to POA (USD)

	2015	2016	2017	2018	2019	2020	2021	2022	Total
Component 1	143,820.00	330,070.00	277,398.00	297,956.78	183,821.87	226,783.37	132,079.59	144,928.21	1,736,857.82
Component 2	54,840.00	590,650.00	562,928.00	641,251.34	648,158.33	497,223.13	162,186.40	249,429.27	3,406,666.47
Component 3	59,600.00	729,630.00	724,614.00	641,559.95	74,005.74	532,584.55	517,161.80	413,314.82	3,692,470.86
Component 4	96,750.00	86,850.00	51,760.00	78,096.66	117,749.99	86,908.95	48,319.54	66,012.14	632,447.28
Total	355,010.00	1,737,200.00	1,616,700.00	1,658,864.73	1,023,735.93	1,343,500.00	859,747.33	873,684.44	9,468,442.43

Table 4. Executed budget, according to the PMU report (USD)

	2015	2016	2017	2018	2019	2020	2021	2022	Total
Component 1	92,712.33	232,007.72	282,051.06	254,259.71	146,239.03	171,280.27	101,651.31	-	1,280,201.43
Component 2	120,162.38	305,017.33	416,476.69	458,089.88	425,482.86	456,503.71	119,096.88	-	2,300,829.73
Component 3	181,042.37	438,872.88	392,244.86	516,863.93	350,397.13	379,107.29	478,426.35	-	2,736,954.81
Component 4	67,659.34	35,695.40	19,512.33	15,939.97	107,698.49	54,894.11	-11,114.81	-	290,284.83
Total	461,576.42	1,011,593.33	1,110,284.94	1,245,153.49	1,029,817.51	1,061,785.38	688,059.73	-	6,608,270.80

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

Table 5. Initial annual budget vs executed (USD and % of annual execution)

	2015	2016	2017	2018	2019	2020	2021	2022*	Total
Initial	730,447.00	1,303,560.00	1,276,019.00	1,008,320.00	922,890.00	820,690.00	743,700.00	676,318.00	7,481,944.00
Executed	461,576.42	1,011,593.33	1,110,284.94	1,245,153.49	1,029,817.51	1,061,785.38	688,059.73	-	6,608,270.80
% Initial / Exec.	63.2%	77.6%	87.0%	123.5%	111.6%	129.4%	92.5%		

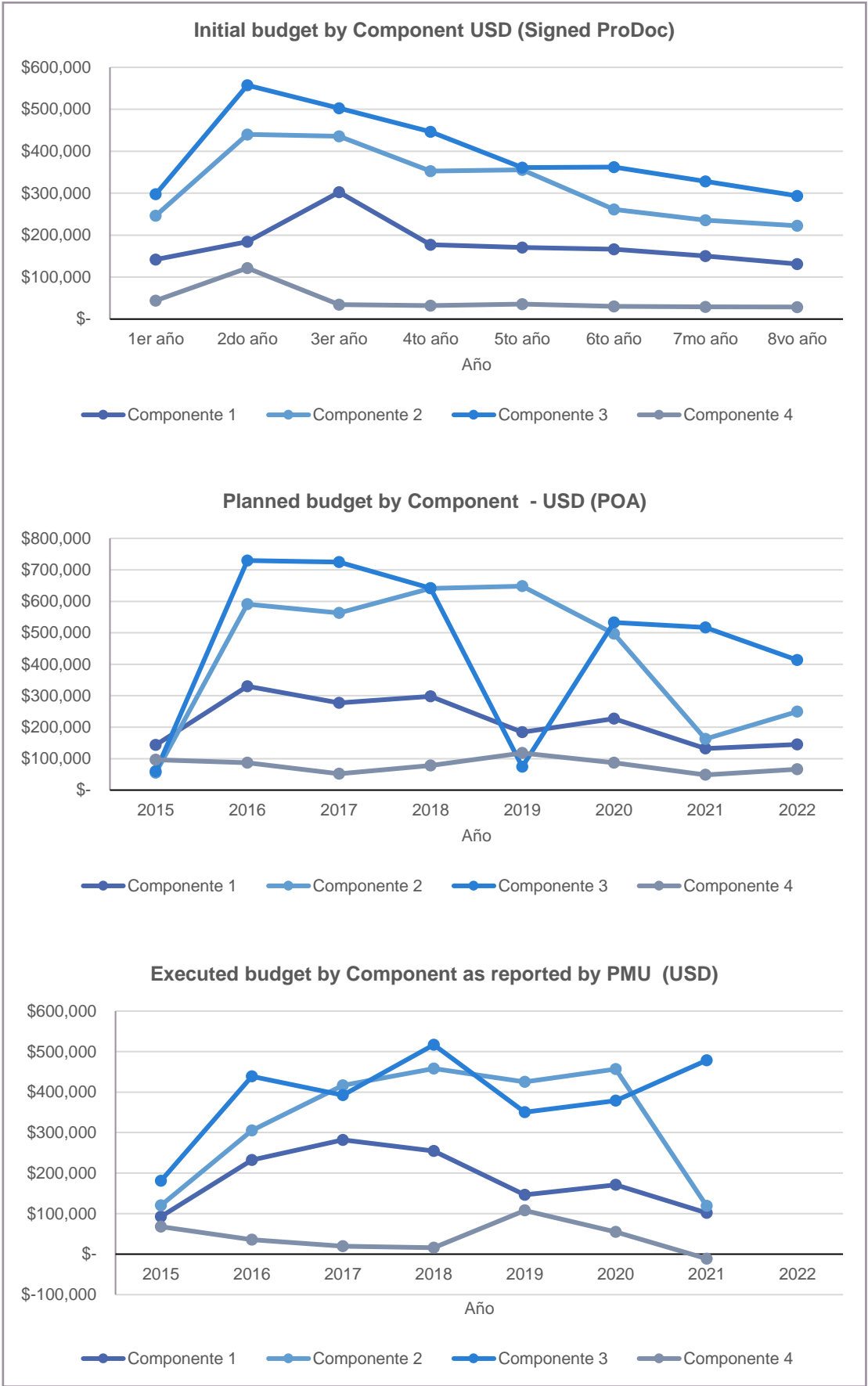
Table 6. Programmed annual budget vs executed (USD and % of execution)

	2015	2016	2017	2018	2019	2020	2021	2022*
Programmed	730,447.00	2,034,007.00	3,310,026.00	4,318,346.00	5,241,236.00	6,061,926.00	6,805,626.00	7,481,944.00
Executed	461,576.42	1,473,169.75	2,583,454.69	3,828,608.18	4,858,425.69	5,920,211.07	6,608,270.80	-
% Program / Exec	130.0%	58.2%	68.7%	75.1%	100.6%	79.0%	80.0%	

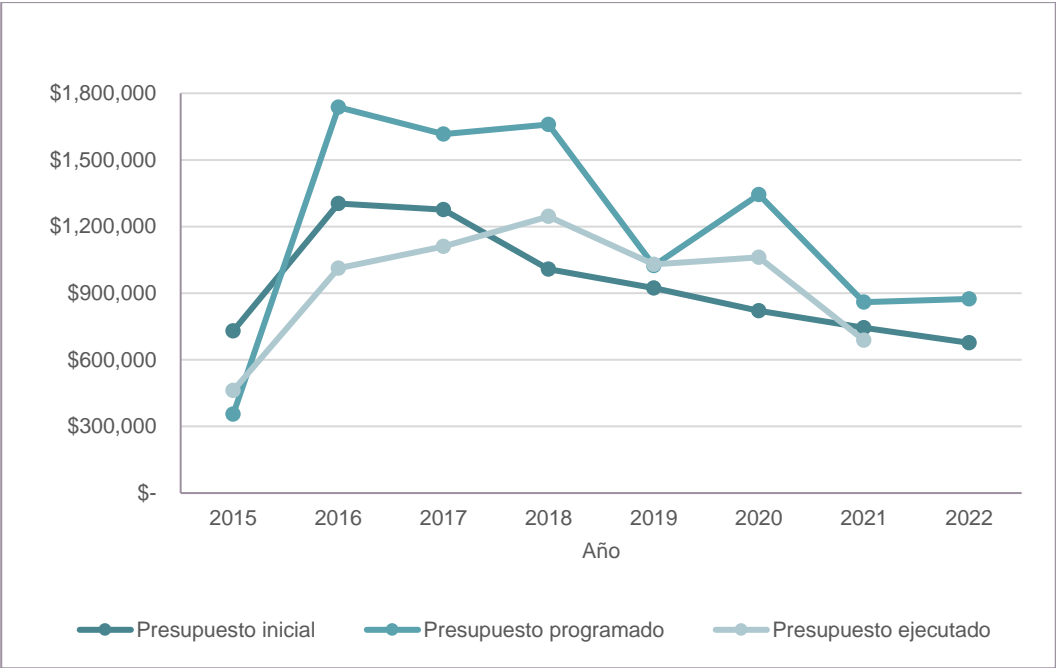
(*) Data for 2022 not yet available

Source: PMU

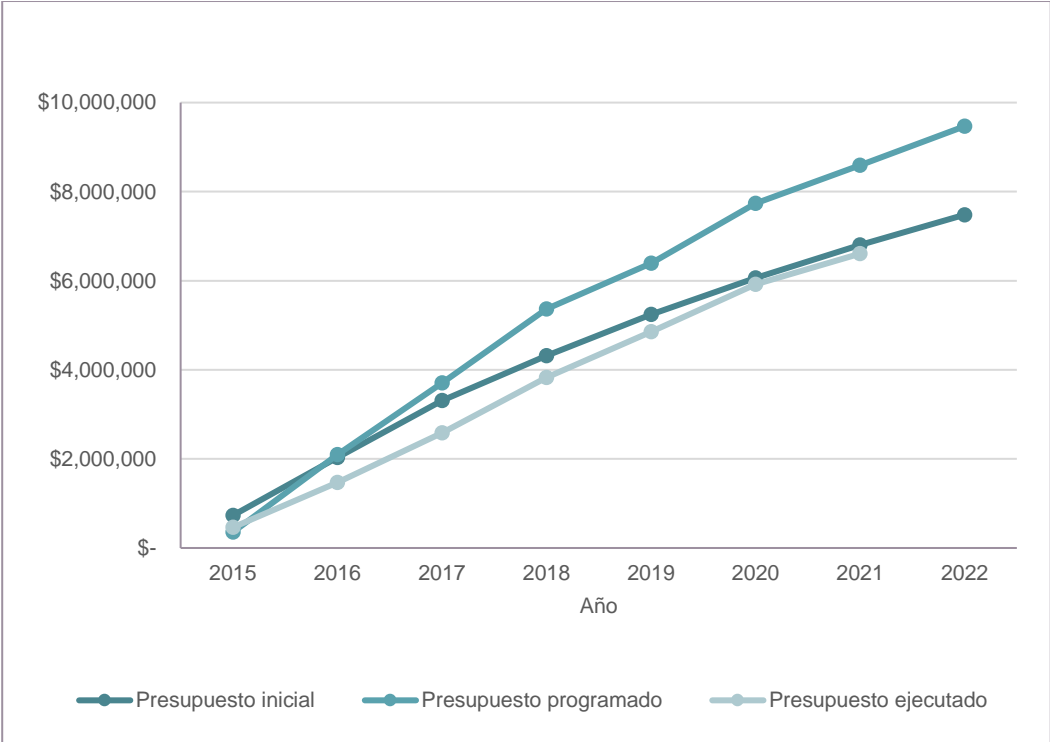
Graphic 2. Initial annual budget, programmed and executed by components (USD)



Graphic 3. Initial, programmed and executed annual budget compared (USD)



Graphic 1. Accumulated budget expenses (initial, programmed and executed) (USD)



4.2.4. Monitoring and Evaluation

The ProDoc establishes that the Outcomes of the Project, as described in the results framework, will be monitored periodically during the implementation phase in order to guarantee its impact and expected results. For this, a Monitoring and Evaluation Plan was developed, where for each expected result the activities or tasks are defined: deadline for completion, entities involved, and those responsible for their performance. According to the ProDoc, the budget for these activities is \$67,000.⁷

The activities that are part of the monitoring and evaluation system are described below:

- **Workshop and Inception Report:** held in two sessions in March 2015, the inception workshop convened the Steering Committee in order to present the Project and its operational plan, the governance structure, and approved budget, among other relevant aspects.
- **Project progress reports:** Prepared by the Project Director, differentiated quarterly frequency reports are filed for CITMA and for UNDP. Both types of reports present a summary of the budgetary execution and the detail of the fulfillment of the objectives based on the indicators established based on the results of the Project and the activities planned as a list. Although useful, these documents do not have a standardized format or a clear recording methodology, aspects that should be taken into account to allow for contribution as transcendental monitoring and evaluation tools.
- **Project Implementation Report (PIR):** the GEF monitoring and evaluation policy requires that the PIR be compiled annually for each fiscal year and therefore cover the period from June to July for each implementation year. Until the completion of the TE, there is a record of seven PIRs, with coverage of the implementation phase until July 2022. The reviewed PIRs have an adequate level of detail in the record of progress in achieving results, as well as the qualification and its justifications. The PIRs from 2016 to 2021 have made different observations and suggestions, which have been addressed and may have influenced the goal setting indicated in the 2022 PIR, evidence that these documents have fulfilled their purpose as a monitoring tool.
- **Periodic monitoring through field visits:** Due to the nature of the Project, field visits to the intervention sites have been encouraged. However, this activity has been limited as a result of the restrictions due to the pandemic and subsequently, restrictive measures in the use of fuels. Based on this activity, supervision reports have been generated that detail the itinerary and main findings.
- **Mid-Term Review (MTR):** this process began its planning in 2019 and the presentation of the final report was in July of the same year. The final report of the MTR presented findings, conclusions and recommendations aimed at accelerating the development of activities and clarifying the focus of the intervention. It stands out as a key milestone that, based on a suggestion promoted within the framework of the MTR, as part of the Response Plan, the PMU updated the indicators, facilitating their understanding and measurement of progress, and maintaining the logic of the expected results.
- **Terminal Evaluation (TE):** The process, which began its planning in 2022, is scheduled to deliver the final report in December, having started in October. The ToR, the TE process, and the required report outline follow the standard templates and guidance for GEF-funded projects. The

⁷The amount excludes staff time from the Project team and UNDP staff, as well as travel expenses.

TE team is made up of an independent international consultant and a national consultant. The findings, conclusions and recommendations of the report are expected to be a key input to ensure an effective exit strategy and the construction of the Sustainability Plan.

- **Project Final Report:** document that is developed by the PMU during the final three months of execution. This report summarizes the achievements based on the objectives, results and products generated; records the problems found and identifies areas for improvement; collects the lessons learned throughout the execution; and presents necessary recommendations to ensure the sustainability and replicability of the Project. Currently. This document is currently being elaborated.

- **GEF Focal Area Tracking Tools:** Tracking Tools seek to monitor global environmental benefits in line with GEF strategic priorities. For this Project, the tool for monitoring the integration of biodiversity conservation in landscapes/seascapes and productive sectors is used. The tool shows important results of the Project such as the area of influence of 504,676 ha (direct) and 1,431,344 ha (indirect), with a slight increase compared to what was planned; the area covered by agroforestry systems of 92,261 ha, including farms, silvo-pastoralist systems and replica areas, a figure that differs but is close to the initial proposal of 96,320 ha; and reforestation with biodiversity considerations, which represents an area of 17,119.83 ha.

- **Learning monitoring and knowledge sharing:** the results achieved by the Project must be disseminated both at the level of the interested parties, but also with external parties through information exchange platforms, as stated in the ProDoc. In order to comply with this requirement, the Project team has stated that it has been identifying, analyzing and recording lessons learned and good practices. The exchange of knowledge has also been promoted through the participation of representatives and beneficiaries in experiences or forums.

The monitoring and evaluation system for this type of projects must consider that the proposed activities: (a) cover all aspects of the intervention, (b) have an appropriate frequency and programming, (c) involve the competent actors, (d) are incorporated into planning as part of adaptive management, and (e) are communicated to interested parties in a timely manner. It is highlighted that the Project has sought to ensure the development of the activities that are part of the monitoring and evaluation plan, with a participatory, inclusive and reflective nature, where even the intervention of the Steering Committee has been achieved. However, there are opportunities for improvement in the recording of activities and the use of tools, as well as the communication to interested parties. Based on the above criteria, the general qualification of the monitoring & evaluation corresponds to **Satisfactory (S)**.

Table 7. Project Monitoring & Evaluation Rating

Monitoring and evaluation	Qualification
Design of the M&E at the entrance	S
M&E Implementation Plan	S
Overall quality of M&E	S

4.2.5. UNDP implementation / oversight, Implementing Partner execution and overall assessment of implementation / oversight and execution

UNDP, as the implementing agency, fulfills the role of guarantor of the Project, supporting the team through the performance of objective and independent supervision and monitoring functions that allow ensuring the adequate execution of the GEF funds. Their intervention in the Project is recognized as positive, due to the recognized advantages of a practical nature and management efficiency. The main linkage aspects are identified as support to expedite import procedures, the availability of tools and guidance for the monitoring and evaluation system, the feasibility of moving to the territories, especially during the pandemic, and facilitation to establish synergies with other projects in the national portfolio. As an opportunity for improvement, delays in operational aspects are identified.

The implementing partner is CITMA, the ministry in charge of directing, executing and controlling environmental policy with a focus aimed at contributing to the sustainable development of Cuba. The role of implementation has been transferred to the IES, which depends on the AMA and is also attached to the ministry. The operational management by the IES is considered correct, due to its understanding of the concepts of biodiversity oriented towards conservation and sustainable use in natural and replacement ecosystems, incorporating a technical-scientific perspective that is considered relevant for this type of intervention. The execution of the IES is valued as positive by the actors, an appreciation that is based on the experience of the institution, its decentralized organization, and its capacity for intersectoral articulation because of its direct link to the AMA and CITMA.

The relationship of both partners has been declared as important for progress towards the objective and the results, with emphasis on situations that have posed risks to continuity. Strengthening this link and determining the collaboration mechanisms that work best, however, requires greater interaction not only on specific operational issues or overcoming obstacles that appear in the course of implementation, but also knowledge management must be promoted. continuously and bidirectionally.

On this last point, the execution of the partners does not provide enough evidence to understand how this task has been carried out, to what extent the lessons have been incorporated into the planning of activities, and how and to what extent this process has contributed to strengthening the role of both UNDP and IES/AMA/CITMA. Considering the foregoing, the general qualification of the execution of the Project corresponds to **Satisfactory (S)**.

Table 8. UNDP Implementation/Monitoring Rating and Implementing Partner execution

UNDP execution/supervision and Implementing Partner execution	Rating
UNDP Quality of Implementation/Monitoring	S
Quality of Delivery Partner Execution	HS
Overall Quality of Implementation/Execution	S

4.2.6. Risk management and social and environmental safeguards

The intervention of the Project has faced some risks, which in general respond to the base conditions and the dynamics of the prioritized areas, and to the national and international context. For this section, the management of risks identified during the design of the Project is evaluated separately, and that of those that have arisen during execution.

On the one hand, during the design of the Project, five potential risks were identified with a "moderate risk" rating: an increase in projected threats above the expected levels, conflicts of interest between the productive and environmental sectors, conflicting institutional dynamics with a paradigm shift promoted by the project, extreme natural events and the impact of climate change on biodiversity. For this group of risks, the Project's management capacity stands out, which, with the exception of extreme weather events, has managed to keep them under control and has not resulted in detrimental impacts for the activities implemented (**Table 910**).

Table 9. Risks identified during design and management measures

Identified risk	Risk management
Increase in projected threats above expected levels, exceeding the range of coping strategies	This risk has remained “low” throughout the duration of the Project. The Project has applied an adaptive management approach, which has allowed the monitoring and mitigation of threats. The proposed strategies as well as its innovative approach have shown, considering the results achieved, to be appropriate for the context and scope of the intervention
Conflicts of interest between the productive and environmental sectors	This risk has remained “low” throughout the duration of the Project. This responds to the fact that the Project has implemented conflict resolution mechanisms and has invested in education and awareness about the benefits of synergies between these sectors. The foregoing has resulted in no complaints or conflicts being filed during implementation.
Institutional dynamics in conflict with the paradigm shift promoted by the Project	This risk has remained “low” throughout the duration of the Project. Dialogue between the different interested parties is promoted where the needs and priorities of all the actors are identified. The formation of the Steering Committee is appropriate and gives visibility to the actors that influence the impact of the Project, consolidating itself as the space to generate joint planning and solve problems.
Extreme natural events	The only risk that has reached the level of "moderate" during the implementation of the Project. The impact of these events, on the one hand, has slowed down operational actions in the field; and on the other, it has affected the ecosystems and the dynamics of life of the beneficiaries. The case of Hurricane Mathew is proposed, which in 2016 affected the natural ecosystems and plantations in the Nipe-Sagua-Baracoa REDS. In this case, the damages were

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

	<p>assessed and a recovery plan was implemented in conjunction with local stakeholders.</p> <p>For this type of event, it is important to work on capacity building and response systems. The Project approach is appropriate since it allows incorporating these forecasts into the planning instruments and working on the resilience of the intervened areas and populations.</p>
Climate change undermines biodiversity values	<p>This risk has remained “low” throughout the duration of the Project. This is attributed to the fact that the Project has integrated the results of the climate change scenario analysis into land use planning, and consequently, the impact on biodiversity has been mitigated.</p>

On the other hand, during implementation, risks have arisen that - compared to those identified in the design - have had a greater impact on the Project, generating delays in the development of activities or limitations in intervention strategies. It is considered that the identification of risks by the team has been generally timely and adequate management mechanisms have been established, integrating the strategies to address them within the planned activities planning. However, it is considered that it would have been opportune to include in the design some risk related to operational issues, which is linked to the real delays that occurred in equipment imports.

It should be clarified that, in several cases, the risks are caused by external factors that exceed the scope of the Project and the capabilities of the team, partners and allies; but the response capacity and adaptive management of those involved is highlighted (**Table 10**).

Table 10. Risks identified during execution and management measures

Year	Risk identified	Risk management
2017 2018 2019	Low execution of financing as a consequence of delays in the process of importing equipment, materials and goods	A new importing company was sought, with which the project team and AMA maintained constant exchange and support. In addition, the UNDP Country Office in coordination with CITMA and MINCEX held meetings with the company for analysis and monitoring of import and purchase processes at the national level.
2020 2021 2022	Impact of the measures derived from the Covid-19 pandemic on operational and financial execution due to the cancellation of activities and delays in import processes	<p>During 2020, the PMU made contingency plans for Covid to identify the main impacts of the pandemic on the implementation of the Project; and apply mechanisms for the continuity of activities in progress and to be initiated. Virtual work was implemented, extending its scope to the four areas of intervention; and this measure made it possible to maintain the functionality of the Project, even with a low financial execution. During 2021 and 2022, this risk continues to be monitored.</p> <p>At the level of the procurement plan, the PMU and the AMA have maintained permanent communication with the importing company and CITMA has been coordinating quarterly meetings with key institutions involved in the plan to ensure the progress of the Project.</p>

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

2021 2022	Publication of the monetary decree – law that updates the value of the CUP currency and affects the price of suppliers and the value of co-financing	The decree published on November 17, 2020 and which entered into force in 2021, provides for the update of the official exchange rate to 1 USD = 24 CUP. With this, changes in the prices of national service providers and alterations in the programmed budget were perceived. The UPM has taken measures to ensure close work with suppliers, ensuring the commitment to supply the goods. As for budget revisions and modifications been made In terms of national co-financing, there have been no problems.
2022	Restrictions on the use of fuel imposed by the government as a result of the energy crisis due to the closure of thermoelectric plants and fuel availability associated with the Russia-Ukraine war.	Restrictions on the use of fuel impact Project operations, to the extent that field visits affect the acquisition of goods internationally due to increased freight costs. The PMU has carried out a new review and prioritization of activities to optimize the need for transportation where possible.

Regarding social and environmental safeguards, the Project applied the current UNDP SES policy at the time of design. Therefore, the identification of this type of risk has been carried out based on an ESSP evaluation template and the Project received a 3A rating.⁸ It should be noted that the tool used is prior to the 2021 SES policy and that, considering the time remaining for the end of the Project, the decision was made not to update the safeguards package.

The Project has monitored SES risks under the Atlas Risk Register. That said, the coronavirus pandemic was identified during implementation as a new SES risk due to its impact on the health of team members and was classified as "critical risk". The measures planned to manage this situation have been described above.

Based on the foregoing, the identification, monitoring and management of SES risks of the Project have been adequate, an affirmation that is supported by the fact that no complaints or claims have been registered. Even so, a certain group of actors has conveyed the need for risk monitoring to be updated to the most current SES policy in similar situations, ensuring the use of the tools provided and the use of the Risk Register.

4.3. Project Results and Impacts

4.3.1. Progress Towards Objective and Expected Outcomes

In summary, the final progress towards the achievement of the objectives and achievements of the Project is globally qualified as Highly Satisfactory, with two of its components qualifying with this range (the Project Objective and Outcome 2). This can be deduced from the detailed evaluation of the results by component and of the respective indicators in the following sections, in which the

⁸ Category 3A determines that SES impacts and risks are of limited scale and can be identified with a reasonable degree of certainty, and can often be managed through application of standard best practices or focused on further review and assessment to identify and assess whether there is a need for a full environmental and social assessment.

results framework and progress are commented on according to the criteria of relevance, effectiveness and efficiency, as set out below..

Table 12. Summary of qualifications and achievements of the Project in TE

Objective/ Expected Outcome	Achievement Description	Rating
Objective of the Project: <i>Effective protection of biological diversity against current and future threats in mountain landscapes, “from the top to the coast”</i>	The Project Objective, until the end of operations, can be considered highly satisfactory in terms of the conceptual bases established and strengthened in the environmental, agroforestry, and land use regulatory frameworks; the strengthening of PA conservation actions and the participation in the task by the surrounding population; and of the advances in the introduction of clean and friendly production practices with nature and PAs.	HS
Outcome 1: <i>Systemic framework for landscape management.</i>	There is a positive and satisfactory progress in this Result towards the normative and work systematization, evidenced in the territorial planning plans throughout the Project, and in the management plans of the pilot corridors and environmental planning proposals, still in execution. Likewise, coordination and inter-institutional work in the intervention areas have been strengthened, in addition to achieving the initial investment goals with a landscape approach.	S
Outcome 2: <i>Management effectiveness for PAs, considered as core areas in the context of integrated management of the landscape as a whole.</i>	In this Outcome, a highly satisfactory progress is verified, generated by the good base of work in PA in the country, which has allowed to widely exceed the management goals (METT scores) in all the intervened areas, through work with the communities. and schools, training and dissemination of values. The goal of creating 8 new APs was exceeded, with 9 APs with a total extension greater than planned, covering connectivity areas, and with better score goals	HS
Outcome 3: <i>Production systems compatible with conservation in threatened mountain ecosystems and in conservation corridors towards the coast.</i>	In this Outcome, the one with the greatest expression of paradigm change, and the one with the greatest number of diverse and innovative products (9), the indicators show that the goals were achieved and mostly exceeded in various activities still under development such as promotion of plantations, enrichment of ecological connectivity, good productive management practices, water care, fire reduction, reduction of illegal activities, and incorporation of benefits and families benefited by Project actions, including 59% women.	S

4.3.2. Relevance

The Project addresses a relevant issue at the global and national level, such as the conservation of biodiversity in PAs. The strategy - as mentioned before - is to integrate the management of the areas with their environment, taking into account anthropic pressures, for the full protection of key spaces for native biodiversity. The four prioritized mountain massifs stand out for their high value for the conservation of species and unique ecosystems.

The Project is aligned with and contributes to the development of the country's environmental policy. At the level of international commitments, the Aichi Biodiversity Targets established by the Convention on Biological Diversity (CBD) are taxed. Specifically, it contributes to the goals of strategic objective A (*“address the underlying causes of biodiversity loss through mainstreaming biodiversity in government and society”*); strategic objective B (*“reduce direct pressures on biodiversity and promote sustainable use”*); strategic objective C (*“improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity”*); and strategic objective D (*“enhance the benefits for all of biodiversity and biodiversity services”. of ecosystems”*).

At the central government level, the approach is consistent with different regulatory elements. The design took into account the Cuban National Environmental Strategy (EAN) and National Biodiversity Action Plan 2006-2010, whose principles included the application of an ecosystem approach to environmental management. The Project coincided with the proposal to establish action plans for the conservation and sustainable use of priority ecosystems. During the course of implementation, the results and activities of the intervention have generated relevant knowledge that has contributed to updating the Strategy, the most recent being EAN 2021-2025. Additionally, Biological Corridors were included as *“In Situ Conservation Area”* in the new Law 150 of the Natural Resources and Environment System; and it has been agreed to include a legal framework for these in the new Protected Areas Decree-Law, which marks a milestone in the management of biodiversity in Cuba, and is evidence of the relevance of the Project to contribute to the development of a legal appropriate framework.

At the institutional level, the Project's approaches are compatible with more than one AMA dependency. As stated, the intervention faces three key barriers, of which the inadequate management framework for mountain ecosystems and the limitations in the design and management effectiveness of PAs are related to the capacities of competent institutions. Incorporating the landscape management perspective into the conservation strategy has been a paradigm shift from the traditional management understanding of these PAs. Regarding the AMA, the relevance lies in this process, proposing an updated approach aligned with the global environment and national needs, and ensuring that its affiliated entities, such as the IES, the CNAP and others, internalize this conception.

Regarding the beneficiaries of the Project, especially the associations, farmers and their families, attention has been focused on the concepts of clean and sustainable production, generating capacities and guiding productive activities. The Project has been pertinent insofar as the activities proposed and carried out have met the needs of the intervened areas, respecting the tradition and wishes of those involved, who have benefited from the drive for their development, with sustainable production systems, without detriment to their income or quality of their products, and with new market opportunities. The rating in this regard is **Satisfactory (S)**.

4.3.3. Effectiveness

For the Effectiveness criterion (level of achievement of goals and objectives), the basis for the assessment was the analysis of the level of achievement of goals (see Annex A) and the verification of milestones, complemented by other sources of data and information and interviews with stakeholders.

The Project has four target indicators and 14 outcome indicators. If the numerical calculation is applied to the level of achievement of objectives and indicators, we observe an average achievement of 100% of the objectives and 93% of the results indicators, for a global achievement of 94% of both objective and results indicators without distinction.

In summary, it can be said that the goals established for the four objective indicators were met. Of these, the goals O1 were surpassed by increasing the areas of major vegetation types in the four REDS, and 70% (26 types) exceeded the number of hectares committed, and two types of vegetation were incorporated in the Guamuhiya massif that were not identified in the baseline. Therefore, the Project's objective was achieved by contributing to the effective protection of biodiversity from current and future threats "from the coast to the peaks".

In the case of results, all indicators were achieved, except indicator 1.1 (Area in the target REDS that is covered by environmental land use plans that incorporate considerations of biological connectivity and ecosystem resilience), which has not been fully achieved in the period of the TE, since the total area covered by the environmental land use plans at a scale of 1: 250,000 has been reached; but it is still not reached at a scale of 1: 50,000 in the 4 REDS. Only the pilot corridor *Sierra del Rosario Mil Cumbres* has been completed, and it is expected that the proposed goal will be reached before the scheduled end of project .

In general, the Project has achieved compliance with several objective and result indicators, for a total of eight indicators that exceeded the proposed goals (O1, all of the indicators for Outcome 2, and half of those for Outcome 3). Key to this achievement have been the partnerships with national and territorial stakeholders, local governments, NGOs, non-state actors, and others. Also relevant are: the involvement and active participation of the communities, in general, and of their formal and informal leaders; the articulation of the Project with environmental, economic, social and development policies, strategies and priorities of the country; the incorporation of good practices and synergies with other related projects; and the relationships of empathy, communication, commitment and respect among the PMU, both at the national level and in the territories. In addition, the incorporation of the proposals for changes in indicators made by the EMT contributed to the fulfillment of the final goals.

The strategy employed has been appropriate, based on national and international experiences and in line with the country's environmental policies. The central axis lies in the joint management of biodiversity conservation and sustainable human development in the 4 REDS, applying a landscape approach. An essential aspect of this strategy is to make visible the role of mountain ecosystems in addressing climate change, incorporating adaptive management, which has previously been more focused on coastal ecosystems.

Regarding the factors that affected the effectiveness of the project, most of them are essentially external. One of the main is the U.S. economic blockade, which worsened in certain periods during implementation; as well as others not considered in the forecasts due to their

unpredictable character, such as extreme meteorological events, the Covid-19 pandemic, actions to improve state institutions and changes in global political and economic dynamics.

Potential operational difficulties related to the complexity of procurement were not identified in the design phase, which proved to be critical, especially during the first years of implementation. The acquisition of imported equipment was a slow process, due to complex logistical processes that were accentuated by changes in the importing company; and, externally, by the restrictions of the economic blockade that forced the intermediation. This would be the reason for the lower execution in this area (50% of the total financing planned in the ProDoc).

The MTR rated Effectiveness as ‘Moderately Satisfactory (MS)’. Since then, the Project has developed adaptive measures to counteract some of the barriers that hindered the achievement of the proposed goals, especially those of an external nature, as in the case of Covid-19. In this sense, the planned objectives and results have been achieved almost in their entirety, so the TE considers that, overall, the Project's Effectiveness is **Highly Satisfactory (HS)**.

4.3.4. Eficiencia

The efficiency of the Project is evaluated from two aspects. The first is the allocation of resources and profitability, associated with the economic management of the Project team and the implementing partners. The second is the punctuality in the delivery of the expected results, within which it is necessary to review the planning and development of activities, including the management of unforeseen situations that may lead to delays.

For the allocation of resources and profitability, strategies have been implemented to efficiently use the available resources, and the optimization of expenses has been promoted as a good practice for the technical team and activities. The PMU has been commissioned to administer the financing by the GEF, amounting to USD7,481,944.00 for the eight years of operation. Budget execution, as indicated by the documentary information, has had barriers that have caused delays. Cumulative budget execution reveals a constant growth: At the date of the MTR an expense equivalent to half of the budget had been made; and to the date of the TE, an almost total budgetary execution is registered (See **Graphic 4**)

However, a detailed review of the executed budget versus the programmed one reveals that the financial execution has not occurred as planned. Until 2019, the accumulated execution reached only 72% of the planned budget, due to delays in the processes of hiring personnel and, above all, in the purchase of imported goods. Between 2020 and 2021 the increase in accumulated spending was 3%, a low performance related to the pandemic. In 2022 an acceleration in budget execution is shown, reaching as of the PIR date (June 2022) 94.22% of what was planned during all the years of the Project (See **Graphic 5**).

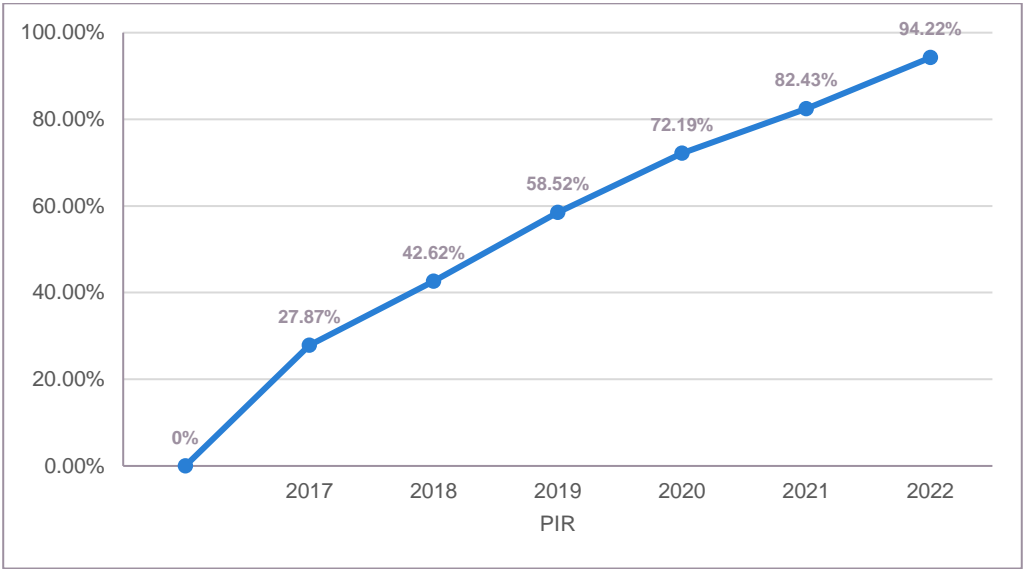
Regarding the management of the Project and the punctuality for the development of programmed activities, there have been some delays in the implementation process. On the one hand, in the initial period the Director and the Heads of Components were replaced, new specialists were incorporated, and it was decided to relocate the offices to the AMA headquarters. There were also delays in equipment acquisitions..

On the other hand, the impacts associated with Covid-19 have affected both financial and operational execution. The financial aspect coincides with what was explained about the delay in imports. Meanwhile, the operational aspect is considered the restrictions and measures of national

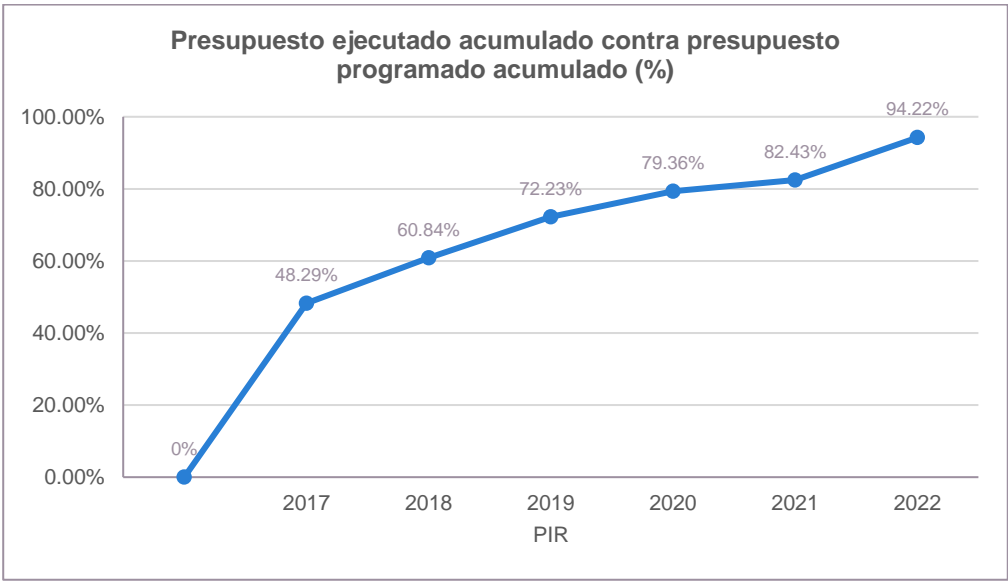
scope that initially paralyzed the activities in the field, which still persist to a lesser extent. This has affected the use of resources for Component 3 activities.

It should be noted that both the issue of imports and the pandemic have been present for most of the Project's development. It is clear that these delays have had a negative impact on the progress towards the goals, but the management of resources by those involved has allowed progress in the achievement of results. This evaluation coincides with the perspective of the interviewees who recognize the performance of the PMU, the Steering Committee and the partners in taking adaptive and timely measures in these situations. Based on this analysis, the efficiency of the Project is rated as **Satisfactory (S)**.

Graphic 4. Cumulative Executed Budget against Total Initial Budget (%)



Graphic 5. Cumulative Executed Budget vs. Programmed Budget (%)



Source: PMU. No data from 2016 is available.

4.3.5. Overall Project Outcome

In summary, based on the advances described in the previous sections, the evaluation assigns the following qualifications:

Table 11. Results of the relevance, effectiveness and efficiency evaluation

Evaluation of results	Ratings
Relevance	S
Effectiveness	HS
Efficiency	S
Overall Project Rating	S

4.3.6. Sustainability

Financial sustainability

In the regional economic and financial context, the sustainability of development projects is usually affected by uncertainty and precariousness in the allocation of funds for the continuity of the promoted actions, especially within the framework of public budgets for co-financing. This is not the case of the Project, which through the eight years of implementation has achieved sustained support from MINAG and CITMA, materialized in the allocation of financial resources that are part of the co-financing, the total being higher than planned. The commitment and consequent performance of these institutions during implementation, based on the appropriation of the results and impact of the Project, allows us to project that they will continue to be accessible sources of financing for the continuity of the Project's achievements in the short and medium term.

At the beneficiary level, the Project has designed activities aimed at establishing an incentive scheme with FONADEF, which has allowed the delivery of funds to those producers and organizations that have demonstrated their commitment to decentralized sustainable development. Work has also been done to strengthen environmentally sustainable production systems, based on products from the areas, and promoting new and better sources of income.

It can be foreseen that some beneficiaries are in a better position to seek financing and continuity for the undertakings started with the support of the Project; while others, in the absence of financial support or the expected economic return, could return to previous practices. In this sense, it is crucial to monitor the mobilization of funds and work with organizations and actors that can provide support to less prepared producers.

The favorable projection of financial sustainability should not overlook the fact that there are risks that could undermine the results achieved, such as the international scenario of conflicts and wars; but above all, conditions of the one aligned to the dynamics of the country with the economic blockade, market conditions, and value of the national currency, among others. Financial sustainability is conservatively rated **Moderately Likely (ML)** in this analysis.

Sociopolitical sustainability

The socio-political sustainability of the Project resides in the generation of favorable conditions, based on the demonstration of the benefits for the actors involved. . At the political level, CITMA's intervention has been coherent and has made it possible to mainstream the approach proposed by the Project, being the articulator of other government actors with competence. In order to promote good governance, provision has been made for the functioning of a Steering Committee, which has considered the presence of at least one representative from each organization involved. In this way, the coordination of roles and responsibilities and the planning and monitoring of activities that have been fundamental to guide the course of the Project and take adaptive management measures have been facilitated. Likewise, the representativeness of these spaces has allowed their members to get closer to the Project, transmit their particular needs and raise the level of appropriation of results and impact.

On the social front, interaction with beneficiaries will remain essential, especially with producer associations. The revised documentation and the statements of the Project actors indicate a general satisfaction of the producers with the activities in which they have participated, so it follows that the value proposition has been demonstrated and that it has been sufficiently attractive and viable for the producers living in the intervened areas. This is reflected in the achievement of the expected results, mainly in Component 3, which is considered as evidence of the transformative capacity of the Project. The process of changing production systems to appropriate practices for PAs has allowed the establishment of sustainable production chains that generate green jobs, increase the income of those involved, promote the well-being of rural mountain families and communities and conserve biodiversity.

To achieve sociopolitical sustainability, the transmission, training and feedback of experiences and lessons learned is crucial. A process has been undertaken to capture the reflection and systematization of the experience accumulated throughout the implementation of the Project, in order to generate a document that can be transferred to new related projects. It would be expected that it be accompanied by capacity transfer workshops, which are spaces to generate and assume commitments that ensure and expand the impact of the Project. In short, socio-political sustainability receives the rating of **Likely (L)**.

Sustainability of institutional and governance frameworks

At the institutional level, the actors involved, mainly CITMA and MINAG, have shown their commitment to defining guidelines and tools to advance in the management of PAs, integrating the results of the Project in the planning, control and surveillance processes. The Environmental Management Plans in the four REDS have already been applied in the preparation or improvement of other instruments, such as the Municipal Local Development Strategies, and those of Land Management. The institutions also have strengthened capacities, as a result of the field work with actors and the training received, allowing the internalization and prioritization of the 'landscape approach' at all levels. The establishment and training of Local Technical Teams, specialists in each REDS and the deployment of 11 Capacity Promotion Centers, helps to generalize the results, raise awareness, and raise environmental awareness.

At the macro level, the Project is aligned with the priorities in the country's agenda, aimed at strengthening the conservation of ecosystems and sustainable development. Constant work has been done contributing to the national environmental policy through the EAN. A transcendental milestone has been the work with the 'Biological Corridors', which boost the connectivity between

landscapes, ecosystems and habitats, and are key to maintaining biological diversity and ecological and evolutionary processes. The corridors were included as 'Area of Conservation on-site' in the new Law 150 of the Natural Resources and Environment System. Additionally, it was agreed with the DGMA of CITMA to include a legal framework for biological corridors in the new Decree-Law on Protected Areas. CITMA will dictate the procedures and requirements to establish biological corridors, establishing a solid governance scheme for the sustainability of the Project results, because it lays the foundations for the creation of future biological corridors.

In this aspect of the analysis, the sustainability of the institutional and governance framework is assigned a rating of **Likely (L)**.

Environmental sustainability

The environmental factors that threaten the sustainability of the Project's actions are linked to the threats identified in the intervention areas, such as uncontrolled fires, pollution and activities incompatible with the sustainability of the territory such as mining. All these factors have anthropic origin and are the result of the ways of operating under traditional practices used in the intervened areas, which, in most cases, lacked a sustainable approach prior to the intervention.

Although the Project has worked to transform the development approach of economic activities, threats still persist by putting pressure on PAs and are therefore a permanent risk to environmental sustainability, especially in the ability to conserve biodiversity and avoid ecosystem degradation. Other factors to take into account are climate change and extreme weather events, important risks for the country and that have interacted with the Project. In the latter case, there is concern about the growing trend of intensity, increase in frequency, and unpredictability of its evolution.

The characteristics of the environmental factors described and of the environment as the environment of interaction of actors and activities, define the particular situation of the environmental sustainability of the Project, which is closely linked to the other types of sustainability evaluated. Specify financing flows for producers that allow sustaining the results of the Project in a scenario without GEF support; achieve binding commitments and articulation of future needs and expectations of the various actors of the territory under a single vision but with differentiated responsibilities; and continuing to strengthen the institutional frameworks related to PA management incorporating the landscape approach, are key aspects that must be monitored as they will make environmental sustainability viable.

During its implementation, the Project has reached different milestones aligned to the suggested aspects, so environmental sustainability is qualified as **Likely (L)**.

Overall Sustainability Rating

It is important to reconsider the traditional approach to biodiversity and PA management, transitioning to a vision that considers the implementation of the landscape approach and the application of strategies that involve the different actors in the territory, which is the essence of the Project. Based on the above, the role and degree of commitment that the actors must assume must be identified, where some are especially relevant to concretize sustainability, such as government institutions and producer associations. In balance and synthesis, the overall sustainability of the Project's achievements is classified as **Likely (L)**.

Table 12. Assessment of Project sustainability

Sustainability	Rating
Financial sustainability	ML
Socio-political sustainability	L
Institutional framework and governance sustainability	L
Environmental sustainability	L
Overall Sustainability Rating	L

4.3.7. National Implication

The paradigm shift proposed by the Project for biodiversity conservation and protected area management in Cuba contributes to strengthen the PA system's management effectiveness. The fact that the Project's implementation phase coincided with the process of perfecting national environmental policy contributed to this.

In terms of public policy, some of the results of 'Connecting Landscapes' have served as a basis for new legislative frameworks in environmental matters, some of which have already been implemented and others are in the process of being drafted. Such is the case of the recently approved Natural Resources and Environment System Law of May 2022 - based on the ecosystem approach to replace the partialized analysis of natural resources - which was nourished by the experiences and good practices of the Project.

Thus, in the new law, the concept of biological corridors appears for the first time, linked to in-situ conservation; and in the National System of Protected Areas (Section 2), Article 28, paragraph g, identifies breeding areas, biological corridors and other priority sites for the conservation of species, as priority objects for the conservation of biological diversity in situ. It also provides elements on alternative economic and institutional modalities, with potential positive implications for the viability and sustainability of natural resource management and conservation strategies.

As for the Protected Areas System, it has been provided with tools that incorporate the ecosystem approach for better management and even for the approval processes of new sites of different management categories. One of its main achievements was to apply, for the first time, the concept of biological corridors within national protected areas, with the experience of the Mesoamerican corridor, which had never been fully implemented in Cuba, and whose antecedents come from the 'GEF/UNDP 'Sabana-Camagüey' project.

At the national level, the results achieved in the eight years of the Project have been contributing to the development of the National Environmental Strategy (EAN) in different periods up to the current 2021-2025, as the guiding document of the environmental policy in Cuba. Based on the EAN, territorial strategies are adapted and actions are promoted in order to achieve the goals of sustainable development; the complementation and articulation with other strategies, plans and programs is qualitatively elevated; and the management of the territories in the preservation of the environment is strengthened. Likewise, the Project contributes to the National Economic and

Social Development Plan until 2030, specifically in the strategic axis of Natural Resources and Environment.

All of the above contributes, in turn, to the achievement of the objectives and tasks of the State Plan to Confront Climate Change (*'Tarea Vida'*) of national priority; aimed at the short, medium and long term solution of environmental, social and economic problems related to vulnerability, GHG emissions and adaptation to climate change. In this sense, the project contributed results and good practices, both in terms of conservation and protection of natural resources, as well as adaptation to climate change in fragile and vulnerable ecosystems such as mountain ecosystems, which had been less important in the analysis and solutions to climate change than the better studied coastal ecosystems.

4.3.8. Cross-cutting issues

It is evident from the TE that 'Connecting Landscapes' supports the participation and inclusion of all stakeholders. This is in line with and supports the UNDP policy framework on social and environmental standards, and the Guiding Principles of the United Nations Sustainable Development Group (UNSDG), which constitute the normative basis for the framework of cooperation and integrated programming in any national context, considering "leaving no one behind" as a global and unifying principle.

From the point of view of Cuban legislation, it is also aligned with key elements of citizen participation, endorsed in the Constitution of the Republic of Cuba and Law 127 "Electoral Law" of July 2019 (art.1, item g), related to public consultation processes; and with resolutions of CITMA itself, such as Resolution No. 132 of August 2009, which provides that the incorporation of consultations with local authorities and the criteria of the citizenry be taken into account, in the evaluation of environmental impacts and other related aspects.

In the case of the Project, the consultation processes were appropriately documented and are considered positive in this TE. A continuous process of stakeholder consultation has been detected, which began in the design and formulation stage of the Project, through the inception workshop, and continued during the implementation of the Project with training and education workshops.

With the achievement of some results (see results matrix in Annex A), benefits were also reported that, although not explicitly stated in the Project's objective and results, were alluded to by stakeholders, such as women, children, youth and older adults, who stated that they had benefited in their standard of living, education, new knowledge, economic income, and others, which contributed, for example, to the empowerment of women farmers, producers, managers and housewives.

As a transversal axis of knowledge, there was evidence of the work in training and environmental education processes, both within the traditional (state) educational system at different levels, and in non-conventional ways at the community level and circles of interest, with community initiatives and actions from different age groups. It also provided opportunities for professional development and training at the national and international level for women participants.

4.3.9. Gender Equality and Women's Empowerment

The results of the Project recognize, strengthen and are based on the theoretical and practical approach that the country has built in terms of gender empowerment and equity, which is supported by sectoral laws and regulations that contribute to the achievement of social, economic and cultural benefits favorable to women. In this sense, the Project is aligned with Law No. 116 of the Labor Code, Law No. 105 of Social Security, the Constitution of the Republic of Cuba (Art. 41 and 42), and is nourished by the Gender Strategy of the Ministry of Agriculture.

In the design of the Project, the gender perspective is not very visible. It is only mentioned in indicator 3.8 of Outcome **3**, which measures the increase in the number of women direct beneficiaries of the Project, mainly linked to the creation of institutional capacities for the development and transfer of technology, through the Demonstration Farms/Production Units (Output 3.1, item c). More implicitly, reference is made to gender in the mechanisms for increasing gender awareness across sectors, institutional support and participation in planning, implementation, reinforcement and monitoring (Output 1.3), and reference is made to the Awareness Raising, Environmental Education and Communication Program (1.3, sub-section a).

The Project did not develop a gender analysis and action plan, elements that were not contemplated in the design of the Project, but that today are indispensable requirements within UNDP's policy of social and environmental standards. However, the Project's results point towards an equitable and effective participation of women in dialogue and decision making; visualize and recognize the different ways in which men and women relate to biodiversity; and identify and promote opportunities for concrete benefits in terms of women's empowerment and livelihood sustainability, which can be replicated in other spaces.

Through interviews and the review of documents and evidence, the TE confirmed the incorporation of women in planting activities in forestry farms and nurseries, as leaders and participants in training processes. The Project's actions have generated new jobs, higher remuneration, and promoted the empowerment of women, their participation in national and international events; as well as the active participation of other vulnerable groups such as children, adolescents and older adults, who have benefited from activities, material resources and knowledge. The Project, in conclusion, has directly contributed to improving the living conditions and quality of life of women and their families through the installation of coffee pulpers and biogas production units.

The gender approach is adopted at the national, provincial and community levels. An example of this is that the composition of the PMU is mostly female, and also has a large representation of women in the territories in decision-making and management positions, as administrative or trainers, and a smaller number, in relation to men, as producers or heads of farms.

The Project's gender marker score was **1**, which indicates some contribution to gender equality. However, if all the results achieved are taken into account, the TE considers that its contribution went beyond, and rates it as a '*Gender Targeted*' project, according to UNDP's Gender Results Effectiveness Scale (GRES)⁹, since it addressed the differentiated needs of men or women, the equitable distribution of benefits, resources, rights, but does not address the root causes of inequalities in their lives (UNDP, 2020).

⁹ *Guidance for conducting Terminal Evaluations of UNDP-Supported, GEF- Financed Projects* (2020).

4.3.10. GEF Additionality

GEF investments are based on the delivery of global environmental benefits. The Project, framed in the focal area strategy for GEF-5, is aligned with the objective of the GEF biodiversity focal area, which proposes the conservation and sustainable use of biodiversity and the maintenance of ecosystem goods and services. Specifically, a combined approach is adopted considering the objective BD 1 “to improve the sustainability of protected area systems” and BD 2 “to incorporate the conservation and sustainable use of biodiversity in the production sectors and land/seascapes”, to strengthen PA management, expand PA coverage and ensure the compatibility of PA management with biodiversity conservation in productive sectors and landscapes.

GEF additionality is defined as the additional result that can be directly associated with the Fund's participation. For this Project, additionality is evaluated based on six areas:

- **Specific environmental additionality:** The Project generates significant global environmental benefits in four mountain massifs covering a combined area of 41,000 km². The areas prioritized for intervention are characterized by their high diversity, being the habitat of important species in danger of extinction and containing some of the rarest ecosystems in the world. The involvement of the GEF has affected the ability of the Project to be able to cover the extensive area of intervention and has provided tools for the design, planning and management of the PAs within the REDS in order to improve their functioning as central refuges. for biodiversity.
- **Legal/regulatory additionality:** the Project proposes the strengthening of the systemic framework of landscape management. As part of the activities, it has opted for the development of strategic management instruments for PAs and territorial planning of REDS, incorporating considerations of threat management and sustainable development. Additionally, the Project has participated in the development of the National Environmental Strategy 2021-2025, and has promoted the institutionalization of biological corridors in the new Law 150 of the Natural Resources and Environment System and the Decree-law of Protected Areas.
- **Institutional/governance additionality:** considering the paradigm shift proposed by the Project, it has been necessary to work with the institutions involved. The effective management of existing PAs has been fostered, from the introduction of the landscape concept and the threat identification and mitigation tools, incorporated into their planning documents. The articulation of the actors has also been sought, promoting the understanding of the benefits of the landscape approach and the identification of the role of each one involved. GEF involvement has provided tools, such as METT diagnostics, that have made governance viable.
- **Financial additionality:** The amount of the GEF grant for the Project is \$7,481,944. Under the logic of additionality, incremental reasoning and based on the perceptions of those involved, the contribution has been adequate to cover the costs of the activities proposed in the ProDoc. On the other hand, co-financing has amounted to 19 times the GEF contribution; thanks to the co-financing of the Cuban government, which increased by 242% during execution.
- **Socioeconomic additionality:** Building on a GEF conceptual approach and prioritized approach, an essential feature of the Project's approach is the integration of biodiversity conservation objectives and support for sustainable livelihoods. Good productive practices, based on the potential for productivity and compatibility with the needs and customs of the beneficiaries, have made it possible to increase and diversify their agricultural income and food security, even at the level of their families. These activities are deployed from Component 3.

- **Additionality for innovation:** transforming livelihoods to make them compatible with ecosystem conservation has required transferring knowledge and skills to beneficiaries to promote innovative and sustainable production systems. To this end, for piloting purposes, the necessary technology has been provided to implement practices, such as coffee pulpers and biodigesters for the treatment of livestock manure.

4.3.11. Catalyst function and replication effect

The Project has a catalytic and replication function of its results. It has generated relevant political incidence as a participant in the process of updating Cuba's Environmental Policy, and in the approval of the new Law of the Natural Resources and Environment System, still pending official publication. The knowledge generated from the theoretical, methodological and practical point of view, related to the landscape and biological corridors approach, have been key inputs for this new regulation.

Although the Project covers most of the prioritized mountain areas of greatest conservation and environmental vulnerability, there are still significant vulnerable areas of high conservation importance in the country that are not covered. In this sense, several results of the Project can be replicated in the two REDS that are not part of the Project (*Ciénaga de Zapata* and *the Sierra Maestra* mountainous region); as well as in other non-mountainous ecosystems.

There is an important potential for scaling up and replication, which has been mentioned by different actors, to be able to develop in other areas of impact. A new perspective is focused on the implementation of the Biological Corridors, in continuity with a milestone established by the Project, which would add value for the conservation of biodiversity in Cuba. This requires the approval and implementation of the new Environmental Law, where, in addition to these "novel concepts to be applied in the country", other connectivity and landscape criteria appear. In this sense, the catalytic function of the Project is strengthened with new regulatory frameworks on local development, given the importance of biological corridors that, if well managed, add to the sustainable development of the territory. Actions in the different sectors fulfill their objective, but within a corridor, joint development, landscape connectivity, species movement, conservation, and productive linkages for sustainable development are achieved.

For example, Agroforestry Farms (FAF) are being applied in other farms in flat and coastal areas, as is the case of the farms of the Coastal Resilience project in the province of *Ciego de Avila*, sites of common intervention of both projects; and it is expected to apply them in other MINAG-FAF. In replication at the local level, the FAFs are centers for local validation and demonstration of the proposed practices, where the link between nongovernmental organizations, such as ANAP, which brings together large numbers of small farmers, and through cooperatives and other productive enterprises, is fundamental. All of the above, under the concept of integration of 'Connecting Landscapes' links different actions in terms of biodiversity conservation, and in support of productive changes, replicable in mountain, pre-mountain, plain, coastal zone.

4.3.12. Progress toward Impact

The value of the Project to allow lasting results and impacts lies in its proposed approach based on the landscape and the ecosystem, integrating the PAs and the surrounding areas. Previous Interventions have not been effective enough to achieve a long-term solution to reduce current and future threats to biodiversity in mountain landscapes.

In Component 1 "Systemic landscape management framework", the activities seek to make the REDS operational, through the establishment of an institutional framework of support, structures and effective decision-making mechanisms to involve communities in the management of natural resources. In this sense, the processes of analysis and updating in land planning, such as the Environmental Management Plans, stand out. At the same time, they have generated capacity building in the specialists of the institutions involved, and formation of Local Technical Teams.

In Component 2 "Effectiveness of the management of central PAs in the context of fragile mountainous landscapes", the central element has been to have functional PAs for the Project objective. The incorporation of tools and indicators for the evaluation of the state of these areas stands out here. This methodological support is necessary to monitor the evolution of the recovery of these spaces, in case they have been in conditions of degradation or fragmentation; maintain biodiversity; and manage identified threats early and in a timely manner. The impact achieved is the transformation of the institutions involved that adopt these new and best practices.

In Component 3 "Production systems compatible with conservation in threatened mountain ecosystems and conservation corridors that descend towards the coast" the Project has sought to make sustainable the productive processes that contribute to the objective, and that do not condition the well-being of local populations. The main impacts have been the productive chain of products such as coffee, cocoa, and medicinal plants, among others, through good practices, facilitation of skillful technologies, and mobilization of financing. Although the achievement has not been the same in all cases, the satisfaction of many stakeholders with the progress and future prospects is notorious.

Regarding the GEF monitoring tools, positive impacts on the biodiversity focal area are identified. At the end of the Project and with the monitoring tool for the integration of biodiversity conservation in terrestrial/seascapes and productive sectors, important results will have been achieved, such as direct (504,676 ha) and indirect (1,431,344 ha) areas of influence.); area of 92,261 ha covered by agroforestry systems, between farms, silvo-pastoral systems and replica areas; and reforestation with biodiversity considerations, which represents an area of 17'119.83 ha. These results show the degree of progress in the effective management of PAs as a direct impact of the Project. Even with the results obtained, the need to continue strengthening and emphasizing management in the zones must be demonstrated.

5. Main conclusions, recommendations and lessons learned

5.1. Conclusiones

Project design and formulation

The design of the Project has been pertinent and original, since it has been generated and proposed from the reality of the country itself to address a problem of national interest, and which in turn contributes globally to the state of the art of conservation and development of mountainous areas in tropical regions. The design of the Project has aimed at a paradigm shift and has energized the evolution of the conservation of protected areas and biodiverse ecosystems, by positively integrating and interrelating natural habitats with local production systems, considering the interests of the population of the area of influence.

- The central concept of the Project is the construction of natural resilience, considering the impacts of climate change on ecosystems and their services in PAs, and the needs of production and sustainable use of natural resources. It is an approach of great breadth and complexity whose evolution requires time and synergies that exceed those of the execution of isolated and short-term projects. Therefore, the extension of the execution period to eight years has been functional and effective as a good practice.
- An explicit 'Theory of Change' with conceptual models and clarity of interactions and synergies was not included in the design of the Project. However, theory is conceptually implicit in the shaping of components, products, activities and indicators. One can speculate on the advisability or not of covering, as from the beginning, such a wide and diverse geographical extension, as opposed to the convenience of concentrating efforts and results in an appropriate area, and then deriving replication schemes. The alternative taken, judging by its results, has been rational
- The experience of the Project has also required an extensive and necessary inter-institutional, inter-actor, and territorial negotiation, in order to ensure the social basis for intersectoral and community management. This process has been key to successful implementation, and has required time for adaptive processes. Experience suggests that, necessarily, long execution times benefit from periodic reviews and flexibility for adaptive measures, such as those introduced in this case after the EMT, with the readjustment of indicators and goals.

Implementation and Risks Management

- The Project faced multiple risk situations, which were largely mitigated by sound solutions: taking advantage of experiences and lessons learned from parallel or completed projects; sound governance management, including appropriate entities and institutions at subnational territorial levels; decentralization of activities; and, coordination based on local SNAP experience, among other adaptive actions.

- The overall role of the implementing entities is considered highly satisfactory (**HS**). In the case of UNDP, there has been a strong commitment to support the Project, throughout the implementation period, in overcoming difficulties of importing equipment, coordination crises and personnel changes. Inter-agency coordination has been consolidated both intersectoral and territorially.
- It is evident, through the evaluation of results, the greater awareness of the population, technicians and decision makers in incorporating the issue of risks in planning instruments, in the approaches to address them; in field actions; and environmental education and training for key population groups, especially women. This is a finding that can be systematized and applied in similar projects, or in the expansion of actions already established.
- The Covid-19 pandemic was not foreseeable, and its impact caused disruption of activities and plans of the Project, and derived effects on the life and health of residents. Adaptive measures in this regard were immediate and well organized; and although this external aspect has been the main cause of the delays and difficulties in executing the planned activities, the results indicate that it was possible to overcome the challenge, complete the execution of the Project and achieve its global goals on time.

Participation and collaboration of interested parties

- The Project has achieved collaboration and effective participation of entities at the national and local levels, both state and productive bases and non-state social organizations, and has established key synergies with other concurrent or related projects in the country and in the region. The national government in Cuba has a capacity for effective articulation and promotion of the joint work of its institutions, both in intersectoral and territorial articulation; an asset that is not common in the context of the Latin American and Caribbean region. This capacity has been decisive to achieve the level of demonstrated collaboration and the results of the Project.

Gender approach

- With regard to gender approach, the Project is aligned with national and multilateral donor policies, has made progress in the design of methodologies, and in training on the subject for groups of technicians and local actors; which favors the increase of the participation of women in the activities and benefits of the Project. Interviews with stakeholders and women involved in productive activities and environmental improvements revealed a genuine and enthusiastic involvement and commitment. The participation of women in the management of the Project also reaches a significant proportion, even majority, in technical and administrative aspects.

Social and environmental safeguards.

- The Project has performed satisfactorily, in terms of social and environmental safeguards, due to the positive affinity of its actions for these purposes, aiming to expand and improve the scope of conservation actions, and the strengthening and training in the institutions involved. In this regard, it is worth mentioning the reduction of forest fires, the reduction of violations in the use of PA resources, the expansion of the number of protected areas, the treatment to avoid pollution downstream from the places of agricultural production; participation and public

consultations with stakeholders, gender mainstreaming; and other achievements outlined in this document.

- In terms of social impacts, technical support, training and provision of equipment for productive activities, all aimed at greater economic and social well-being of the local population, are considered highly positive. In addition, are also positive the contribution to better knowledge about climate change, and means and ways to better conservation of ecosystems’ services and natural resources, from a landscape approach, with greater economic efficiency and future sustainability.

Financing and Cofinancing

- There is no evidence of critical situations in the availability of financial resources for the Project activities. Expenditure execution through the GEF grant, administered by UNDP, has been efficient, so financial closure would be achieved with 100 per cent execution, judging by progress in implementation and financial reporting of the Project.
- According to the figures provided, the performance in the use and application of co-financing has far exceeded ProDocs amounts, by up to 240%. Financial subvention from the Ministry of Agriculture, and to a lesser extent from CITMA, have been crucial to achieving the goals and results of the Project.
- In short, in addition to the GEF subvention of USD 7,481,944, and the UNDP contribution of USD 800,000, the Government of Cuba has contributed an amount equivalent to USD 140,147,429. This financial arrangement has contributed to laying the foundations for the sustainability of the Project’s actions and the synergy with other convergent projects dealing with environmental issues, ecosystem conservation, and similar mountainous areas.

Outcome achievement

- Regarding the Project Objective, the achievement of the expected results until the end of the operations is considered **highly satisfactory (HS)** in terms of: conceptual bases established and strengthened in the environmental, agroforestry, and land use regulatory frameworks; strengthening of PA conservation actions and the engagement in the task by surrounding population; and advances in the introduction of clean and environmentally sound production practices in front of PA.
- For **Outcome 1** evaluation shows a positive and **satisfactory** progress (**S**) towards regulatory and systematization work, evidenced in the territorial planning plans throughout the scope of the Project, and in the management plans of the pilot corridors and environmental management proposals, still in execution. Likewise, coordination and inter-institutional work in the intervention areas have been strengthened, in addition to achieving the initial goals of investments with a landscape approach.
- Progress towards **Outcome 2** is rated as **highly satisfactory (HS)**, generated by the good base of work in PA in the country, which has allowed to exceed with breadth the management goals in all the intervened areas, through work with communities and schools, training and

dissemination of values. The goal of creating 8 new APs was exceeded, with 9 APs with a larger than planned total extent, covering connectivity areas, and better scoring goals.

- In **Outcome 3**, the one with the greatest expression of paradigm shift, and the one with the largest number of diverse and innovative products, a **satisfactory** achievement is appreciated (**S**). The indicators show that the goals were achieved, and mostly exceeded in various activities, still in development, such as promotion of plantations, enrichment of ecological connectivity, good productive management practices, water care, fire reduction, reduction of illegal activities, and incorporation of benefits and families benefited by Project actions, including 59% of women.
- In balance, the overall rating of the achievements of the Project rated between **satisfactory** to **highly satisfactory**, depending on the final activities at the end of the Project to achieve the best rating.

Monitoring and evaluation

- Project implementation has satisfactorily met the prescribed GEF and UNDP standards for monitoring and evaluation of its activities, with up-to-date records and information. The monitoring instruments have also been applied and kept updated through the tools and instruments of the Tracking Tool and SESP, the results of which are attached in special annexes to this report. Information and documents have been provided for the TE that are in orderly fashion, revealing diligence and appropriate methods on the part of the PMU.

Sustainability of achievements, replicability and scaling.

- The sustainability of the Project's achievements lies mainly in the consolidation of the alliances and commitments already reached with all actors and in all areas of intervention; as well as in the continuation and improvement of the application of good practices. In this sense, the analysis of the TE on overall sustainability (financial, socioeconomic, institutional and environmental), is qualified as **Likely** in a balance of the four aspects.

5.2. Recommendations

This section presents the consequent recommendations for action of the TE, based on the analysis and conclusions of the evaluation carried out.

A. For priority and immediate action

- A.1 *Formulate in advance and implement, an exit strategy of the Project in front to each type of actor or participating institution; including viable convergence prospects and funding commitments to continue the actions, prior to financial close.*
- A.2 *The exit strategy should include holding events or workshops at REDS headquarters level, to consolidate progress, identify lessons from the field and good practices, strengthen partnerships and designate support groups – including the state, non-state and community sectors – engaging them in the continuation of developing actions.*
- A.3 *Invest in the preparation of a Project report with its results. experiences, lessons learned and testimony of achievements, including the dissemination of improvements and innovations, and describing current and potential synergies and their benefits. Memory should be shared throughout the LAC region through UNDP, UNEP, FAO, ECLAC, IUCN, and similar organizations..*
- A.4 *Promote an international event to present and discuss the results and contributions of the Project for conservation and environment, with the support of UNDP and the agencies and conventions of the system (UNEP, FAO, DB and CC Conventions) and international cooperation projects (i.e., Euroclima, EU Horizon, IUCN, and others.*

B. For an efficient operative closing in the short term

- B.1 *Coordinate and optimize use of remaining resources with administrative programming by UNDP-GEF, prioritizing the completion of key activities, ensuring commitments that can be met until financial closure.*

C. To ensure long term effectivity and impact of actions

- C.1 *Proponer y procurar la inclusión de actividades de seguimiento y apoyo a los logros del Proyecto, a través de proyectos afines, en curso o en preparación, y en los presupuestos sectoriales actuales y futuros, de manera sistemática y orgánica*

C.2 *Develop a strategy and coordination pathways to include the landscape approach in key national planning instruments (e.g., national land use planning scheme for massifs, National System of Protected Areas Plan, derived regulations, rural extension plans).*

D. For the sustainability of outcomes in the Project intervention areas

D.1 *Promote and carry out studies and research derived from the Project, on local impacts of climate change at the scale of the territories and ecosystems of the country, with attention to species displacement, changes in habitat and in interspecific relationships, or roles of key species in ecosystems; and on anthropic influences that affect ecosystem services.*

D.2 *Support social and financial sustainability of the Project outcomes, evaluate the feasibility of national and external funding to continue monitoring and expanding implementation of REDS, such as the Small Grants Program (SGP), FONADEF, Fund for Soil Management; or incorporating Project methodologies and good practices Project into others.*

E. For optimization of gender and intercultural approaches

E.1 *Promote, in environmental projects and especially in mountainous areas, visible gender mainstreaming, and empowerment of women, which in the Project were little visible, despite favorable results to the approach and its positive effects. Beyond quantification of participant and beneficiary women, capitalize on the concept with training, technology transfer, and strengthening self-confidence in the conduct of family activities*

F. For scaling up and replicability of Project achievements

F.1 *Continue updating the cartography elaborated in the REDS, and extend its use to new REDS and PAs, based on homogeneous structures that allow subsequent comparative analyses, which facilitate management of conservation. Likewise, expand to other areas diagnostics and applications for the management of spatial information and the protection of geospatial data resulting from the Project; as well as the training of specialists and users*

F.2 *Promote the implementation of the newly approved Environmental Law, which includes innovative concepts to be applied in the country and validated in the Project, such as biological corridors, along with other connectivity and landscape criteria. In this sense, the catalytic function of the Project extends to new regulatory frameworks on local development, benefiting from well-managed biological corridors which add to sustainable development.*

- F.3 Replicate the successful experience of the farm schools (Fincas Escuelas) , in other areas of the territory, as a mechanism of extension of social, family and productive scope, and as an integrated practice to the national education system*
- F.4 Given the context in Cuba regarding importation of technological equipment, the operational risk related to the acquisition of such equipment must be carefully considered and mitigated from the outset (including in project design). Consultancy should be sought to support procurement processes; systematically update tender plans; and constant monitoring, to detect and identify possible delays in this regard.*

5.3. Lessons learned

The experience of implementing the Project leaves numerous lessons learned that must be systematized and documented in the remaining time of implementation; Likewise, the elaboration of an exit strategy – already in planning within the UMP – requires immediate support and follow-up by the Steering Committee and adequate management of resources, including transfers of items and changes of priorities as necessary. The main lessons are summarized as follows:

- Coherent management between different actors (government, academia, non-state sector, producers, researchers, decision makers, communities) is essential, for which there has been an extensive training and articulation plan; from the local to the national level.
- It is highly recommended to apply innovative elements in the way of managing conservation in key places, even if you do not have an established PA.
- The results achieved by the Project, from the methodological and practical point of view, underline the importance of the landscape approach in the processes and management of ecosystem conservation, beyond the spatial scope of protected areas. Taking into account the population to be benefited, their life systems, their particularities in the use of land and resources, and the types and infrastructure of settlement, conditions and facilitates the conservation and connectivity of biological diversity.
- It is important and instructive to incorporate the results and good practices of projects such as 'Connecting Landscapes', into regulatory and legal frameworks, and into local governments, so that they are truly implemented, evaluated and monitored, and incorporated into territorial development strategies and plans.
- In financial execution, attention should be paid to the mechanisms that will monitor and monitor the execution of co-financing funds, especially if they are government funds that come from annual budgets.
- Project management and resource distribution must have a permanent presence and anchorage in the areas of intervention. Participatory, interdisciplinary and integrated teamwork is necessary to change paradigms and achieve sustainability.

- It is important to join wills and engage the stakeholders and beneficiaries of a project, from children and young people to the elderly, through environmental education; and take these efforts to the most remote places, such as mountainous areas.
- Establishing links between and with academia, producers, researchers, and government officials is crucial; as well as with the private ones that are part of a landscape subject to a project.
- Project design should be flexible, in the sense of anticipating, allowing, and facilitating changes and adaptive measures to emerging situations; especially when it covers a long period of implementation, and contains experimental or complex approaches.

-----000-----

6. ANNEXES

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

ANNEX A. Matrix of progress towards the objective and expected outcomes

Objective: Biodiversity effectively buffered from current and future threats across mountain landscapes, from the foothills to the mountain ridges					
Indicator	Baseline Level	End-of-Project	Target End-of-Project per TE	Comments from TE	Rating
O.1 Area of major vegetation types in the four target REDS	<u>Guaniguanico</u>	No net loss of any major vegetation type	The baseline is maintained in the four REDS, with an increase in the number of hectares compared to the beginning of the Project in natural regeneration plantations and in established plantations. <u>Guaniguanico:</u> Cuabal (Cb) 1,569.40 ha Holm oak forest (En) 6,734.73 ha Pine grove (Pn) 52,857.30 ha Semideciduous on acid soil (Scf/c) 33,402.00 ha Semideciduous on limestone (Scf/c) 63,663.68 ha Xerophyll mogote complex (Xm) 27,315.90 ha Planted broadleaved (Pt-Lsp) 11,111.93 ha Pine plantation (Pt-Pino) 75,239.82 ha <u>Guamuhaya:</u> Scrubland (Chr) 1,300.00 ha Pine grove (Pn) 105.53 ha Mountain rainforest (Pvs-m) 10,646.60 ha Semideciduous on acid soil (Scf/a) 41,892.60 ha Semideciduous on limestone (Scf/c) 36,396.60 ha Xerophyll mogote complex(Xm) 2,930.32 ha Planted broadleaved (Pt-Lsp) 2,291.90 ha Pine plantation (Pt-Pino) 1,769.40 ha <u>Bamburanao:</u> Cuabal (Cb) 86.30 ha Mangrove forest (Mg) 862.20 ha	The objective was achieved and the target surpassed during the project period, as the areas of major vegetation types in the 4 REDS increased.	4
	Cuabal (Cb) 1,569.40 ha				
	Holm oak forest 6,734.73 ha				
	Pine grove 52,162.40 ha				
	Semideciduous on acid soil 33,094.92 ha				
	Semideciduous on limestone 63,232.55 ha				
	Xerophyll mogote complex 27,315.86 ha				
	Planted broadleaved (Pt-Lsp) 9,740.76 ha				
	Pine plantation 67,903.36 ha				
	<u>Guamuhaya</u>				
	Scrubland (Chr) 1,299.99 ha				
	Pine grove 105.53 ha				
	Mountain rainforest 10,646.55 ha				
	Semideciduous on acid soil 41,436.31 ha				
	Semideciduous on limestone 35,600.36 ha				
	Xerophyll mogote complex 2,930.32 ha				
	<u>Bamburanao</u>				
	Cuabal (Cb) 86.29 ha				
	Mangrove forest 862.20 ha				
	Pine grove 44.60 ha				
	Semideciduous on acid soil 1.87 ha				
	Semideciduous on limestone 18,783.04 ha				
	Semideciduous on soil with poor drainage 814.50 ha				

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

	<p>Xerophyll mogote complex 354.87 ha Planted broadleaved (Pt-Lsp) 353.38 ha Pine plantation 516.98 ha</p> <p><u>Nipe Sagua Baracoa</u></p> <p>Cuabal (Cb) 2,492.06 ha Scrubland (Chr) 28,495.31 ha Mangrove forest 716.56 ha Coastal marshy tropical forest 943.67 ha Pine grove 52,456.50 ha Pluvial rainforest 28,922.30 ha Mountain rainforest 100,698.07 ha Semideciduous on acid soil 112,721.11 ha Semideciduous on limestone 37,832.30 ha Semideciduous on soil with poor drainage 60.79 ha Xerophyll mogote complex 23,781.61 ha Xerophyll de(Xt) 20,168.16 ha Planted broadleaved (Pt-Lsp) 7,365.31 ha Pine plantation 20,501.71 ha</p>		<p>Pine grove (Pn) 44.60 ha Semideciduous on acid soil (Scf/a) 31.90 ha Semideciduous on limestone (Scf/c) 19,051.00 ha Semideciduous on soil with poor drainage (Scf/md) 814.50 ha Xerophyll mogote complex (Xm) 354.90 ha Planted broadleaved (Pt-Lsp) 689.20 ha Pine plantation (Pt-Pino) 551.20 ha</p> <p><u>Nipe Sagua Baracoa</u></p> <p>Cuabal (Cb) 2,492.10 ha Scrubland (Chr) 28,495.30 ha Mangrove forest (Mg) 716.60 ha Coastal marshy tropical forest (Mc) 943.70 ha Pine grove (Pn) 53,137.50 ha Pluvial Rainforest (Pvs) 28,922.30 ha Mountain rainforest (Pvs-m) 100,698.10 ha Semideciduous on acid soil (Scf/a) 113,734.90 ha Semideciduous on limestone (Scf/c) 37,971.80 ha Semideciduous on soil with poor drainage (Scf/md) 60.80 ha Xerophyll mogote complex (Xm) 23,781.60 ha Xerophyll (Xt) 20,168.20 ha Planted broadleaved (Pt-Lsp) 10,308.94 ha Pine plantation (Pt-Pino) 21,838.70 ha</p>		
<p>O.2 Index of ecosystem integrity in 6 of the priority PAs (covering 155,559ha) of importance as refuges in prioritized connectivity zones within the REDS</p>	<ul style="list-style-type: none"> • Mil Cumbres: 2.45 (14,059.0 ha) • RB Sierra del Rosario: 2.55 (24,504.0 ha) • Jobo Rosado: 3.0 (4,181.0 ha) • Lomas de Banao: 2.98 (6,091.0 ha) • Topes de Collantes: 1.98 (20,135.0 ha) • Crystal Peak: 2.01 (18,540.0 ha) • Alejandro de Humboldt: 1.75 (68,430 ha) 	<p>Rates remain stable thanks to more effective PAs management and the fight against external threats to PAs</p>	<p>Completed the analysis of the Ecological Integrity Indexes (EII) in the 7 PAs:</p> <ul style="list-style-type: none"> - Mil Cumbres 3.08 - Jobo Rosado 3.93 - Topes de Collantes 3.16 - Pico Cristal 3.37 - Sierra del Rosario: 3.15 - Lomas de Banao: 2.88 - Alejandro de Humboldt: 3.12 <p>The final objective has been met, as a result of the improvement of effective management within protected areas, in terms of resource monitoring and management, especially conservation objectives; which validates that the proposed</p>	<p>The objective was successfully achieved. The ecological integrity indexes in the PAs evaluated have increased, with the exception of the Lomas de Banao ER, where the index decreased slightly in relation to the baseline, but the rating remained in the 'Good' range.</p> <p>Additional results were obtained in the fulfillment of the objective, which, from a methodological, communicative and research point of view, validate the results achieved.</p>	4

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

			<p>indicators, methodologies and monitoring procedures are simple, practical and feasible for PA personnel to carry out. Their incorporation into PA management is proposed.</p> <p>The key ecological attributes and indicators of each conservation target were updated in all selected PAs, recommending the inclusion of this methodology in the Biodiversity Monitoring program and in the management plans of these PAs.</p> <p>This result also strengthened South-South cooperation between the Ministry of Science, Technology and Environment (CITMA) of Cuba and the Ministry of Environment of Panama. A manual was prepared for the Evaluation of Ecological Integrity in Cuba's Protected Areas: first experiences in mountain ecosystems (editing and design process).</p>		
O.3 Indexes of species diversity and abundance in the priority areas for the connectivity of the four REDSs focused on some target groups (functional or taxonomic)	<p>Species lists and abundances to be compiled through sampling once detailed methodology is defined in Year 1 (species lists already exist for the core refuges in the 4 REDS.</p>	<p>Fifteen new species are observed in key connectivity zones of each massif during the life of the Project.</p>	<p>The indicator was completed since the 2020 IRP.</p> <p>Species Richness Index (S)</p> <p>REDS Guaniguanico: 137</p> <p>REDS Guamuhaia: 139</p> <p>REDS Bamburanao: 168</p> <p>REDS Nipe-Sagua-Baracoa: 170</p> <p>Ecological data was collected on distribution, feeding, predators, plant formations, relief and type of soil where they live; along with data on vulnerability and main causes that threaten their populations.</p> <p>The above resulted in:</p> <p>a) proposals for conservation measures, monitoring protocols, environmental education actions to raise awareness and increase the local population's knowledge of their biology;</p> <p>b) maps of potential species richness within each landscape unit for each REDS. This made it possible</p>	<p>The objective was successfully achieved two years before the Project's closure, as evidenced in the 2020 PIR.</p> <p>The species diversity and abundance indices in the areas prioritized for connectivity of the 4 REDS show very favorable values; and, in addition, other actions and products were carried out that contribute to maintaining and increasing the values of the species richness indices achieved.</p>	4

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

			<p>to identify the sites with the greatest biodiversity in the biological corridors, which were defined as priorities for conservation and incorporated into the action plan for the biological corridors with actions to maintain the ecosystem services they provide;</p> <p>c) completion of the connectivity analysis from the top of the mountain to the coast in the Cabagán river basin, Sancti Spiritus. This result showed adequate water quality for bathing on the beach, as well as the availability of nutrients and organic matter essential for the development of coastal marine fauna, which indicates that the ecological coffee pulper installed by the project in <i>Cuatro Vientos</i> reduced the discharge of production waste into the river and increased the inhabitants' awareness of not throwing garbage into the river, thanks to the environmental education work carried out by the project.</p>		
<p>O.4 Cumulative width of non-forest gaps separating habitat blocks in prioritized connectivity zones</p>	<p>Index Forests Fragmentation / Connectivity Networking Index</p> <p>REDs / Fragmentation / Connectivity</p> <p><u>Guaniguanico</u> / 48% / 52%</p> <p><u>Bamburanao</u> / 68% / 32%</p> <p><u>Guamuhaya</u> / 46% / 54%</p> <p><u>NSB</u> / 41% / 59%</p>	<p>Reduction of non-forest gaps, facilitating the movement of species between habitat refuges (objectives to be defined in PY1).</p>	<p>At the end of the project there was an increase in the number of hectares of forest, and therefore a decrease in fragmentation in the matrix of each REDS, and an increase in the connectivity of the landscape. This was possible due to the application of good practices and the work of the farms and agroforestry companies that ensured the growth of the vegetation patches, with a good structural development of the forests, increasing connectivity and maintaining a high composition of native species.</p> <p>The fragmentation and connectivity status achieved was as follows: REDS Fragmentation % / Connectivity %: Guaniguanico 79.50 % / 83.84%. Guamuhaya 73.81 % / 85.92%. Bamburanao 75.60 % / 70.20 %. Nipe-Sagua-Baracoa 82.33 % / 80.74 %.</p>	<p>The objective was achieved. It is considered an innovative result, since it manages to refine the level of detail and precision of the new programs and aero spatial bases, which is an element of great importance in the analysis and monitoring of fragmentation, landscape connectivity and the maintenance of corridors in general.</p> <p>It is recommended that the new practices and tools implemented be taken into account for sustainability in planning in the prioritized connectivity areas, as well as in future habitat fragmentation analyses, even outside of the intervened REDS.</p>	4

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

			<p>Following the recommendations of the ETM, a new methodology was positively adopted, different from the one initially proposed, which allowed more precise calculations of fragmentation, according to the proposal of Vogt et al. (2022), which allowed increasing the spatial resolution of the images to 15 m per pixel. As a result, the fragmentation and connectivity analysis tools were updated in the prioritized areas.</p> <p>Forest landscape connectivity maps were prepared with proposals for connectivity bridges between the core zones, where the main forest vegetation formations are concentrated. These have shown a reduction in the distances between vegetation blocks, corroborating once again the fulfillment of the proposed objective.</p>		
Outcome 1: Systemic landscape management framework					
Indicator	Baseline Level	End-of-Project	Target End-of-Project per TE	Comments from TE	Rating
1.1: Area in the target REDS that is covered by environmental land use plans that incorporate considerations of biological connectivity and ecosystem resilience	<p>The entire project area is covered by IPF land use planning, with basic environmental issues addressed.</p> <p>Environmental land use planning has only been carried out in Yaguajay municipality (Bamburanao), at 1:100,000 scale.</p>	<p>Surface area covered by environmental land use plans at scale 1:250.000:</p> <p><u>Guaniguanico</u> 375.50ha</p> <p><u>Bamburanao</u> 78.216ha (1: 100.000)</p> <p><u>Guamuhaya</u> 157.600ha</p> <p><u>NSB</u> 807.600ha.</p> <p>Area also covered by environmental land-use plans at scale 1:50.000:</p> <p><u>Guaniguanico</u> 81.500ha</p>	<p>Since the 2019 PIR, the environmental land management plans at a scale of 1: 250,000 in the four REDS have been completed.</p> <p>The management plan for the <i>Sierra del Rosario Mil Cumbres</i> pilot corridor was completed, and the other plans for the remaining corridors are being finalized.</p> <p>The environmental land-use planning proposals at a scale of 1:50,000 in the four REDS are expected to be finalized before the end of the project, with the approval of the local governments.</p>	<p>The target is expected to be achieved within the expected timeframe. The total area covered by the environmental land use plans at a scale of 1:250,000 was reached. However, with regard to the environmental land use plans at a scale of 1: 50,000, only the one for the pilot corridor Sierra del Rosario Mil Cumbres was completed. The rest of the corridors, in consultation with the project coordinator, are finalizing their proposals and must complete their management plans before the project closes.</p>	3

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

		<u>Bamburanao</u> 24.152ha <u>Guamuhaya</u> 24.540 ha <u>NSB</u> 86.703ha.																																							
1.2: Number of institutions in each massif (IES, CNAP, territorial delegations of INOTU, INAF, IGT, INRH, Mountain bodies, DNF, SEF, CITMA delegations and local authorities and NGOs) that effectively coordinate and integrate activities vis-a-vis the landscape approach, specifically in relation to the following factors: (i) Sharing and facilitating access to information; (ii) Monitoring activities (iii) Research (iv) Enforcement	Average scorecard rating for each factor (of 10 institutions in Guaniguanico, Guamuhaya and Bamburanao, and 11 in NSB) Factors (i) - (iv) Massifs: I / II / III / IV / Av. (i) 1 / 2 / 2 / 2 / 1.75 (ii) 2 / 2 / 1 / 1 / 1.5 (iii) 1 / 1 / 1 / 1 / 1 (iv) 1 / 2 / 1 / 1 / 1.25 Massifs: I = Guaniguanico II = Guamuhaya III = Bamburanao IV = Nipe-Sagua-Baracoa	Average value per massif (per factor) (i) 2.75 (ii) 2.5 (iii) 2 (iv) 2.25	In the 2019 IRP, it was proposed to eliminate this indicator, based on the recommendation of the ETM and the Project team, which was approved by the National Steering Committee; however, it continued to appear on the platform. Consequently, progress was not measured through the scorecard. Nevertheless, by the end of the Project, integration among the institutions has been strengthened and increased, with new working methods (developed as a management response to the limitations in the COVID-19 context), such as new communication mechanisms, working teams in reduced composition disseminating information and knowledge, increased local capacities to assume new roles in research, optimal use of computer media and virtual communication spaces. The greatest strength lies in the integration of Local Technical Teams made up of representatives of all the territorial organizations and the articulation with the Project Coordination at all levels and entities. <table> <tr> <td>Factors</td><td>Massifs</td><td></td><td></td><td></td><td></td></tr> <tr> <td></td><td>I</td><td>II</td><td>III</td><td>IV</td><td>Av.</td></tr> <tr> <td>(i)</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td></tr> <tr> <td>(ii)</td><td>3</td><td>3</td><td>3</td><td>2</td><td>2.75</td></tr> <tr> <td>(iii)</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td></tr> <tr> <td>(iv)</td><td>3</td><td>2</td><td>3</td><td>2</td><td>2.5</td></tr> </table>	Factors	Massifs						I	II	III	IV	Av.	(i)	3	3	3	3	3	(ii)	3	3	3	2	2.75	(iii)	2	2	2	2	2	(iv)	3	2	3	2	2.5	Despite being an indicator that was recommended to be eliminated, the objective was successfully achieved, since there was a considerable increase in inter-institutional integration and synergies, from the perspective of the landscape approach. This is the result of several years of intense work, surpassing the proposed goal, and establishing relationships between institutions for future actions, even after the Project is concluded. It is worth noting that relations were not only established with state institutions, but there is also a high degree of synergy and commitment with community, local and non-state actors, especially cooperatives.	4
Factors	Massifs																																								
	I	II	III	IV	Av.																																				
(i)	3	3	3	3	3																																				
(ii)	3	3	3	2	2.75																																				
(iii)	2	2	2	2	2																																				
(iv)	3	2	3	2	2.5																																				

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

1.3 Increase in investments with a landscape focus on forestry	There is no information about current environmental investment in the National Economy Plan that specifically promotes the landscape approach	Increase of at least 10% of environmental investments that promote the landscape approach (baseline and target to be determined in PY2).	<p>This indicator is reported as the increase in hectares realized by investments with a landscape approach in forestry and the expenditures for this investment.</p> <p>During the Project, investment expenditures were made for environmental protection, with a landscape approach, in the indicators of biodiversity and landscape protection.</p> <p>In the protection of forest resources were indicated as:</p> <ul style="list-style-type: none"> - Protection of forest resources in measures against fires in the amount of 10 304.23 thousand pesos, equivalent to 429,342 thousand pesos in USD. - Reforestation and silvicultural treatment as natural regeneration with 41,344.95 thousand pesos, equivalent to 1,344.95 thousand pesos in USD, of which the forestation of the protective strip of water bodies and streams with an amount of 1,971.70 thousand pesos, equivalent to 82,154 thousand pesos in USD. - Reconstruction of forests with 6,337.73 thousand pesos, equivalent to 264,072 thousand pesos in USD. <p>In addition, under Other activities</p> <ul style="list-style-type: none"> - Activities and administrative measures for training, information and education aimed at the protection of biodiversity, ecosystems, habitats and landscapes collected as training actions with an amount of 288.08 thousand pesos, equivalent to 12.00 thousand pesos in USD. <p>The total expenditure of environmental investments with a landscape approach is 58,274.99 thousand pesos, equivalent to 2,428.124 thousand pesos in USD.</p>	<p>The objective was achieved, if measured in terms of the increase in ha. realized by investments with a landscape approach in forestry, and the costs of this investment.</p> <p>However, the planning of environmental investments by the corresponding authority should be increased, according to its performance in each REDS.</p>	4

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

			The reconstruction of forests manifested a permanence since 2019 in Pinar del Río, the provinces of Nipe - Sagua - Baracoa and the territory in Guamuhaya of Sancti Spiritus province. Environmental investments in training actions had the lowest incidence given the need and understanding reached in each territory, highlighting the provinces of Pinar del Río, Cienfuegos and Santiago de Cuba.		
Outcome 2: Management effectiveness for core PAs within the context of the landscape as a whole					
Indicator	Baseline Level	End-of-Project	Target End-of-Project per TE	Comments from TE	Rating
2.1 Average METT scores of declared target PAs in prioritized connectivity zones	<u>Guaniguanico</u> 60.9 <u>Bamburanao</u> 59.0 <u>Guamuhaya</u> 91.5 <u>NSB</u> 60.5 <u>Average total</u> 63.8	<u>Guaniguanico</u> 74.3 <u>Bamburanao</u> 88.0 <u>Guamuhaya</u> 95.0 <u>NSB</u> 82.2 <u>Aver. Total</u> 81.1 Questions 21, 24 and 25 for every AP must have a rating of at least 2.	The evaluation of the effectiveness of METT management was completed in all the REDS, with an overachievement of the proposed goal. Guaniguanico 88.29 Bamburanao 97.00 Guamuhaya 96.00 NSB 82.75 Average Total 91.01 Total 91.01 In all PAs, indicators 21 and 24 scored between 5 and 6 (maximum) points in the evaluation, while indicator 25 was evaluated between 2 and 3 (maximum). The increase in the valuation of each of these areas is mainly due to better work with communities and school circles of interest, with an increase in their participation in PA management; improvement of access roads to PAs, rescue of endangered species of forest flora and birds, elimination of invasive plants; as well as staff training and dissemination of PA values at the local and national levels.	The objective was achieved and the target surpassed, with a score 10 points above what was committed.	4

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

2.2 Area of new PAs declared in prioritized connectivity zones, facilitating biological connectivity between existing core refuge PAs	0	8, covering 13.812ha	<p>The indicator has exceeded the final goal. Five PAs were approved by the Council of Ministers, for a total of 9 new PAs covering 24,871.35 ha in connectivity zones, one PA more than committed. The indicator was as follows:</p> <p><u>Guaniguanico</u> END Mogote Soroa (75.45 ha) RE Sierra de la Güira (2, 065 ha)</p> <p><u>Bamburanao</u> END Lomas Las Tasajeras (141.9 ha) END Lomas de la Canoa-Cueva La Chucha (1, 920 ha)</p> <p><u>Guamuhaya</u> PNP Habanilla, (1, 735 ha) RE Pico San Juan (2, 945) ha) END Martin Infierno Cave (430 ha)</p> <p><u>Nipe-Sagua-Baracoa</u> END Maisí Caleta (10, 782 ha) PNP Maisí Yumurí (4, 777 ha)</p> <p>An increase in the number of hectares covered by new PAs is observed, taking into account the size and importance of landscape units in the territory.</p>	<p>The objective was achieved and the target exceeded. The Project worked on a total of 28 PAs, 9 of which were newly approved, of which only 8 were committed as a final goal.</p> <p>Within the massifs there were 15 sites with possibilities of being approved in some of the PA categories, but which did not have to be approved during the implementation of the Project. Nevertheless, it is suggested that future approvals take into account the integrated landscape approach perspective and good practices derived from the project.</p>	4
2.3 Average METT scores of new PAs to be established in prioritized connectivity zones	<p><u>Guaniguanico</u> 7.0 <u>Bamburanao</u> 5.0 <u>Guamuhaya</u> 3 0.0 <u>NSB</u> 7.0</p> <p>Overall aver. 12.0</p>	<p><u>Guaniguanico</u> 62.0 <u>Bamburanao</u> 75.0 <u>Guamuhaya</u> 81.0 <u>NSB</u> 79.0 <i>Overall</i> 74.0</p> <p>Questions 21, 21, 24 and 25 for all PAs must have a score of 2 or 3.</p>	<p>The final evaluation of the METTs was achieved in the 9 new PAs. The proposed goal was achieved in all REDS.</p> <p><u>Guaniguanico</u> 86,0 <u>Bamburanao</u> 75,5 <u>Guamuhaya</u> 89,3 <u>NSB</u> 80,5 Total 82,83</p> <p>The results could be achieved after the approval of the new PAs by the corresponding authority. Barriers related to equipment, equipment</p>	<p>The objective was achieved and the target surpassed in all the REDS, with a score of 8 points above the total agreed upon; in addition, the final evaluation of the METTs was carried out for the ninth approved PA, which was not initially committed to in the Project.</p> <p>There are favorable elements to give continuity to what has been achieved, given the training provided</p>	4

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

			<p>maintenance, visitor facilities and commercial tourism operations that prevented the increase in the values of indicators 1, 2, 4, 7, 13 to 19, 21 and 29 disappeared.</p> <p>With support from the project, PAs obtained the material resources needed for effective management, increased the number of personnel and established links with other PAs within the REDS to prepare management plans for all approved PAs, which are in the process of being reviewed and approved.</p> <p>In the PA management plans, the concept of landscape connectivity was incorporated into the natural resource management program through various activities for the next 5 years.</p> <p>Environmental education activities were carried out in all PAs to celebrate environmental dates, with the participation of local communities, and visitor centers and signage were improved in the new PAs. In addition, surveillance points were built in coordination with the Forest Ranger Corps, and two specialists in PA management and biological corridors were trained in Costa Rica.</p>	to specialists in environmental education, PA management and biological corridors; the synergies with other PAs, the incorporation of the landscape connectivity concept in PA management plans, linked to the natural resource management program through various activities for the next 5 years.	
Outcome 3: Conservation compatible production systems in threatened mountain ecosystems and conservation corridors leading down to the coast					
Indicator	Baseline Level	End-of-Project	Target End-of-Project per TE	Comments from TE	Rating
3.1 Area of (i) forest plantations, (ii) water protection belts, and (iii) enriched connectivity forests	385,684 ha	<ul style="list-style-type: none"> - 19,560 ha of established forest (of which 10,840 ha are in priority connectivity zones). - 600 ha of water protection belt forests in priority connectivity zones. 	<p>Reforestation of 1,903.25 ha of established forest is reported. The accumulated progress amounts to 20,440.7 ha, all in the prioritized connectivity zones, reaching a coverage higher than the planned goal.</p> <p>In the water protection strips in connectivity zones, a cumulative total of 581.50 ha was achieved, representing 97% of the final goal. It is planned that by the end of 2022, the remaining 18.5 ha will be reforested to reach the final target.</p>	The objective was achieved and the target exceeded in the three components analyzed: forest plantations and water protection belts; and enriched forest connectivity. Total information will be available at the end of the year.	4

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

		<ul style="list-style-type: none"> - 2,400 ha of enriched connectivity forests in priority connectivity zones. - 1,600 ha of diverse agroforestry systems established on 40 existing integral forest farms (10 per target area), and 4,720 ha of diverse silvo pastoral systems, promoting habitat and connectivity (the number and target area of these located in prioritized connectivity zones will be determined in PY1). - 90,000 ha of agroforestry and silvopastoral systems established in the REDS that replicate practices demonstrated in integrated forest farms. 	In connectivity areas for natural regeneration management, 690.20 ha have been identified, for a total of 2,974.74 ha, exceeding the proposed target.		
3.2 Area of agroforestry farms	This universe was determined as a baseline for the project following 10 IFF (Integral Forestry Farms) ¹⁰ by REDS.	- 1,600 ha of diverse agroforestry systems established in 40	The number of hectares of agroforestry systems corresponds to the 40 agroforestry farms covering 4,453 ha of diverse agroforestry systems and 4,720	The objective was achieved. The 40 existing agroforestry farms (10 per target area), and the 4,720 ha of silvo	4

¹⁰ They are currently known as Agroforestry Farms.

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

and silvo pastoral spaces that incorporate agro-ecological management measures	<p><u>Guaniguanico</u> 2,079.4 ha <u>Bamburanao</u> 328.2 ha <u>Guamuhaya</u> 640.2 ha <u>NSB</u> 544.0 ha</p>	<p>existing integral forest farms (10 per target area), and 4,720 ha of diverse silvo pastoral systems, promoting habitat and connectivity (target number and area of these located in prioritized connectivity zones to be determined in PY1)</p> <p>90,000 ha of agroforestry and silvo pastoral systems established in the REDS replicating the practices demonstrated in the Integrated Forest Farms.</p>	<p>ha in silvo pastoral systems in the four REDS. Since the beginning of the project, the number of ha. was exceeded, so the actions were concentrated on maintaining the number of ha. with agro-ecological management.</p> <p><i>La Caléndula</i> (REDS Guaniguanico), <i>Rincón Los Hondones</i> (REDS Bamburanao) and <i>El Ocho de Mella</i> (N-S-B) received the status of School Farms with a Landscape Approach.</p> <p>Producers were trained and worked on the replication of good agroecological demonstration practices; and advisory and follow-up visits were made to the different activities, as well as exchanges of experiences between national and foreign producers in the management of biological corridors and productive linkage and local development undertakings.</p>	<p>pastoral systems, maintained the number of ha under agro-ecological management.</p>	
3.3 Maintenance of coffee areas under diverse shade	<p>30,000ha of coffee under shade in the target REDS</p>	<p>Maintenance of 30,000 hectares of shade-grown coffee</p>	<p>According to data from the PIR 2022, a total of 33,456.30 ha of coffee under shade have been accumulated in the Project's intervention areas.</p> <p>The monitoring of coffee shade, using the variables of temperature, luminosity, carbon sequestration and diversification of production, continues in 7 sustainable farms in the REDS N-S-B, with the objective of identifying the influence of diverse shade on coffee productivity.</p>	<p>The objective was achieved and the target surpassed.</p>	<p style="text-align: center;">4</p>

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

<p>3.4 Application of clean production practices in coffee and pig production units, with emphasis on those located in priority connectivity zones</p>	<p>-<u>Guaniguanico</u>: 7 coffee production units, of which 2 are ecological; <u>Guamuhaya</u>: 7 coffee production units, of which 4 are ecological; <u>Bamburanao</u>: 48 pig production units without clean production <u>NSB</u>: 149 coffee production units, of which 22 are ecological;</p>	<p>Demonstration units with clean technologies applied to swine production and coffee pulping units - <u>Guaniguanico</u>: 1 coffee production unit with clean production - <u>Guamuhaya</u>: 1 coffee production unit with clean production - <u>Bamburanao</u>: 5 of 48 swine production units with clean production, providing cooking gas that specifically benefits 25 women. - <u>NSB</u>: 1 coffee production unit with clean production.</p>	<p>The declared indicator was met, working throughout the period to maintain the Project's goal, with the three coffee demonstration units in the REDS Guaniguanico, Guamuhaya and NSB. In addition to the five swine units that continue to carry out clean production actions. production. 19 households in the community of <i>La Bomba</i> benefit from the use of biogas, for a total of 25 women.</p> <p>Considerable savings in energy and water consumption have been achieved, as well as the elimination of environmental pollutants, thus contributing to the clean production process.</p> <p>The installation of biodigesters at REDS Bamburanao allows the use of this renewable energy source for cooking, avoiding environmental pollution from these gases and saving energy carriers. Solid pollutants are eliminated, improving the quality of life of the inhabitants.</p>	<p>The objective was achieved in the three coffee demonstration units with clean production, in the REDS Guaniguanico, Guamuhaya and NSB; and in the swine production units with clean production in Bamburanao.</p>	
---	--	--	--	--	--

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

3.5 Number and area of fires in target REDS	<p>Annual average for 2011-13:</p> <ul style="list-style-type: none"> - Guaniguanico: 32 fires/year (affecting 873ha in total, average 28ha/event) - Guamuhaia: 4.7 fires/year (affecting 11.8ha in total, 2.5ha/event) - Bamburanao: 0.7 fires/year (affecting 0.83ha in total, 1.25ha/event) - NSB: 20 fires/year (affecting 1,554ha in total, 76ha/event) 	<p>Annual average for the end of the project:</p> <ul style="list-style-type: none"> - <u>Guaniguanico</u>: 27 fires/year, affecting 785ha in total, with an average of 25ha/event (10% reduction in frequency and extent of fire/fire). - <u>Guamuhaia</u>: 3.2 fires/year, affecting 9.8ha in total, with an average of 2.0ha/event (15% reduction in the frequency and extent of fires). - <u>Bamburanao</u>: 0.6 fires/year, affecting 0.7 ha in total, with an average of 1.1 ha/event (15% reduction in the frequency and extent of fires). - <u>NSB</u>: 18 fires/year, affecting 1,400 ha in total, with an average of 69 ha/event (10% reduction in the frequency and extent of fires). 	<p>During the years of the Project, the average number of forest fires decreased, reaching values well below those identified in the baseline. There has been a decrease of more than 15% in relation to the final objective of forest fires and the number of hectares affected. This is the result of the work carried out by the Forest Ranger Corps (CGB) in conjunction with the Project, through training and environmental education activities carried out in different scenarios, involving children from different educational levels, in communities and circles of interest in schools, producers, farmers, specialists and technicians from protected areas and companies in the agricultural and livestock sector.</p> <p>This demonstrates that the CGB has been successful through the surveillance and protection plans in the CGB circuits, in support of the Early Warning System (EWS) against fires.</p> <p>At the end of the Project the average was as follows:</p> <p>Guaniguanico: 12.42 forest fires. (347.34 ha affected).</p> <p>Guamuhaia: 2.57 forest fires (14.47 ha affected). (14.47 ha affected)</p> <p>Bamburanao: 0 forest fires (0.0 ha affected)</p> <p>NSB: 13.57 forest fires (521.22 ha affected)</p>	<p>The objective was achieved and the targets exceeded. The four REDS achieved the planned goal in terms of number of forest fires and area affected, and even reduced it by 15% compared to plan.</p> <p>The ET recognizes the work of the CGB and urges continued training and involvement of the communities and the state and non-state sectors in order to continue reducing the number and area of forest fires.</p>	4
--	--	--	--	--	----------

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

3.6 Number of illegal activities registered per unit time of Forest Guard Corps patrols affecting the environment in the target areas	Illegal activity recorded by REDs (2015) <u>Guaniguanico</u> 197 penalty illegal activity <u>Guamuhaya</u> 1687 penalty illegal activity <u>Bamburanao</u> 1817 penalty illegal activity <u>N-S-B</u> 3324 penalty illegal activity	Reduction of at least 40% in the number of illegal activities recorded per unit of time, reflecting improved effectiveness of the Forest Guard Corps, improved coordination and synergies between institutions and increased participation of local communities and their organizations.	<p>In relation to the final objective of the Project, the behavior has been to reduce illegalities in all the REDS, in relation to the previous year.</p> <p>In this regard, it is important to highlight the monitoring and control actions and the environmental education work carried out by the Forest Guard Corps. The latter is supported by the Project in environmental education activities, talks and the important work carried out in the communities.</p>	The objective was achieved in spite of the illegalities recorded. Vigilance is being maintained.	4
3.7 Number of families in the REDS that receives an incentive >25% from FONADEF for applying environmentally friendly production systems and that have access to the soil improvement and conservation program of soil improvement and conservation.	Families working in integral forest farms are typically only compensates for around 10-15% of their investments in environmentally friendly production systems.	40 families (10 of them led by women) working in the 40 integral forest farms to be targeted by the Project recover no less than 30% of the farm expenses they incur for landscape management by increasing forest cover with native species (targets in farms affected by the replication effect are yet to be determined).	<p>The 40 farms have recovered 100% of their expenses, and have also received a bonus of up to 30% through the Forestry Development Fund (FONADEF), with the different reforestation and conservation actions carried out annually.</p> <p>These farms have also had access to soil conservation funds. All of this benefits their production.</p>	The objective was satisfactorily achieved, and all the families recovered the incentive income through the activities financed by FONADEF and the improvement of the land.	4

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

3.8 Increase of direct beneficiaries of the project who are women	Baseline to be determined at startup	At least 40% of all Project beneficiaries (of goods and services provided by forests, agroforestry systems and silvo pastoral systems, incentives provided by FONADEF and the availability of cooking gas in swine production units) are women.	Fifty-nine percent of the women receive benefits from the project, both in terms of training, the provision of resources and the incentives available for the financial mechanisms of the agricultural sector. By increasing their production, women have supported COVID-19 by contributing their surpluses. They play an important role in the preservation of biodiversity and ensure food sovereignty and security through the production of healthy food, for which they received incentives. Women increased their visibility both in the territories and at the national and international levels, and women's empowerment has been more tangible: - The <i>Finca Escuela</i> with Landscape Approach was declared La Caléndula represented by a woman. REDS Candelaria Municipality of Guaniguanico; <i>Artemisa</i> province. - The work of the women entrepreneurs was widely publicized in the media, recognizing their work in the project. - Training on cleaner production and use of biogas, resilience and climate change in the agricultural sectors, Ecosystem-based Adaptation (EbA) and implementation of EbA measures in agriculture. - Delivery of a motor pump for waste and sustainable consumption, kitchen utensils for the use of biogas, which guarantees food and energy sovereignty with more science in the Finca Las Margaritas Municipality of Florencia.	The objective was achieved and the target surpassed by 15% of the proposed amount, with a total of 689 women being directly benefited, which represents 59% of the total direct beneficiaries. This contributed to an increase in the quality of life of women and their families, their empowerment and gender equity.	4
--	--------------------------------------	---	---	--	----------

Criteria for target achievement	Rating
Target not expected to be met I	1
Expected to reach the target, but out of schedule.	2
Expected to reach the target in the scheduled time.	3
Expected to reach in excess the target in the schedule time, or it was already met.	4

ANNEX B. ToR of the contract for the TE

1. INTRODUCCIÓN

De acuerdo con las políticas y los procedimientos de SyE del PNUD y del FMAM, todos los proyectos de tamaño mediano y ordinarios respaldados por el PNUD y financiados por el FMAM deben someterse a una evaluación final una vez finalizada la ejecución. Estos términos de referencia (TdR) establecen las expectativas de una evaluación final de un proyecto ordinario titulado *Proyecto PNUD/GEF "Un enfoque paisajístico para la conservación de los ecosistemas montañosos amenazados (Conectando Paisajes)."*, PIMS 4716 implementado a través de *Agencia de Medio Ambiente*. El proyecto comenzó en la 11 de diciembre del 2014 y está en su 8 año de implementación. La evaluación final se realizará según se establece en la "Guía para realizar evaluaciones terminales de proyectos respaldados por el PNUD y financiados por el FMAM" (http://web.undp.org/evaluation/guideline/documents/GEF/TE_GuidanceforUNDP-supportedGEF-financedProjects.pdf)

2. ANTECEDENTES Y CONTEXTO DEL PROYECTO

Generalidades

El proyecto se diseñó para lograr un cambio de paradigma en la conservación de la biodiversidad y gestión de áreas protegidas en Cuba, desde un enfoque de sitio específico a un enfoque de paisaje que integre las áreas protegidas y sus áreas de influencia. Esto es necesario a fin de proteger los refugios núcleos para la biodiversidad, manejando la fragmentación como un todo, incluyendo la provocada por las prácticas productivas en el paisaje, y minimizando las amenazas tales como incendios y la contaminación que tienen sus orígenes en las prácticas usuales empleadas en el sector productivo. Por lo tanto, el estratégico enfoque paisaje apoyado a través de este proyecto constituirá un enfoque novedoso que contribuirá a fortalecer la efectividad de gestión del Sistema Nacional de Áreas Protegidas. Se trabajará a través de gradientes altitudinales, desde la cima hasta la base de la montaña, a fin de mantener la conectividad funcional. El proyecto es una combinación de los enfoques SO1 y SO2¹¹, para fortalecer la gestión de las Áreas Protegidas, ampliar su cobertura nacional y garantizar la compatibilidad de la gestión de AP con la conservación del BD en los sectores productivos y paisajes.

Objetivos y principales resultados deseados.

Objetivos del Proyecto: Protección efectiva de la biodiversidad contra amenazas actuales y futuras en paisajes de montaña, desde la cima hasta la costa.

Para alcanzar los resultados deseados, el Proyecto quedó estructurado en tres Componentes (Resultados, Outcomes), cada una con sus correspondientes Salidas (Output). A continuación, se destacan solamente los aspectos esenciales de cada una de ellas, según su diseño, en el momento de formular el Proyecto. En la Parte I, en la sección del Documento de Proyecto dedicada a la Estrategia esos aspectos aparecen suficientemente ampliados.

Componente 1: Marco sistémico para la gestión con enfoque paisajístico

Las actividades de este componente estarían centradas en hacer operativas a las REDS (que comprende las áreas protegidas y los paisajes que las rodean), a través del establecimiento de un marco institucional de apoyo, estructuras para la toma eficiente de decisiones y mecanismos participativos de las comunidades en la gestión sostenible de los recursos naturales.

Componente 2: Manejo efectivo de las AP prioritarias dentro del contexto de los paisajes frágiles de montañas

La existencia de áreas protegidas con buen funcionamiento es un elemento medular del modelo a ser promovido por el proyecto. Estas actuarán como refugio principal para las meta-poblaciones de especies de alta prioridad de conservación global, desde y entre las cuales, las especies puedan migrar e interactuar a través del paisaje en su conjunto, aprovechando el aumento de la hospitalidad y la conectividad del paisaje que resultarán de las intervenciones del proyecto en virtud de los componentes 1 y 3.

Componente 3: Sistemas productivos en ecosistemas montañosos amenazados y corredores de la cima a la costa compatibles con la conservación de la BD.

El apoyo que brindará el proyecto en el marco de este componente se centrará en los 4 macizos de interés, específicamente, en las áreas incluidas dentro de las "redes de conectividad ecológica".

El proyecto resultará en una tasa de reforestación de 4,000 hectáreas por año en estas áreas objetivo, durante su periodo de ejecución (incluyendo sistemas agroforestales, cortinas rompe viento, Fincas Forestales Integrales y fajas hidro reguladoras), apoyado por el esquema de incentivos del Fondo Nacional para el Desarrollo Forestal (FONADEF). Este fondo ya establecido por largo tiempo y que funciona efectivamente, es manejado por el Servicio Estatal Forestal. Los programas de incentivos gubernamentales, como FONADEF, en Cuba constituyen una fuente muy confiable de financiamiento a largo plazo de los productores.

Áreas de intervención

El proyecto está centrado en cuatro ecosistemas montañosos amenazados de los cinco principales macizos montañosos existente en el país, considerados legalmente como Regiones Especiales de Desarrollo Sostenible (REDS) y gestionados por los Órganos de Montaña. Tiene un alcance nacional, abarca un 13% del país, con un total de 9 provincias y 35 municipios donde reside un 8% del total de la población cubana (878,842 personas), aproximadamente.

En sus áreas de intervención se encuentran 6 de las cuencas hidrográficas de interés nacional, entre las 11 existentes en el país; 25,2 % de las áreas boscosas naturales, 70% de especies endémicas y el 55% de plantaciones de café y cacao.

En correspondencia con su estructura, dentro del área de intervención se localizan los sitios específicos que, de acuerdo con la naturaleza de las actividades que realizan, tributan al cumplimiento de los objetivos del Proyecto (Áreas Protegidas, Sectores productivos, Fincas Forestales Integrales, Fincas y Unidades Demostrativas).

ARREGLOS INSTITUCIONALES

Los arreglos institucionales están basados en la estructura organizativa del Proyecto, según lo previsto en su diseño. A continuación quedan resumidos en el siguiente esquema:

Comité Ejecutivo del Proyecto

Copresidentes: CITMA, MINCEX, PNUD

Otros miembros: Ministerio de la Agricultura, Instituto de Planificación Física

Unidad de Implementación:

- Unidad de Coordinación
 Dirección General: IES
 Coordinador Técnico: IES
 Coordinadores Nacionales: IES, CNAP, INAF, DFFFS

 Jefes de Componentes: 1, 2, 3
 Coordinadores regionales: (Jefes de Macizos y Coordinadores Provinciales)

Equipos Técnicos Locales: (entidades locales)

- Junta Directiva del Proyecto

La ejecución del proyecto se lleva a cabo bajo la dirección general de la Junta Directiva del Proyecto. Esta Junta es responsable de la aprobación de los planes anuales operativos (POA), de los Reportes de Implementación del Proyecto (PIR) anuales, de los términos de referencia y los nombramientos de los miembros de personal clave, así como de otras decisiones que se acuerda sean de su competencia (por ejemplo, uso de recursos financieros del Proyecto para la capacitación de personal o asistencia a eventos en el exterior del país). Tiene conocimiento y aprueba los ajustes al presupuesto por no ejecución oportuna u otras desviaciones. Está integrado por representantes de CITMA, MINCEX, el PNUD, el MINAG y el IPF. Esta Junta se ha reunido como mínimo dos veces al año. (Como consta en las correspondientes relatorías).

Esta entidad del Proyecto ha contribuido a instrumentar acciones de carácter interministerial y a lo interno de aquellos en que están representados por más de una institución, como es el caso del MINAG.

3. PROPÓSITO DE LA EVALUACIÓN FINAL

En el informe de la evaluación final se valorará el logro de los resultados del proyecto con respecto a lo que se esperaba lograr, y se extraerán lecciones que puedan mejorar la sostenibilidad de los beneficios de este proyecto, así como ayudar a mejorar la programación general del PNUD. El informe de la evaluación final promueve la rendición de cuentas y la transparencia, y evalúa el alcance de los logros del proyecto.

4. ENFOQUE Y MÉTODO DE LA EVALUACIÓN TERMINAL

La evaluación debe proporcionar información empírica que sea creíble, confiable y útil.

El equipo de la evaluación final examinará todas las fuentes de información pertinentes, incluidos los documentos elaborados durante la fase de preparación (es decir, el FIP, el Plan de iniciación del PNUD, el SESP del PNUD) el documento del proyecto, los informes del proyecto, incluidos los IEP anuales, las revisiones del presupuesto del proyecto, los informes de lecciones aprendidas, los documentos estratégicos y jurídicos nacionales y cualquier otro material que el equipo considere útil para esta evaluación con base empírica. El equipo de la evaluación final revisará los indicadores básicos/herramientas de seguimiento de referencia y de mitad de período del área focal del FMAM presentados al FMAM en las fases de aprobación del CEO y de mitad de período, y los indicadores básicos/herramientas de seguimiento finales que deben completarse antes de que comience la misión sobre el terreno de la evaluación final.

Se espera que el equipo de la evaluación final acoja un enfoque participativo y consultivo que garantice una estrecha colaboración con el equipo del proyecto, las contrapartes gubernamentales (el Punto focal operativo del FMAM), los asociados en la ejecución, las oficinas del PNUD en el país, el Asesor Técnico Regional, los beneficiarios directos y otras partes interesadas.

El compromiso de los interesados es fundamental para el éxito de la evaluación final. La participación de las partes interesadas debe incluir entrevistas con los interesados que tengan responsabilidades en el proyecto, incluidas, entre otras, *Ministerio de Ciencia, Tecnología y Medio Ambiente (CITMA), Agencia de Medio Ambiente (AMA), que pertenece al CITMA, Instituto de Ecología y Sistemática (IES), Ministerio de la Agricultura (MINAGRI), Gobierno Local y actores clave involucrados en el proyecto en las provincias: Artemisa, Pinar del Río, Sancti Spíritus, Villa Clara, Ciego de Ávila, Holguín, Santiago de Cuba y Guantánamo*, organismos de ejecución, altos funcionarios y jefes de equipo de tareas/componentes, expertos y consultores clave en el área temática, Junta del proyecto, beneficiarios del proyecto, el sector académico, el Gobierno y OSC locales, etc. Además, se espera que el equipo de la evaluación final lleve a cabo misiones sobre el terreno en las 4 Regiones Especiales de Desarrollo Sostenible Guaniguanico, Guamuhaya, Bamburanao, Nipe Sagua Baracoa, incluidos los siguientes sitios de proyecto:

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

REDS Guaniguanico

Sitio intervención	Localización	Sector
Hotel Soroa - comunidad	Candelaria, Artemisa	Turismo-Fincas-Comunidad Gestión del Corredor Biológico. Encadenamientos productivos
Vivero Forestal La Jagua	La Palma, Pinar del Río	Agroforestal
Finca El Caimito	La Palma, Pinar del Río	Agroforestal
Circuito CGB La Palma	La Palma, Pinar del Río	Cuerpo de Guardabosques CGB
APRM Mil Cumbres	La Palma, Pinar del Río	Área Protegida

REDS Guamuhaya

Sitio intervención	Localización	Sector
Finca de Semilla de café	Mayarí Cumanayagua, Cienfuegos	Cafetalero
Finca Guayaba, UBPC La Herradura	Manicaragua, Villa Clara	Agroforestal
Paisaje Natural protegido Hanabanilla	Manicaragua, Villa Clara	Área Protegida

REDS Bamburanao

Sitio intervención	Localización	Sector
Finca La poderosa	Buenavista, Remedios, Villa Clara	Agroforestal
Finca Zarza Gorda	Yaguajay, Sancti Spíritus	Porcino
Finca La Espinita (Sinergia con BASAL)	Yaguajay, Sancti Spíritus	Agrosilvopastoril
Comunidad Rincón de Mabuya	Chambas, Ciego de Ávila	Agrosilvopastoril

REDS Nipe Sagua Baracoa

Sitio intervención	Localización	Sector
Vivero tecnificado Pinares de Mayarí	Mayarí, Holguín	Agroforestal
Circuito CGB Mayarí	Mayarí, Holguín	Cuerpo de Guardabosques CGB

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

Finca El Guisaso	II Frente, Santiago de Cuba	Silvopastoril. Finca Escuela
Finca La Corolina	II Frente, Santiago de Cuba	Agroforestal (Sombra del Café)
Parque Nacional Alejandro de Humboldt	Baracoa, Guantánamo	Área Protegida
Corredor Biológico Local Cuenca Mata	Baracoa, Guantánamo	Gobernabilidad y Tarea Vida
Vivero tecnificado Paso Cuba	Baracoa, Guantánamo	Agroforestal

El diseño y la metodología específicos de la evaluación final deben surgir de las consultas entre el equipo de la evaluación final y las partes antes mencionadas sobre lo que sea apropiado y factible para cumplir el propósito y los objetivos de la evaluación final y responder a las preguntas de evaluación, dadas las limitaciones de presupuesto, tiempo y datos. No obstante, el equipo de la evaluación final debe utilizar metodologías e instrumentos sensibles al género y garantizar que la igualdad de género y el empoderamiento de las mujeres, así como otras cuestiones intersectoriales y los ODS, se incorporen en el informe de la evaluación final.

El enfoque metodológico final, que incluye el calendario de entrevistas, las visitas sobre el terreno y los datos que se utilizarán en la evaluación, debería esbozarse claramente en el informe inicial de la evaluación final, y el PNUD, las partes interesadas y el equipo de la evaluación final deberían debatirlo y ponerse plenamente de acuerdo acerca de este.

El informe final debe describir plenamente el enfoque de evaluación final adoptado y la justificación de dicho enfoque, haciendo explícitos los supuestos, desafíos, fortalezas y debilidades subyacentes sobre los métodos y el enfoque de la evaluación. El informe final debe ser entregado en idioma español e inglés.

5. ALCANCE DETALLADO DE LA EVALUACIÓN FINAL

La evaluación final evaluará el desempeño del proyecto en función de las expectativas establecidas en el Marco lógico/Marco de resultados del proyecto (consultar el anexo A de los TdR). La evaluación final evaluará los resultados de acuerdo con los criterios descritos en la Guía de evaluaciones finales para proyectos respaldados por el PNUD con financiación del FMAM (http://web.undp.org/evaluation/guideline/documents/GEF/TE_GuidanceforUNDP-supportedGEF-financedProjects.pdf). La sección de Conclusiones del informe de la evaluación final cubrirá los temas que se enumeran a continuación.

En el anexo C del TdR se presenta un resumen completo del contenido del informe de la evaluación final

El asterisco “(*)” indica los criterios para los que se requiere una clasificación.

Conclusiones

i. Diseño/formulación del proyecto

- Prioridades nacionales e impulso del país
- Teoría del cambio
- Igualdad de género y empoderamiento de las mujeres
- Salvaguardias sociales y ambientales
- Análisis del Marco de Resultados: lógica y estrategia del proyecto, indicadores
- Supuestos y riesgos
- Lecciones de otros proyectos pertinentes (p. ej., la misma área focal) incorporadas en el diseño del proyecto
- Participación prevista de las partes interesadas

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

- Vínculos entre el proyecto y otras intervenciones dentro del sector
- Disposiciones de gestión

ii. Ejecución del proyecto

- Gestión adaptativa (cambios en el diseño y los productos del proyecto durante la ejecución)
- Participación real de las partes interesadas y disposiciones de asociación
- Financiación y cofinanciación de proyectos
- Seguimiento y evaluación: diseño inicial (*), implementación (*), evaluación general del SyE (*)
- Organismo de implementación (PNUD) (*) y Organismo de ejecución (*), supervisión/implementación y ejecución generales del proyecto (*)
- Gestión de riesgos, incluidos los Estándares sociales y ambientales

iii. Resultados del proyecto

- El informe de la evaluación final debe evaluar de manera individual la consecución de los resultados de cara a los indicadores, e informar sobre el nivel de progreso de cada indicador de objetivo y resultado en el momento de la evaluación final, al tiempo que señala los logros finales.
- Pertinencia (*), efectividad (*), eficiencia (*) y resultado general del proyecto (*)
- Sostenibilidad: económica(*), sociopolítica(*), de marco institucional y gobernanza(*), ambiental(*), probabilidad general de sostenibilidad(*)
- Implicación nacional
- Igualdad de género y empoderamiento de las mujeres
- Cuestiones transversales (reducción de la pobreza, mejora de la gobernanza, mitigación y adaptación al cambio climático, prevención y recuperación de desastres, derechos humanos, desarrollo de la capacidad, cooperación Sur-Sur, gestión del conocimiento, voluntariado, etc., según corresponda)
- Adicionalidad del FMAM
- Función catalizadora/efecto de replicación
- Progreso hacia el impacto

Principales constataciones, conclusiones, recomendaciones, lecciones aprendidas

- El equipo de la evaluación final incluirá un resumen de las principales conclusiones del informe de la evaluación final. Las conclusiones deben presentarse como declaraciones de hecho basadas en el análisis de los datos.
- La sección sobre las conclusiones se redactará a partir de los resultados. Las conclusiones deben ser declaraciones completas y equilibradas que estén bien fundamentadas por la evidencia y lógicamente relacionadas con las constataciones de la evaluación final. Deben destacar los puntos fuertes, las debilidades y los resultados del proyecto, responder a preguntas clave de evaluación y proporcionar información sobre la identificación y/o soluciones de problemas o cuestiones importantes pertinentes a los beneficiarios del proyecto, el PNUD y el FMAM, incluidas cuestiones relacionadas con la igualdad de género y el empoderamiento de las mujeres.
- Las recomendaciones deben ofrecer recomendaciones concretas, prácticas, factibles y específicas dirigidas a los usuarios previstos de la evaluación sobre las medidas que deben adoptarse y las decisiones que deben tomarse. Las recomendaciones deberían estar específicamente respaldadas por las pruebas y vinculadas con las constataciones y conclusiones en torno a las cuestiones clave abordadas en la evaluación.
- El informe de la evaluación final también debe incluir lecciones que puedan tomarse de la evaluación, incluidas las mejores y peores prácticas para abordar cuestiones relacionadas con la pertinencia, el

desempeño y el éxito, que puedan proporcionar conocimientos obtenidos de la circunstancia particular (métodos de programación y evaluación utilizados, asociaciones, apalancamiento financiero, etc.) Esto se aplica a otras intervenciones del FMAM y del PNUD. Cuando sea posible, el equipo de la evaluación final debe incluir ejemplos de buenas prácticas en el diseño y la implementación de proyectos.

- Es importante que las conclusiones, recomendaciones y lecciones aprendidas del informe de la evaluación final incluyan resultados relacionados con la igualdad de género y el empoderamiento de las mujeres.

El informe de la evaluación final contará con una tabla de valoraciones de evaluación, como se muestra a continuación:

Tabla 2 de los Términos de Referencia: Tabla de valoraciones de evaluación de (Un enfoque paisajístico para la conservación de los ecosistemas montañosos amenazados (Conectando Paisajes).”, PIMS 4716)

Seguimiento y evaluación (SyE)	Calificación ¹²
Diseño de SyE al inicio	
Implementación del Plan de SyE	
Calidad general de SyE	
Implementación y ejecución	Calificación
Calidad de la implementación/supervisión del PNUD	
Calidad de la ejecución del asociado en la ejecución	
Calidad general de la implementación/ejecución	
Evaluación de resultados	Calificación
Pertinencia	
Efectividad	
Eficiencia	
Valoración de los resultados generales del proyecto	
Sostenibilidad	Calificación
Recursos financieros	
Sociopolítica	
Marco institucional y gobernanza	
Medioambiental	
Probabilidad general de sostenibilidad	

6. CRONOGRAMA

¹² Los resultados, la efectividad, la eficiencia, el SyE, la ejecución de lyE y la relevancia se clasifican en una escala de 6 puntos: 6 = Altamente satisfactorio (AS), 5 = Satisfactorio (S), 4 = Moderadamente satisfactorio (MS), 3 = Moderadamente insatisfactorio (MI), 2 = Insatisfactorio (I), 1 = Altamente insatisfactorio (AI). La sostenibilidad se clasifica en una escala de 4 puntos: 4 = Probable (P), 3 = Moderadamente probable (MP), 2 = Moderadamente improbable (MI), 1 = Improbable (I)

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

La duración total de la evaluación final será de aproximadamente 39 días durante un período de 16 semanas a partir del 20 de Junio. El cronograma tentativo de evaluación final es el siguiente:

Cronograma	Actividad
15 junio 2022	Cierre del plazo de solicitud.
20 junio 2022	Selección del equipo de la evaluación final.
20 de septiembre 2022	Período de preparación del equipo de la evaluación final (entrega de documentos).
21 - 23 de septiembre 2022 (3 días)	Preparación de documentos del informe inicial (español e inglés) de la evaluación final.
26 - 27 de septiembre (2 días)	Finalización y validación del informe inicial de la evaluación final; inicio tardío de la misión de la evaluación final.
28 septiembre – 6 octubre 2022 (12 días)	Misión de la evaluación final: reuniones con las partes interesadas, entrevistas, visitas sobre el terreno, etc.
7 octubre 2022	Reunión de recapitulación de la misión y presentación de las constataciones iniciales; finalización más temprana de la misión de la evaluación final.
10 – 25 octubre 2022 (12 días)	Preparación del proyecto de informe de evaluación final.
26 octubre – 8 noviembre 2022 (10 días)	Distribución del proyecto de informe de evaluación final para comentarios.
9 – 15 noviembre 2022 (5 días)	Incorporación de comentarios sobre el informe de la evaluación final del proyecto en el historial de auditoría y finalización del informe de la evaluación final.
16 – 24 noviembre 2022 (7 días)	Preparación y emisión de la respuesta del personal directivo.
25 noviembre 2022	Fecha prevista de finalización de la evaluación final.

Las opciones de visitas sobre el terreno deben proporcionarse en el informe inicial de la evaluación final.

7. RESULTADOS CONCRETOS DE LA EVALUACIÓN FINAL

N.º	Resultado esperado	Descripción	Plazo	Responsabilidades
1	Informe inicial de la evaluación final	El equipo de la evaluación final aclara los objetivos, la metodología y el plazo de la evaluación final	A más tardar 2 semanas antes de la misión de la evaluación final: (27 de septiembre 2022)	El equipo de la evaluación final envía el informe inicial a la unidad encargada y a la dirección del proyecto
2	Presentación	Constataciones iniciales	Finalización de la misión de la evaluación final: (7 de octubre 2022)	El equipo de la evaluación final presenta a la unidad encargada y a la dirección del proyecto

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

3	Proyecto de informe de evaluación final	Proyecto del informe completo <i>(usando las directrices sobre el contenido del informe del anexo C de los TdR)</i> con anexos	En un plazo de 2 semanas desde el final de la misión de la evaluación final: <i>(26 octubre 2022)</i>	El equipo de la evaluación final envía a la unidad encargada; con revisión del ATR de la DPAP-FMAM, la Unidad de Coordinación de Proyectos, el Punto focal operativo del FMAM
5	Informe final de la evaluación final* + Historial de auditoría	Informe final e historial de auditoría de evaluación final, en que la evaluación final detalla cómo se han (o no se han) abordado todos los comentarios recibidos en el informe final de evaluación final <i>(consultar la plantilla en el anexo H de los TdR)</i>	En el plazo de 2 semanas a partir de la recepción de comentarios sobre el proyecto de informe: <i>(16 noviembre 2022)</i>	El equipo de la evaluación final envía ambos documentos a la unidad encargada

*La calidad de todos los informes finales de la evaluación final será evaluada por la Oficina de Evaluación Independiente (OEI) del PNUD. La información sobre la evaluación de la calidad de las valoraciones descentralizadas realizada por la OEI se encuentra en la sección 6 de las Directrices de Evaluación del PNUD.¹³

8. DISPOSICIONES DE LA EVALUACIÓN FINAL

La principal responsabilidad de la gestión de la evaluación final recae en la unidad encargada. La unidad encargada de la evaluación final de este proyecto es la *Oficina de País del PNUD en Cuba*.

La *Oficina de País del PNUD en Cuba* contratará a los evaluadores y garantizará al equipo de la evaluación final la oportuna provisión de dietas y arreglos de viaje dentro del país. El equipo del proyecto será responsable de establecer contactos con el equipo de la evaluación final para suministrar todos los documentos pertinentes, organizar entrevistas con los interesados y visitas sobre el terreno.

9. COMPOSICIÓN DEL EQUIPO DE LA EVALUACIÓN FINAL

Un equipo de *tres evaluadores independientes* dirigirá la evaluación final: dos evaluadores internacionales uno con experiencia como jefe de equipo (con experiencia y contacto con proyectos y evaluaciones en otras regiones) y *un experto nacional*. El jefe del equipo será responsable del diseño general de la evaluación, del diseño de las entrevistas y la redacción del informe de la evaluación final, el segundo experto internacional estará evaluará las tendencias emergentes con respecto a los marcos normativos, las asignaciones presupuestarias, la creación de capacidad, trabajará con el equipo del proyecto en la elaboración del itinerario de la evaluación final y el experto nacional será el encargado de aportar al equipo evaluado aquellos temas del contexto nacional relevantes para el proyecto.

Los evaluadores no pueden haber participado en la preparación, formulación y/o ejecución del proyecto (incluida la redacción del documento del proyecto), no deben haber realizado el examen de mitad de período de este proyecto, ni deben tener un conflicto de intereses con las actividades relacionadas con el proyecto.

¹³ Disponible en: <http://web.undp.org/evaluation/guideline/section-6.shtml>

La selección de evaluadores tendrá como objetivo maximizar las cualidades generales del "equipo" en las áreas que se indican a continuación:

Competencias del Jefe del equipo (Team Leader):

Educación

- Grado superior en Ciencias de la Tierra, biología, agronomía, forestales u otro campo estrechamente relacionado;

Experiencia

- Experiencia pertinente con metodologías de evaluación de la gestión basada en los resultados;
- Experiencia en la aplicación de indicadores del tipo SMART y en la reconstrucción o validación de escenarios de referencia;
- Competencia en la gestión adaptativa, tal como se aplica en *el área focal de Biodiversidad del FMAM*
- Experiencia en la evaluación de al menos 3 proyectos y en al menos uno como Team Leader
- Experiencia trabajando en *América Latina y el Caribe*
- Experiencia de al menos **10 años** en áreas técnicas pertinentes
- Comprensión demostrada de las cuestiones relacionadas con el género área focal de Biodiversidad del FMAM y experiencia en evaluación y análisis con perspectiva de género
- Excelentes aptitudes de comunicación
- Aptitudes analíticas demostrables
- La experiencia de evaluación/examen de proyectos dentro del sistema de las Naciones Unidas constituye una ventaja

Idioma

- Fluidez en inglés escrito y hablado.

Competencias del experto internacional:

- Experiencia pertinente con metodologías de evaluación de la gestión basada en los resultados;
- Experiencia en la aplicación de indicadores del tipo SMART y en la reconstrucción o validación de escenarios de referencia;
- Competencia en la gestión adaptativa, tal como se aplica en el área focal de Biodiversidad del FMAM
- Experiencia en la evaluación de proyectos
- Experiencia trabajando en *América Latina y el Caribe*
- Experiencia de al menos **5 años** en áreas técnicas pertinentes
- Comprensión demostrada de las cuestiones relacionadas con el género dentro del área focal de Biodiversidad del FMAM y experiencia en evaluación y análisis con perspectiva de género
- Excelentes aptitudes de comunicación
- Aptitudes analíticas demostrables
- La experiencia de evaluación/examen de proyectos dentro del sistema de las Naciones Unidas constituye una ventaja

Competencias del consultor nacional:

- Máster en Ciencias Ambientales, sociales, o campos relacionados.
- 5 años de experiencia de trabajo en gestión de recursos naturales, políticas ambientales públicas, corredores biológicos, temas de género, sociales y comunitarios, o campos relacionados.

- Conocimiento demostrable de las políticas públicas en Cuba, y del marco regulatorio e institucional en el sector ambiental.
- Conocimiento del PNUD y el GEF, en particular sobre los procedimientos para la implementación y evaluación de los proyectos.
- Experiencia de trabajo como evaluador de proyectos PNUD/GEF, demostrada mediante 1 ejercicio de evaluación desarrollado, se considera un valor añadido.
- Experiencia aplicando indicadores SMART y reconstruyendo o validando escenarios de línea base.
- Comunicación óptima en español.
- Habilidades analíticas demostradas.

10. ÉTICA DEL EVALUADOR

El equipo de la evaluación final deberá apegarse a los más altos estándares éticos, y se exige que firme un código de conducta al aceptar el encargo. Esta evaluación se llevará a cabo de conformidad con los principios esbozados en las “Directrices éticas para evaluaciones” del UNEG. El evaluador debe proteger los derechos y la confidencialidad de los proveedores de información, los entrevistados y las partes interesadas mediante medidas que garanticen el cumplimiento de los códigos jurídicos y de otro tipo pertinentes que rigen la recopilación de datos y la presentación de informes sobre estos. El evaluador también debe garantizar la seguridad de la información recopilada antes y después de la evaluación, así como de los protocolos que garantizan el anonimato y la confidencialidad de las fuentes de información cuando esté previsto. Los conocimientos y datos de información reunidos en el proceso de evaluación también deben utilizarse exclusivamente para la evaluación y no para otros usos sin la autorización expresa del PNUD y sus asociados.

11. CALENDARIO DE PAGOS

- 50% del total, a la entrega satisfactoria del Informe de Inicio de la evaluación al PNUD Cuba versiones en español e inglés.
- 50% del total a la entrega y aceptación del Informe Final y su aprobación por parte del Asesor Técnico Regional del PNUD (a la firma del formulario de Aprobación – Anexo G), y a la entrega del Audit Trail completado (Anexo H).

Criterios para la emisión del pago final del 50 %¹⁴

- El informe final de evaluación final incluye todos los requisitos descritos en los TdR de la evaluación final y se ajusta a las directrices de la evaluación final. El informe final de evaluación final está escrito con claridad, está organizado lógicamente y es específico de este proyecto (es decir, el texto no ha sido cortado y pegado de otros informes de evaluación final). El historial de auditoría incluye respuestas y justificación de cada comentario enumerado.

ANNEX C. TE Mission itinerary and list of persons interviewed

Week 1 (Tuesday, October 11 – Friday, October 14)

#	Name and surname	Position	Institution
Day 1 (October 11)			
1	Odalys Goicochea Cardos	Director	Dirección de Medio Ambiente, CITMA
2	Pedro Ruiz Hernández	Specialist	Dirección Relaciones Internacionales, CITMA
3	Mailyvis Ynouye Francés	Environmental Protection Specialist	Cuerpo de Guardabosques
4	Daimar Cánovas González	Director	Instituto de Ecología y Sistemática (IES)
5	Edelmira Castro Blanco	Chief of Component 3	Instituto de Ecología y Sistemática (IES)
6	Antonio Guzmán Torres	Vice principal	Dirección Forestal, Flora y Fauna Silvestre
7	Elexis Legrá Calderín,	Director	Café, Cacao y Coco Grupo Agroforestal
Day 2 (October 12)			
8	Lázara Sotolongo Molina	Project Director	Instituto de Ecología y Sistemática (IES)
9	Yoana Pérez Yahima García Pérez	Financial manager Administration and logistics assistant	Instituto de Ecología y Sistemática (IES)
10	Maritza García	President	Agencia de Medio Ambiente, AMA
11	Freddy Morales Rutiña	Technical Coordinator and Chief of Component 1	Instituto de Ecología y Sistemática (IES)
12	Betina Neyra Raola	Chief of Component 2	Instituto de Ecología y Sistemática (IES)
13	Sergio Sigarreta Vilches	Holguin Coordinator	Centro de Estudios Ambientales (CISAT), Holguín
14	Wilder Carmenates	Director	Centro de Estudios Ambientales (CISAT), Holguín
15	Yoirá Rivera Queralta	REDS Coordinator	Centro Oriental de Ecosistemas y Biodiversidad (BIOECO), Santiago de Cuba Servicio Estatal Forestal, II Frente Finca Silvopastoril El Guisaso
	Adonis Martínez Nieves	Chief	
	Manuel Cereijo Olivares	Farmer	
Day 3 (October 14)			
16	Lelieth Feyobe Zandoval	REDS Coordinator	Artemisa Government
17	Rubén Montano García	Administrator	PA Loma el Mogote de Soroa
18	Eloisa Bocourt Vigil	Producer	Local government

Week 2 (Monday, October 17 – Friday, October 20)

#	Name and surname	Position	Institution
Day 4 (October 17)			
19	Marelis Sedeño Cardoso	President	Asamblea Municipal Poder Popular, Sancti S.

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

20	Arnaldo Heriberto Rojas	Producer	Finca Porcina Zarza Gorda
21	Leonor Méndez Herrera Osmany Ceballo Meléndez	REDS Coordinator Bamburanao Coordinator Sancti Spíritus	Delegación del CITMA, Sancti Spíritus Delegación del CITMA, Sancti Spíritus
22	María del C. Olivero Isern	Ciego de Ávila Coordinator	Unidad de Medio Ambiente de la Delegación del CITMA, Ciego de Ávila
23	Idelsy Hernández Zambrano	REDS Coordinator	REDS Guamuhaya
24	Orelvis Pérez Garrido Modesto Robaina Pérez	Producer Chief	Finca agroforestal El Sijú UBPC La Herradura
25	Rebeca Vanegas Presno Annia Sánchez Paneque	Cienfuegos Coordinator Agroindustrial Specialist	Unidad de Medio Ambiente de la Delegación del CITMA, Cienfuegos Empresa Procesadora de Café de Cumanayagua, Cienfuegos
Day 5 (October 18)			
26	Augusto Martínez Omar Cantillo Ferreiro	National Coordinator CNAP Director	Centro Nacional de Áreas Protegidas (CNAP) Centro Nacional de Áreas Protegidas (CNAP)
27	Yolanis Rodríguez Gil	Coordinator	Instituto Nacional Agro Forestal
Day 6 (October 19)			
28	Alfredo Martínez Arteaga	Director	UNDP/FAO/UNEP/GEF Country Partnership Program for Sustainable Land Management
29	Eduardo Planos Gutiérrez	Director	3rd National Communication Project
Day 7 (October 21)			
30	Yohanis Sanchez	Technical coordinator	Resiliencia Costera Project

Week 3 (Monday October 24 and Tuesday October 25)

#	Name and surname	Position	Institution
Day 8 (October 24)			
31	Beatriz Crespín Oviedo	DOEI official.	Ministry of Foreign Trade (MINCEX9)
Day 9 (October 25)			
32	María Cruz	Regional Technical Advisory - ATR	Regional UNDP
33	Gricel Acosta María Rosa Moreno	Nature, Climate and Energy Monitoring Officer UNDP Monitoring Officer	UNDP Cuba
34	Johan Navarro Padrón Elizabeth Céspedes Miranda	Nature, Climate and Energy Program Analyst Associate of the Nature, Climate and Energy Program.	UNDP Cuba

ANNEX D List of documents reviewed

1. Project Identification Form (PIF)
2. UNDP Initiation Plan
3. Final UNDP-GEF Project Document with all annexes
4. CEO Endorsement Request
5. Inception Workshop Report
6. Updated Mid-Term Review report and management response to MTR recommendations
7. All Project Implementation Reports (PIRs)
8. Progress reports (quarterly, semi-annual or annual, with associated workplans and financial reports)
9. Oversight mission reports
10. Minutes of Project Board Meetings and of other meetings (i.e. Project Appraisal Committee meetings)
11. GEF Tracking Tools (from CEO Endorsement, midterm and terminal stages)
12. Financial data, including actual expenditures by project outcome, including management costs, and documents of all major budget revisions
13. and including documentation of any significant budget revisions
14. Co-financing data with expected and actual contributions broken down by type of co-financing, source, and whether the contribution is considered as investment mobilized or recurring expenditures
15. Audit reports
16. Electronic copies of project outputs (booklets, manuals, technical reports, articles, etc.)
17. Sample of project communications materials
18. Summary list of formal meetings, workshops, etc. held, with date, location, topic, and number of participants
19. List of contracts and procurement items over ~US\$5,000 (i.e. organizations or companies contracted for project outputs, etc., except in cases of confidential information)
20. List of related projects/initiatives contributing to project objectives approved/started after GEF project approval (i.e. any leveraged or “catalytic” results)
21. Data on relevant project website activity – e.g. number of unique visitors per month, number of page views, etc. over relevant time period, if available
22. List/map of project sites, highlighting suggested visits.
23. List and contact information for project staff, key project stakeholders, including members of the project Board, ATR, project team members, and other partners to consult
24. Concrete results of the project that offer documentary evidence of achievements with a view to project results. component heads
25. Resultados concretos del proyecto que ofrezcan pruebas documentales de logros con miras a resultados del proyecto. Jefes de componente

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

ANNEX E. Evaluation Question Matrix

Evaluation Criteria Questions	Indicators	Sources	Data collection method
Relevance: How does the project relate to the main objectives of the GEF focal area and to environment and development priorities at the local, regional and national levels?			
How does the Project support environmental priorities and development at the national level?	There is a tangible contribution of the Project to the State Plan for Coping with Climate Change (Life Task), the National Environmental Strategy and the Economic and Social Development Plan for 2030.	<ul style="list-style-type: none"> • State Plan for Confronting Climate Change. • National environmental strategy. • Economic and Social Development Plan to 2030. 	Document analysis. Interviews with project staff and stakeholders. Visits to the intervention areas, if the energy, climatic and epidemiological situation allows it.
To what extent has the Project been aligned with the UNDP Strategic Plan, the CPD, the UNDAF, the United Nations Sustainable Development Cooperation Framework (UNSDCF), the SDGs and the GEF strategic programming?	Level of coherence between the objective of the project and the results frameworks: with UNDAF, CPD, UNDAF, UNSDCF and the strategic programming of the GEF	<ul style="list-style-type: none"> • UNDP and GEF strategic documents • UNDP Officials • Regional Technical Advisor UNDP-GEF 	Document analysis. Interviews with project staff and stakeholders. Visits to the intervention areas, if the energy, climatic and epidemiological situation allows it
To what extent did the Project address the needs and interests of all specific and relevant stakeholder groups?	Level of link between needs and interests of all specific and/or relevant stakeholder groups and those of the project	<ul style="list-style-type: none"> • ProDoc • Project Initiation Report • PP validation workshop report • Design Participants • Implementing partner and key stakeholders of the Project 	Document analysis. Interviews with project staff and stakeholders. Visits to the intervention areas, if the energy, climatic and epidemiological situation allows it
Does the Project generate relevant lessons and experiences for future similar projects?	<p>Level of systematization of lessons learned.</p> <p>Level of knowledge of the key actors of lessons learned.</p>	<ul style="list-style-type: none"> • Project Documentation • Periodic reports, PIR • Key stakeholders 	Documentation analysis, data analysis, interviews
Effectiveness: To what extent have the expected outcomes and objectives of the Project been achieved?			
What is the behavior and what are the advances in qualitative terms of the indicators of the Project Objective? Did the project achieve its objective?	Fulfillment of the target indicators in the middle of the Project, according to its ML.	Project Document. Project performance reports.	Document analysis. Interviews with Project staff and stakeholders. Visits to the intervention areas, if

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

Evaluation Criteria Questions	Indicators	Sources	Data collection method
			the energy, climatic and epidemiological situation allows it.
Are the activities carried out in each Project Component according to its design and the expected scope in the middle of its execution?	The Results Indicators expected so far in each component are achieved, in accordance with the Logical Framework Matrix (MML) of the Project.	Project Document. Annual operative plan. Project performance reports.	Document analysis. Interviews with Project personnel and interested parties. Visits to areas of intervention, if the energy, climatic and epidemiological situation allows it.
What are the key factors that contribute to the success or failure of the project?	Level of documentation and preparation for projects, assumptions and drivers of impact	Project documentation Periodic reports, PIR key players	Documentation analysis, data analysis, interviews
What are the main risks and barriers that remain to achieve the objective of the Project and generate global environmental benefits?	Presence, evaluation and preparation to mitigate the risks, assumptions and expected impact factors	project documents project team Project stakeholders	Documentation analysis, data analysis, interviews
To what extent are the main impact assumptions and drivers relevant to achieving the global environmental benefits?	Actions taken to address key assumptions and target impact drivers.	Project Documentation Periodic reports, PIR Key actors.	Documentation analysis, data analysis, interviews.
Efficiency: Was the Project implemented efficiently, in accordance with international and national norms and standards?			
Have financial resources been used efficiently? Is the financial management of the project adequate?	Difference between the planned and executed budget. Planned co-financing vs. real. Costs related to the results achieved in comparison with the costs of similar projects of other organizations.	Project financial reports. Analysis reports of budget execution and adjustments made by the Project Team with the CO of UNDP. Annual operative plan Work groups. UNDP CO Interest groups involved.	Document analysis. Interviews with project staff and stakeholders. Visits to the intervention areas, if the energy and epidemiological situation allows it.
Does the Project have an M&E System, which it uses to complete, document and assure the activities of its Components and Results?	M&E system available and updated.	Documents prepared by the project team.	Document analysis.
Have the activities programmed in each Component been documented to facilitate monitoring?	Activities programmed by Component / year of project execution.	Annual operative plan. Project performance reports.	Document analysis. Interviews with project staff and stakeholders.

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

Evaluation Criteria Questions	Indicators	Sources	Data collection method
Have the tasks programmed in the Annual Operating Plans (POA) of the Project been fulfilled and documented in each of its Components, so that they point to the expected results at the end of the Project?	Number of activities programmed / fulfilled according to the POA in the evaluated period.	ProDoc Project Implementation Reports (PIR) Annual operating plans Progress report audit reports EMT report and its recommendations Budget revisions.	Document analysis. Interviews with project staff and stakeholders.
Do national stakeholders continue to play an active role in making Project decisions that support efficient and effective implementation?	Level of participation of interest groups in decision-making.	Project document.	Do national stakeholders continue to play an active role in project decision-making that supports efficient and effective project implementation?
What has been the contribution in cash and co-financing in kind for the implementation of the Project?	% cash execution and in-kind co-financing vs. expected level	Project Documents project team	Documentation analysis, data analysis, interviews
Have the expenses been made in accordance with international norms and standards?	Cost of project inputs and outputs relative to norms and standards for donor projects in the country or region.	Project Documents Project Team	Analysis of documentation, interviews
Outcomes:			
Have the expected products been obtained? Have they contributed to the results and objectives of the Project?	Level of progress of the indicators of the Project's products in relation to those expected. Level of logical link between project outputs and expected results/impacts	project documents Project Team. Key actors of the Project periodic reports PIR	Documentation analysis, data analysis, interviews
Were the expected results achieved or are they likely to be achieved? Have they contributed or are they likely to contribute to the achievement of the objectives of the Project?	Level of progress of the indicators of the objectives and results of the project in relation to those expected Level of logical link between project results and expected impacts.	project documents Project Team. Key actors of the Project periodic reports PIR	Documentation analysis, data analysis, interviews
Is it likely that the impact level results will be achieved? Are they likely to be on a sufficient scale to be considered as global environmental benefits?	Environmental indicators Theory of Change Progress Level	Project Documents Project Team. Key actors of the Project.	Documentation analysis, data analysis, interviews

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

Evaluation Criteria Questions	Indicators	Sources	Data collection method
		Periodic reports and PIR.	
Sustainability: To what extent are there financial, institutional, sociopolitical and/or environmental risks to sustain the results of the Project in the long term?			
To what extent are project outcomes likely to depend on continued financial support? What is the likelihood that financial resources will be available once GEF assistance ends to support continued benefits?	Financial requirements for the maintenance of the benefits of the Project. Expected level of financial resources available to maintain the benefits of the Project. Potential for additional financial resources to maintain and/or give continuity to the beneficiaries of the Project.	Project Documents. Project Team. UNDP-CO key players	Analysis of documentation, interviews with the team and the key actors of the Project, among others
Is it likely that the stakeholders will have or achieve an adequate level of "ownership" of the results and is there a commitment and interest in ensuring that the benefits of the Project are maintained?	Level of initiative and involvement of the relevant interested parties in the activities and results of the Project.	Project Documents Project Team. Key actors.	Analysis of documentation, interviews.
In relation to the commitments assumed by the counterparts: What is the level of commitment that each of the beneficiary counterparts assume at the end of the Project based on the results achieved?	Level of commitment of the project counterparts	Project documents. project team Key actors of the Project	Analysis of documentation, interviews
To what extent are the results of the Project dependent on sociopolitical factors?	Existence of sociopolitical risks for beneficial projects	Project Documents. Project Team. key players	Analysis of documentation, interviews
To what extent does the outcome of the Project depend on issues related to institutional frameworks and governance?	Existence of institutional and governance risks for the benefits of the Project	Project Documents. Project Team. key players	Analysis of documentation, interviews
Are there environmental risks that could undermine the future stream of Project impacts and overall environmental benefits?	Presence of environmental risks for the benefits of the Project	Project Documents. Project Team. key players	Analysis of documentation, interviews

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

Evaluation Criteria Questions	Indicators	Sources	Data collection method
Do the relevant stakeholders have the necessary technical capacity to ensure that the benefits of the Project are sustained?	Level of technical capacity of relevant stakeholders in relation to the level required to maintain the benefits of the Project	Project Documents. Project Team. key players Capacity assessments available	Analysis of documentation, interviews
What are the most important challenges that could hinder the sustainability of the project results?	Presence of challenges that may affect the sustainability of the results.	Project Documentation Project Team key players	Analysis of documentation, interviews
Gender equality and women's empowerment: How did the Project contribute to gender equality and women's empowerment?			
To what extent did the Project contribute to gender equality, women's empowerment and to what extent were these approaches incorporated into the project?	Level of progress of the Gender Action Plan Level of progress of the goals related to the gender approach in the framework of project results	ProDoc Project Initiation Report Reports of analogous experiences key players Periodic reports and PIR.	Documentation analysis interviews
What role have women played in the implementation of the Project? Has this role been differentiated between men and women?	Level of differentiation of roles in the participation of men and women in the activities and benefits of the Project.	Follow-up reports from the Ministry of Science, Technology and the Environment, the Ministry of Agriculture and the National Institute of Hydraulic Resources. Project performance reports.	Document analysis. Interviews with Project staff and stakeholders
Impact: Is there evidence that the project has contributed to or allowed progress towards reducing environmental stress and improving ecological status?			
How does the Project contribute to improving connectivity between landscapes and the quality of life of the communities?	Specify which have been the actions that the project has implemented that contribute to the improvement of the environmental quality of the ecosystems and the well-being of the communities.	Project performance reports.	Document analysis. Interviews with project staff and stakeholders.
To what extent did the Project contribute to the country program results, the SDGs, the UNDP Strategic Plan and the GEF strategic priorities?	Level of contribution to project results to country program, SDGs, UNDP Strategic Plan, GEF	Review of strategic documents of GEF and UNDP	Analysis of documentation and interviews

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

Evaluation Criteria Questions	Indicators	Sources	Data collection method
	strategic priorities and national priority development	Interviews with UNDP Officials Periodic reports and PIR.	
Did the Project contribute to the reduction of environmental stress and climate change impacts (for example, reduction of GHG emissions and adaptation)?	Level of environmental stress reduction (GHG emission reductions) attributable to the project Adaptation measures included in the activities	Project documentation. Implementing partner, UNDP and ATR UNDP-GEF officials. Key actors. Periodic reports and PIR.	Documentation analysis, data analysis, interviews
Since the Project, has there been any contribution to changes in policy/legal/regulatory frameworks, including observed changes in capacities (awareness, knowledge, skills, infrastructure, monitoring systems, etc.), and governance architecture, including access and the use of information (laws, trust-building and conflict resolution bodies, information exchange systems, etc.)?	Degree of changes in policy/legal/regulatory frameworks attributable to the Project	Project documentation. Implementing partner, UNDP officers and the Advisor Regional Technician UNDP-GEF and key actors. Periodic reports and PIR.	Documentation analysis, data analysis, interviews
Covid-19: What effects has Covid 19 caused to the technical and financial implementation of the project, what management measures were adopted and how effective were they?			
To what extent is the Project affected in its technical and operational implementation due to Covid 19? What adaptive management measures were adopted and what is the effectiveness of these measures?	Activities not developed by Component during the Covid 19 period.	ProDoc or annual operating plans. Performance reports. Minutes of the Steering Committee. Stakeholders involved	Document analysis. Interviews with project staff and stakeholders.

ANNEX F. Questionnaire Guide for interviews

The interviews were formulated based on the scope and parameters of the evaluation, seeking to obtain findings and answers that correspond to the objective and purpose of the evaluation. The questions below have been adapted in their format to the relevance of the interviewee and their role in the Project, including specific extensions according to the criteria of the evaluation team, according to the following classification:

- A: Questionnaire to UNDP officials linked to the Project
- B: Questionnaire for the Project Management Unit
- C: Questionnaire for members of the Steering Committee
- D: Questionnaire for central and sectoral government officials linked to the Project implementation problem
- E: Questionnaire for other stakeholders, and direct and indirect beneficiaries

Guiding questions for the interviews carried out within the framework of the TE

A	B	C	D	E	Guiding questions
Introduction and general opening questions					
					[Introduction of the interviewers, thanks for their willingness; purpose of the interview and assessment; name, contact and position of the interviewee] [Confidentiality and treatment of the information provided; authorization to record the session or take notes] [Length of the interview and sequence of questions alternated by the interviewers]
					What is your current relationship, or your role and functions, regarding the execution of the Project?
					How familiar are you with the Project and its objectives? How much do you know about its design, formulation and implementation?
About the design and formulation of the Project					
					Did you participate in the design of the Project and the formulation of the execution strategy?
					What do you think are the main virtues and advantages of the Project design?
					Would you say that the Project has been designed on a participatory basis of the actors and beneficiaries involved? Has the gender issue been appropriately considered in the design of the Project?
					If the Project could be redesigned, what changes would you make or what provisions would you include for the best result?
About the Project implementation					
					Have it been necessary to make changes or amendments to the ProDoc, operating plans and budgets to adapt to unforeseen situations?
					Do you think that the Project has convened and worked with all relevant stakeholders? Do you feel that the Project has been understood and aroused the interest of the stakeholders?
					What monitoring and evaluation systems have been used to follow the Project activities? Which actors have been involved in this process?
					How do you perceive the support of UNDP in the process of executing the Project?

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

					How do you perceive the role of the members of the Board and the technical team of the Project?
					To what extent has the project been affected in its technical and operational implementation due to Covid 19? What measures were taken?
About the Project results and impact					
Relevance					
					How does the Project support national and government policies?
					How does the Project support the UNDP Country Program and the UNDAF?
					How does the Project support the GEF Program?
Effectiveness					
					How do you perceive the execution of the Project to date, in terms of compliance with deadlines and activities?
					What do you think are the main barriers or bottlenecks to comply with the execution of the expenditure and the activities of the Project?
					What is the final situation in terms of expected products and results? What problems or situations are pending or require future corrective or adaptive action in this regard?
					How has the project contributed to gender equality and women's empowerment?
Efficiency					
					How do you consider that the human and financial resources have been managed in the execution of the Project?
					What have been the main administrative and budget execution contingencies? How have they been addressed?
Sustainability					
					How do you perceive the sustainability of the results and impact of the Project?
					What are the main risks to the continuity of the Project? Are they linked to the activities and management of the Project or are they external factors?
					Are agents being involved (individuals, in the government or in civil society) that are capable of promoting the sustainability of the Project?
					What changes or modifications do you estimate would be favorable to the sustainability of the Project, including legal, institutional, economic, environmental or social forecasts in the short, medium and long term?
					What lessons learned do you think are derived from the execution of the Project to date?

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

ANNEX G. Co-financing table

Co-financing sources	Name of the co-financing entity	Type of co-financing	Amount co-financed at the date of CEO authorization (USD)	Amount actually contributed as of the ET date (USD) ¹⁵	Actual Percentage (%) of Expected Quantity
National government	MINAG	<i>Subvention</i>	35'536,630.00	115'085,259.00	323.9%
National government	CITMA	<i>Subvention</i>	22'000,000.00	25'062,170.00	113.9%
International cooperation	UNDP	<i>Grant</i>	800,000.00	800,000.00	100.0%
Total	-	-	58'336,630.00	140'947,428.00	241.6%

¹⁵ Source: ProDoc and PIR 2022

ANNEX H. Rating scales

Outcome Assessment Rating Scale – Progress towards goal and expected results¹⁶

Qualification		Description
6	Highly Satisfactory (HS)	It is expected to achieve or exceed the established objectives/results by the end of the project without major gaps. Progress towards the achievement of the objectives/results can be presented as a "good practice".
5	Satisfactory (S)	It is expected to achieve most of the stated objectives/results by the end of the project with only minimal gaps.
4	Moderately Satisfactory (MS)	It is expected to achieve most of the objectives/results established for the final project, but with significant shortcomings.
3	Moderately Unsatisfactory (MU)	It is expected to achieve most of the objectives/results established for the final project with significant shortcomings.
2	Unsatisfactory (U)	It is not expected to achieve most of the objectives/results established by the end of the project.
1	Highly Unsatisfactory (HU)	The objectives/results for the period have not been achieved and none of those established are expected to be achieved by the end of the project.
Indicator evaluation code		
Green = Achieved		Yellow = On track to be achieved
		Red = Not on track to be achieved

Results Evaluation Rating Scale – M&E

Qualification		Description
6	Highly Satisfactory (HS)	There were no shortcomings; the quality of M&E design/implementation exceeded expectations
5	Satisfactory (S)	There were minor shortcomings; the quality of M&E design/implementation met expectations
4	Moderately Satisfactory (MS)	There were moderate deficiencies; the quality of M&E design/implementation more or less met expectations
3	Moderately Unsatisfactory (MU)	There were significant shortcomings; the quality of the M&E design/implementation was somewhat lower than expected
2	Unsatisfactory (U)	There were major shortcomings; the quality of M&E design/implementation was substantially lower than expected
1	Highly Unsatisfactory (HU)	There were serious deficiencies in the design/implementation of M&E
-	Cannot be evaluated	The available information does not allow an assessment of the quality of the M&E design / implementation.

¹⁶ For the evaluation of the progress towards the objective and the expected results, the evaluation team has seen fit to have this scale and evaluation code. This is not part of the GEF/UNDP TE Assessment Guideline.

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
 “A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
 ‘Connecting Landscapes’

Results evaluation scale – Relevance, effectiveness and efficiency

Qualification		Description
6	Highly Satisfactory (HS)	The level of results achieved clearly exceeds expectations and/or there were no shortcomings
5	Satisfactory (S)	The level of results achieved was as expected and/or there were no or minor deficiencies
4	Moderately Satisfactory (MS)	Outcome level achieved more or less as expected and/or there were moderate deficiencies.
3	Moderately Unsatisfactory (MU)	Level of results achieved somewhat lower than expected and/or there were significant deficiencies
2	Unsatisfactory (U)	The level of results achieved was substantially lower than expected and/or there were significant deficiencies.
1	Highly Unsatisfactory (HU)	Only an insignificant level of results was achieved and/or there were serious deficiencies
-	Cannot be evaluated	The available information does not allow an assessment of the level of achievement of results

Results evaluation scale - Sustainability

Qualification		Description
4	Likely (L)	Minimal risk to sustainability; the most important results are on track to be achieved by the end of the project and are expected to continue into the near future.
3	Moderately Likely (ML)	Moderate risks, but it is expected that at least some results may be sustained due to the progress observed in the achievement of the targets during the mid-term review.
2	Moderately Unlikely (MU)	Significant risk that the most important results will not continue after the conclusion of the project, although some products and activities should continue.
1	Unlikely (U)	Serious risk that project results and key deliverables may not be sustained.

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
“A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
‘Connecting Landscapes’

ANNEX I. Signed Evaluation Consultant Agreement form

ANNEX J. Signed UNEG Code of Conduct form

Consultant 1

Evaluadores/consultores:

Deben presentar información completa y justa en su evaluación de las fortalezas y debilidades para que las decisiones o acciones tomadas estén bien fundadas.

Deben revelar el conjunto completo de resultados de la evaluación junto con información sobre sus limitaciones mantenerla accesible a todos los afectados por la evaluación, expresión de los derechos jurídicos para recibir resultados.

Deben proteger el anonimato y la confidencialidad de los informantes individuales. Deben proporcionar la máxima notificación, minimizar las demandas a tiempo y respetar el derecho de las personas a no participar. Los evaluadores deben respetar el derecho de las personas a proporcionar información con confianza, y deben garantizar que la información sensible no pueda rastrearse hasta su fuente. No se espera que los evaluadores evalúen a las personas, y deben equilibrar una evaluación de las funciones de gestión con este principio general.

En ocasiones se descubren pruebas de mala conducta mientras se realizan evaluaciones. Estos casos deben ser comunicados discretamente al órgano de investigación apropiado. Los evaluadores deben consultar con otras entidades de supervisión pertinentes cuando surja alguna duda sobre si y cómo deben informarse los problemas.

Deben ser sensibles a las creencias, los hábitos y las costumbres, y actuar con integridad y honestidad en sus relaciones con todas las partes interesadas. De conformidad con la Declaración Universal de Derechos Humanos de las Naciones Unidas, los evaluadores deben ser sensibles y abordar las cuestiones de discriminación e igualdad de género. Deben evitar ofender la dignidad y el amor propio de las personas con las que entren en contacto en el curso de la evaluación. Teniendo en cuenta que la evaluación podría afectar los intereses de algunas partes interesadas, los evaluadores deben llevar a cabo la evaluación y comunicar su propósito y resultados de manera que claramente respete la dignidad y la autoestima de las partes interesadas.

Son responsables de su desempeño y de sus productos. Son responsables de la presentación clara, precisa y justa, oral y/o escrito, de las imitaciones, conclusiones y recomendaciones del estudio.

Deben reflejar procedimientos contables adecuados y ser prudentes al utilizar los recursos de la evaluación.

Deben asegurarse de que se mantenga la independencia de juicio, y de que los resultados de la evaluación y las recomendaciones se presenten de manera independiente.

Deben confirmar que no han participado en el diseño, ejecución o asesoramiento del proyecto que se está evaluando, y que no han realizado la revisión intermedia del proyecto.

Formulario de acuerdo del consultor internacional de la evaluación

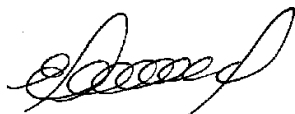
Acuerdo de cumplir el Código de Conducta para la Evaluación del sistema de las Naciones Unidas:

Nombre del evaluador internacional: **EDUARDO DURAND**

Nombre de la organización de consultoría (si corresponde): No Aplica

Confirmo que he recibido y comprendido y que cumpliré el Código de Conducta para la Evaluación de las Naciones Unidas.

Firmado en Lima, Peru, el 8 de octubre de 2022.



Firma: _____

Consultant 2

Evaluadores/consultores:

10. Deben presentar información completa y justa en su evaluación de las fortalezas y debilidades para que las decisiones o acciones tomadas estén bien fundadas.
11. Deben revelar el conjunto completo de resultados de la evaluación junto con información sobre sus limitaciones mantenerla accesible a todos los afectados por la evaluación, expresión de los derechos jurídicos para recibir resultados.
12. Deben proteger el anonimato y la confidencialidad de los informantes individuales. Deben proporcionar la máxima notificación, minimizar las demandas a tiempo y respetar el derecho de las personas a no participar. Los evaluadores deben respetar el derecho de las personas a proporcionar información con confianza, y deben garantizar que la información sensible no pueda rastrearse hasta su fuente. No se espera que los evaluadores evalúen a las personas, y deben equilibrar una evaluación de las funciones de gestión con este principio general.
13. En ocasiones se descubren pruebas de mala conducta mientras se realizan evaluaciones. Estos casos deben ser comunicados discretamente al órgano de investigación apropiado. Los evaluadores deben consultar con otras entidades de supervisión pertinentes cuando surja alguna duda sobre si y cómo deben informarse los problemas.
14. Deben ser sensibles a las creencias, los hábitos y las costumbres, y actuar con integridad y honestidad en sus relaciones con todas las partes interesadas. De conformidad con la Declaración Universal de Derechos Humanos de las Naciones Unidas, los evaluadores deben ser sensibles y abordar las cuestiones de discriminación e igualdad de género. Deben evitar ofender la dignidad y el amor propio de las personas con las que entren en contacto en el curso de la evaluación. Teniendo en cuenta que la evaluación podría afectar los intereses de algunas partes interesadas, los evaluadores deben llevar a cabo la evaluación y comunicar su propósito y resultados de manera que claramente respete la dignidad y la autoestima de las partes interesadas.
15. Son responsables de su desempeño y de sus productos. Son responsables de la presentación clara, precisa y justa, oral y/o escrito, de las imitaciones, conclusiones y recomendaciones del estudio.
16. Deben reflejar procedimientos contables adecuados y ser prudentes al utilizar los recursos de la evaluación.
17. Deben asegurarse de que se mantenga la independencia de juicio, y de que los resultados de la evaluación y las recomendaciones se presenten de manera independiente.
18. Deben confirmar que no han participado en el diseño, ejecución o asesoramiento del proyecto que se está evaluando, y que no han realizado la revisión intermedia del proyecto.

Formulario de acuerdo del consultor internacional de la evaluación

Acuerdo de cumplir el Código de Conducta para la Evaluación del sistema de las Naciones Unidas:

Nombre del evaluador nacional: **JANET ROJAS**

Nombre de la organización de consultoría (si corresponde): No Aplica

Confirmando que he recibido y comprendido y que cumpliré el Código de Conducta para la Evaluación de las Naciones Unidas.

Firmado en La Habana, Cuba, el 8 de octubre de 2022.

Firma:  _____

Gobierno de Cuba – GEF – UNDP Terminal Evaluation of Project
“A Landscape Approach to the Conservation of Threatened Mountain Ecosystems”
‘Connecting Landscapes’

ANEXO K Audit trail

Annex In separate file.

ANEXO L Terminal Evaluation Term of Reference

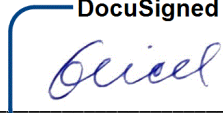
Annex In separate file.

ANEXO M. Clearance

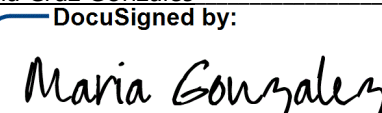
Terminal Evaluation Report for *PIMS+ 4716 A landscape approach to the conservation of threatened mountain ecosystems.*

Reviewed and Cleared By:

UNDP - Cuba (Programme Analyst NCE)

Name: Gricel Acosta Acosta
DocuSigned by:
Signature:  Date: 19-Dec-2022
6CC618DD08A14AE...

Regional Technical Advisor (Nature, Climate and Energy)

Name: María Cruz Gonzales
DocuSigned by:
Signature:  Date: 20-Dec-2022
CD1F0CE8EB01448...