MID-TERM REVIEW OF THE UNDP / GEF PROJECT

Incorporating multiple environmental considerations and their economic implications into the management of landscapes, forests and production sectors in Cuba (Ecovalor)

UNDP ID: 5760

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Evaluation report

Evaluation period: September 2021 – January 2022

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ACRONYMS

AMA	Environmental Agency (by its initials in Spanish)
AWP	Annual Work Plan
BIOFIN	The Biodiversity Finance Initiative
CITMA	Ministry of Science, Technology and Environment (by its initials in Spanish)
CNAP	National Protected Areas Centre (by its initials in Spanish)
CPP	Country Partnership Programme on Sustainable Land Management
EAF	Agro-Forestry Company
EAN	National Environmental Strategy (by its initials in Spanish)
ECOVALOR	Incorporating multiple environmental considerations and their economic implications into the management of landscapes, forests and production sectors in Cuba
ENOT	Land Use and Urban Planning National Strategy (by its initials in Spanish)
FONADEF	National Forestry Development Fund (by its initials in Spanish)
GEB	Global Environment Benefit
GEF	Global Environment Facility
GoC	Government of Cuba
IGT	Institute of Geography
IAgric	Institute of Agriculture Research and Engineering (by its initials in Spanish)
INFOGEO	GEF/UNDP project "Integrating Rio Convention commitments into national priorities by strengthening knowledge and information management for improved planning and decision making".
IPF	Institute of Physical Planning
INSMET	Institute of Meteorology
M&E	Monitoring and Evaluation
MEP	Ministry of Economy and Planning
MINAG	Ministry of Agriculture
MINCEX	Ministry of Foreign Trade and Investment (by its initials in Spanish)
MINTUR	Ministry of Tourism
MOA	Environmental Planning Model (by its initials in Spanish)

MTR	Mid-term review
NDA	National Designated Authority
NSC	National Steering Committee
OACE	Central State Administration Organization
PIF	Project Identification Form
PIR	Project Implementation Review
PMU	Project Management Unit
SESP	Social and Environmental Screening Procedure
SME	Small and Medium Enterprise
RF	Results Framework
RTA	Regional Technical Advisor
SDGs	Sustainable Development Goals
ToR	Terms of Reference
TSA	Targeted Scenario Analysis
TT	Tracking Tool
UMAP	Extended Project Management Unit
UMEP	Executive Project Management Unit
UNCCD	United Nations Convention to Combat Desertification
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNFCCC	United Nations Convention on Climate Change
UNEG	United Nations Evaluation Group

EXECUTIVE SUMMARY

Brief description of the project

The project entitled "Incorporating multiple environmental considerations and their economic implications in the management of landscapes, forests and productive sectors in Cuba", better known as Ecovalor, aims to "promote the generation of multiple global environmental benefits based on the economic valuation of ecosystem goods and services as a tool for decision-making at different levels". Ecovalor is funded through a Global Environment Facility (GEF) grant of USD 9,580,653, USD 37,800,000 in cash co-financing from the Government of Cuba and USD 50,000 in in-kind co-financing from the United Nations Development Programme (UNDP) Cuba Country Office. The project is implemented by UNDP and executed nationally by the Ministry of Science, Technology and Environment (CITMA by its acronyms in Spanish), through its National Centre for Protected Areas (CNAP by its acronym in Spanish), following the UNDP National Implementation Modality. The project started on 3 September 2018. As it is a six-year or 72-month project, the completion date is September 2024.

Objectives and scope of the evaluation

The objective of this consultancy is to carry out the mid-term evaluation of Ecovalor. This evaluation analyses the strategy, effectiveness, efficiency and sustainability of the project. It also identifies lessons learned and provides recommendations. The conclusions of the document are based on the review of relevant documentation and interviews with key stakeholders. The evaluation team is composed of three evaluators. The evaluation team has triangulated the data collected to answer the evaluation questions.

Overall Project Rating

The evaluation concludes that Ecovalor has made moderately satisfactory progress towards results. Project implementation and adaptive management have been moderately satisfactory, while sustainability of project results is moderately likely (Table 1).

Table 1. Evaluation results[1]

Dimension	Rating	Justification
Progress towards results	Moderately satisfactory (MS) The objective/outcome is expected to achieve most of its targets by the	The project has made satisfactory progress towards Outcome 1 and 3, but there are significant delays in Outcome 2.

[1] Following the rating scales provided in the UNDP/GEF guidelines for MTRs.

Dimension	Rating	Justification
	end of the project, but with significant shortcomings.	
Outcome 1: Enabling legal, institutional and policy frameworks in key sectors for the generation of global environmental benefits	Satisfactory (S) The objective/outcome is expected to achieve most of its goals by the end of the project, with only minor shortcomings.	The project has mainstreamed the valuation of ecosystem goods and services in 7 policies, 7 regulatory instruments and 3 economic and financial instruments.
Outcome 2: Focused scenario analysis to guide decision-makers on the implications of different courses of action in target sectors that could affect natural resources and global environmental values.	Moderately Unsatisfactory (MU) The objective/outcome is expected to achieve its targets at the end of the project with significant shortcomings.	Due to the slow process of building agreement on the application of the UNDP-driven methodology, the six TSA studies have not yet started. Although progress has been made towards their implementation, and methodologies have been developed and/or improved, there is uncertainty about the feasibility of completing the six studies by the project's closing date.
Outcome 3: Pilot experiences that generate, validate and demonstrate mechanisms for the optimisation and internalisation of the values of ecosystem goods and services in target sectors and associated landscapes.	Satisfactory (S) The objective/outcome is expected to achieve most of its goals by the end of the project, with only minor shortcomings.	The project has advanced in the implementation of pilot experiences, working on a significant number of instruments and types of sites, and covering both provincial and municipal levels.
Project implementation and adaptive capacity	Moderately satisfactory (MS) Implementation of some of the seven components (management arrangements, work planning, financing and co-financing, project-level M&E systems, stakeholder involvement, reporting and communication) is leading to efficient and	Institutional arrangements and communication mechanisms are effective and stakeholder involvement has been extensive. The project has adapted well to the COVID-19 pandemic and has mechanisms in place to integrate lessons learned into the planning and implementation processes. However, some activities are behind schedule. There are also areas of opportunity in the quality of the results framework,

Dimension	Rating	Justification
	effective project implementation and adaptive management, and some components require corrective action.	gender mainstreaming and the updating of safeguards.
Sustainability	*Moderately Likely (ML)* *Moderate risks, but at least some outcomes are expected to be maintained due to progress on the results of the mid-term review.*	The level of ownership is high and the legal, programmatic and institutional framework favours sustainability, but there are risks from an environmental point of view and the emergence of new social actors generates some uncertainty.

Main findings

From the point of view of the **project strategy**[2], the problem addressed by the project is highly relevant and the project strategy highly appropriate to address it, although there is room for improvement in the involvement of the private sector, particularly some new actors, and some key sectors for development planning, such as housing, water and sanitation, electricity and transport. The design of Ecovalor builds on previous initiatives in economic valuation and environmental finance, while in the implementation phase close collaboration has been established with relevant ongoing initiatives. The project is consistent with Cuba's national priorities and international commitments, as well as UNDP priorities in Cuba. The project design was carried out with broad stakeholder participation. The gender analysis and the gender action plan are weak. The various elements of the project are well integrated vertically and horizontally, but cross-cutting aspects are not addressed in a sufficiently comprehensive and direct manner and some key sectors are not given sufficient attention. The results framework included in the project document is not entirely adequate to measure the effects of the project.

Regarding **effectiveness**[3], as of 30 September 2021, i.e. halfway through the implementation period, the project's progress is satisfactory both at the objective and outcome levels. Progress is satisfactory in Component 1 (Legal, Policy and Institutional Frameworks), moderately unsatisfactory in Component 2 (TSA) and satisfactory in Component 3 (Pilot Experiences), with mixed progress in meeting the targets included in the GEF monitoring tools. The project has generated multiple unanticipated positive results. This progress has been mediated by external inhibiting and facilitating factors, which are presented in detail in section 3.2.2.

From an **efficiency** perspective[4], as of 30 September 2021, the executed budget was USD 4.6 million, equivalent to 47.5% of the total project budget. The cumulative management cost of the

[2] For details, see section 3.1.
[3] For details, see section 3.2.
[4] For details, see section 3.3.

project corresponds to 3.7% of the executed budget, which is below both the planned and the GEF target. As of that date, the project had mobilised USD 25,263,638 in co-financing, i.e. 67% of the co-financing identified in the Project Document (USD 37.9 million). The project has adequate financial controls in place. Although the overall progress of the project is moderately satisfactory, there have been delays in some activities compared to what was originally planned, especially in Component 2 (TSA). The project has an adequate M&E plan, but the results framework included in the project document is not fully adequate to monitor and evaluate project performance. Project monitoring has been carried out in a timely manner. The institutional arrangements for project management have proven effective in facilitating coordination among the multiple actors involved in the project. The quality of implementation and execution is high. Despite some important progress, challenges remain in fully mainstreaming gender equity throughout the project. The review of social and environmental safeguards was carried out based on the then current policies. The project's 2022 AWP foresees the update of the SESP and the development of the respective Management Plan. Financial or operational risks are adequately monitored and managed, with room for improvement in mainstreaming climate change adaptation. The project has adapted adequately to the COVID-19 pandemic. The project's internal and external communication mechanisms are effective. Knowledge management has included educational activities, with room for improvement in the systematisation of the project's experiences and lessons learned.

Finally, in terms of **sustainability**[5], the legal, regulatory and public policy framework, the institutional framework and political ownership will contribute to the sustainability of the project's results. Its appropriation by social and productive actors will depend to a large extent on the degree of implementation in the territories and the benefits evidenced. There are opportunities for the involvement of new economic actors. As evidenced by the co-financing mobilised, it is likely that the country will have adequate financial and economic resources to ensure the sustainability of the project's results once GEF assistance comes to an end. However, the difficult macroeconomic context and ongoing economic reforms create uncertainty. The project has not sufficiently directly, clearly or explicitly integrated climate risk, which may affect the sustainability of project results.

Recommendations

Based on the findings above, this evaluation has the following recommendations.

Table 2. Summary of recommendations and responsible parties

No.	Recommendation	Responsible Party
1	Strengthen the institutional dimension	UMEP, DGCITMA, PSC
2	Broaden the sectoral reach, to the extent possible	UMEP, PSC
3	Broaden the range of stakeholders	UMEP, UMAP
4	Speed up implementation and monitor progress, including the assessment of the need of an extension	UMEP, PSC, UNDP

[5] For details, see section 3.4.

5	Strengthen project management, in particular regarding the improvement of the results framework, updating the social and environmental safeguards, mainstreaming gender equity and document lessons learned	UMEP, UNDP
6	Continue to take on enabling conditions and manage inhibiting factors	UMEP, UMAP, PSC, UNDP

1. INTRODUCTION

1.1. Objective of the evaluation

As stated in the terms of reference (ToR), the objectives of this mid-term review (MTR) are to assess the progress made in achieving the project objectives and results set out in the project document, to analyse early signs of success or failure, and to identify any changes needed to bring the project back on track and achieve the desired results. The MTR also seeks to review the project strategy and its risks to sustainability.

1.2. Scope and methodology of the evaluation

1.2.1 Scope

This evaluation analyses different aspects of the project, namely:

- The project strategy, including in particular the project design and the results framework/logical framework.
- Progress towards the achievement of results: objectives, outcomes, outputs, enabling and disabling factors in achieving the expected benefits.
- Project implementation and adaptive management: financing and co-financing, management mechanisms, stakeholder involvement, work planning, monitoring and evaluation (M&E) system at project level, environmental and social safeguards, information and communication and COVID-19 management.
- Financial, socio-economic, institutional and governance framework, and environmental sustainability.

1.2.2 Methodology

The evaluation team was composed of two international evaluators (Jon Garcia (team leader) and Maria Onestini) and one national evaluator (Oscar Fernandez).

This evaluation was carried out following a structured process integrating data collection and analysis, in order to assess the project design, effectiveness, efficiency and sustainability of project results. The evaluation process took into consideration the guidance and procedures set out in the United Nations Development Programme (UNDP) Guide for conducting mid-term evaluations of UNDP-implemented projects funded by the Global Environment Facility (GEF). In addition, the evaluation was conducted in accordance with the Code of Conduct for Evaluation Consultants established by the United Nations Evaluation Group (UNEG). In this regard, the evaluation adopted a consultative approach, seeking close collaboration with key stakeholders to provide useful, credible and reliable evidence. The evaluation ensured gender equality and women's empowerment, as well as other cross-cutting issues.

This evaluation was conducted in a somewhat special context: the global health crisis related to COVID 19. This crisis compromised the full application of the UNDP/GEF guidance for conducting

mid-term evaluations, particularly with regard to face-to-face meetings and field visits. The evaluation team followed UNDP guidelines for conducting evaluations in this specific framework. As explained below, given the health emergency, the evaluation was conducted in a comprehensive virtual manner.

Data collection

Data collection was carried out using two main methods, as described below.

Document review: in the preparation and implementation phases of the evaluation, a detailed review of relevant documentation provided by project management staff was carried out, as well as of relevant national and regional strategies, plans and legal documents, documents from other similar projects and interventions in Cuba (in particular from reference projects). The documentation reviewed is listed in Annex 5.2.

Interviews: 77 people were interviewed (Annex 5.3) on the basis of a question guide, with the possibility to ask additional questions to elaborate on emerging issues. Due to the COVID-19 pandemic, all interviews were conducted remotely.

Data analysis

The evaluation team compiled the data thus obtained on project results and analysed them against the project objectives and expectations set out in the project logframe, together with their corresponding means of verification. To ensure the validity and accuracy of the findings, quantitative and qualitative information obtained from different sources was triangulated. Conclusions were drawn from the relevant information through an interpretative analysis, in which both deductive and inductive logic was applied. This systematic approach ensures that all findings, conclusions and recommendations are supported by evidence.

The analytical framework for this evaluation included the following elements:

- Evaluation matrix: based on an initial review of available project documentation and following the guidance of the evaluation ToR and the UNDP guidelines for conducting mid-term evaluations of GEF projects, an evaluation matrix was developed and presented in Annex 5.1. This matrix, which guided the data collection and analysis, includes the evaluation questions considered under each criterion, as well as the qualitative and quantitative indicators to operationalise these questions, sources of information and data collection methods. Gender equity issues were considered in a cross-cutting manner throughout the matrix.
- Scorecard: This framework provided in the ToR was used to provide specific ratings on performance criteria, including progress towards results, project implementation and adaptive management, and sustainability.

Limitations

As indicated, this evaluation has been conducted remotely (except that the national consultant sat in person at some of the meetings that took place). In this sense, no field visits were made. While this is a limitation, in the sense that such visits allow for more fluid interaction with a larger group of beneficiaries and direct observation provides useful inputs, the evaluation team considers that it has had access to sufficient information from a variety of sources to produce a robust, credible and useful evaluation report.

1.3 Structure of the evaluation report

The following section briefly describes the evaluation context and the project. Section 3 presents the findings with regard to project design, effectiveness, efficiency and sustainability. Section 4 provides conclusions, lessons learned and recommendations. The annexes include the evaluation matrix, lists of documents and persons consulted, evaluators' statements.

2 DESCRIPTION OF THE PROJECT AND THE DEVELOPMENT CONTEX

2.2 Context of the evaluation

Development is a complex process, involving multiple natural resources, productive sectors, spaces and times, whose priorities and interests are often conflicting. Conflicts occur within productive sectors, but also between productive sectors (e.g. oil exploitation and fisheries) and especially between the short-term objectives of productive sectors and the protection and conservation of ecosystems, which are themselves critical to the medium- and long-term sustainability of many of these productive sectors, and to the conservation of which many countries have international commitments. There are also territorial conflicts, for example between the upper and lower parts of river basins. Conflicts between sectors and territories are also conflicts between actors who benefit or are harmed by decisions made on the basis of their spatial location, productive activity, social position and age, among other aspects. Although not exclusive to these areas, this is particularly relevant in coastal-marine environments and their nearest inland areas.

Development planning and management therefore requires the identification, analysis, weighing and strategic negotiation of these competing priorities and interests. It involves examining the costs and benefits, including environmental ones, at different levels, for different actors, territories and sectors[6], and for different time horizons, of a decision; assessing its net or aggregate benefits; considering alternatives, including not only alternative practices, but also alternative processes, relative weights, scenarios and assumptions; and defining in an informed and participatory way what is the most effective and equitable decision, balancing these aspects and promoting virtuous synergies[7]. From this perspective, development and natural resource planning and management requires integrated, i.e. inter-sectoral, inter-scalar, multi-variable and multi-actor management.

However, integrated development and natural resource planning and management is rare. This was the case in the Republic of Cuba around 2015. Cuba had significant advances in sectoral and municipal planning and management, with interesting natural resource planning tools and

[6] Considering the interrelationships and interdependencies, both positive and negative, with other sectors, territories and actors, and including the distribution of their impacts.

[7] It is important to note that there is not always an objectively optimal decision and it is not always possible to reconcile all interests. Decisions depend on subjective and intersubjective priorities, and sometimes, or often, conflict is not resolved or dissolved, but limited through the management of difference. Although the generation and use of evidence is fundamental, the information for making a decision is never perfect, and there is always uncertainty.

experiences and some technical capacity[8], but faced significant barriers to inter-sectoral, inter-scale, multi-variable and multi-actor planning and management[9]. These barriers included i) a compartmentalised policy and regulatory framework and planning and management tools[10], and inconsistent and counterproductive financial incentives, ii) limited technical capacity, iii) insufficient generation, and inappropriate communication and dissemination of strategic evidence on the economic value of ecosystem services and the implications of regulatory and management alternatives, and iv) the limited existence of significant experiences of integrated development and natural resource management in the country.

In Cuba, these barriers had not allowed for adequate planning and management of development and natural resources, especially in the marine-coastal zones and the agricultural territories that embrace them, and in relation to the interactions between tourism, agriculture, forestry activities, fishing and hydrocarbons, and to some extent industrial, extractive and domestic activities, maritime transport and port operations. This deficit was particularly acute as it faced a process of administrative, economic and social transformation in which tourism and hydrocarbon exploitation were set to grow substantially in a context of climate change.

2.2 Brief description of the project

The GEF responded to the request of the Government of the Republic of Cuba (GoC) to address these barriers through the project "Incorporating multiple environmental considerations and their economic implications in the management of landscapes, forests and productive sectors in Cuba", better known as Ecovalor. The objective of the project is to 'promote the generation of multiple global environmental benefits (GEBs) based on the economic valuation of ecosystem goods and services as a tool for decision-making at different levels'. The project promotes the application of an integrated landscape-wide management approach to recognise the spatial dimensions of environmental hazard drivers and the incorporation of environmental considerations into production practices. To this end, the project seeks to overcome the barriers mentioned above. Concretely, the project is implemented through three interrelated components:

- Component 1: Legal, policy and institutional frameworks in key sectors favouring the generation of global environmental benefits, in particular in biodiversity, sustainable land management/combating land degradation, and sustainable forest management;
- Component 2: Targeted Scenario Analyses (TSA) to guide decision-makers on the implications of different courses of action in target sectors that affect natural resources and global environmental values;
- Component 3: Pilot experiences generating, validating and demonstrating instruments to optimise and internalise the values of ecosystem goods and services in target sectors and associated landscapes. Specifically, the project is working on a pilot basis in the north of the provinces of Pinar del Río, Villa Clara, Las Tunas and Holguín and the whole of the province of Matanzas, involving 30 municipalities, 15 protected areas,

[8] Since the creation of the National BSE Economic Valuation Team in 2012, capacities were built in each territory to conduct BSE valuation studies, in addition to methodological guidance to develop these studies.
[9] See the project document.
[10] Environmental Impact Assessments, land-use plans.

10 soil, water and forest polygons and seven forestry polygons, as well as three fishing establishments, four tourism poles and two hydrocarbon companies.

The total cost of the project is USD 47,465,365, of which USD 9,580,653 is a GEF grant, USD 37,800,000[11] is cash co-financing from the Government of Cuba and USD 50,000 is in-kind co-financing from UNDP Cuba.

The project started on 3 September 2018. As it is a six-year or 72-month project, the completion date is September 2024.

The project is implemented by UNDP and executed nationally by the Ministry of Science, Technology and Environment (CITMA), through its National Centre for Protected Areas (CNAP), following the UNDP National Implementation Modality. The project's National Steering Committee (NSC) provides consensus-based decisions, particularly when guidance is required by the project director, and has final authority over matters requiring formal review and approval, including annual work plans and budget. In addition, the project has an Extended Project Management Unit (UMAP, by its initials in Spanish) and an Executive Project Management Unit (UMEP, by its initials in Spanish).

3. FINDINGS

3.1 Project strategy

3.3.1 Project design

3.3.1.1. To what extent is the problem addressed by the project relevant for its context?

The problem addressed by the project is highly relevant in the context of the economic transformation that Cuba is undergoing, as well as in the context of environmental problems associated with various productive sectors. The project focuses on addressing the main barriers to mainstreaming the conservation and sustainable use of ecosystem goods and services in territorial and productive development planning, namely i) the absence of economic valuation of ecosystems in the regulatory, programmatic, planning and management instruments of different sectors, ii) the insufficient generation, dissemination and use of information on the economic value of ecosystem goods and services and existing

[11] This is the figure indicated in the prodoc. The national co-financing declared by the national institutions will take into account the variation in the official exchange rate declared by the Central Bank of Cuba under the Ordinance Task, in force in the country as of 1 January 2021. Until December 2020 the official exchange rate in the country was 1 USD equivalent to 1 CUP (in these terms the national co-financing to the project was agreed). From January 2021, 1 USD is equivalent to 24 CUP. The national co-financing to be implemented from January 2021 onwards will be reported according to this official exchange rate.

management alternatives, which in turn is linked to iii) the lack of capacities and previous experiences (see section 2. 1).

The interviews confirm that this issue remains highly relevant to the process of economic transformation that the country is undergoing, which, on the one hand, poses the challenge of balancing economic and environmental priorities in a scenario of increased private sector participation, growing dependence on tourism and hydrocarbon extraction, as well as the effects of climate change, and the effects of climate change, and on the other hand, opens the opportunity to mainstream the valuation of ecosystems in key sectors for the country's development, within the framework of the ongoing regulatory and programmatic update based on the National Plan for Economic and Social Development until 2030 (2016) and the new Constitution of Cuba (2019).

The selected areas of intervention are emblematic of this problem, as they face tensions between economic development and the conservation and sustainable use of ecosystems and natural resources. The Project Document identifies as priority coastal and marine ecosystems, including their adjacent lowland agricultural landscapes, which face the joint environmental impacts of tourism and hydrocarbon activity, overfishing, unsustainable agricultural production, overexploitation of water resources and forest degradation, in turn exacerbated by climate change. The five selected intervention areas (north and west of Pinar del Río province, Matanzas province, north of Villa Clara province, north of Las Tunas province and north of Holguín province) share, with different intensities, these threats. The sites selected in the Project Document to apply corrective measures, pilot financial instruments in the tourism sector, as well as promote nature tourism in Natural Protected Areas (NPAs) and sustainable fishing, are aligned with the key threats in each province. Moreover, from the project design, intervention sites were identified in all provinces to integrate the valuation of ecosystem goods and services in the planning of 17 municipalities (of which 13 in Matanzas Province) and in the management instruments of 15 NPAs. The project sites were selected in line with the National Strategy for Territorial and Urban Planning (ENOT).

3.3.1.2 How effective is the selected strategy to achieve expected results?

The project strategy is highly relevant to address the identified institutional and information barriers by adequately integrating the mainstreaming of ecosystem valuation in legal, programmatic and institutional frameworks (Component 1), the development of methodologies, the generation of information and the selection of economic-financial mechanisms through Focused Scenario Analysis (Component 2) and the implementation of pilot experiences in specific contexts (Component 3), in order to support decision-making at different levels and thus promote the generation of multiple environmental benefits. In this way, the project takes advantage of the decentralisation process of public administration, which establishes the municipality as the centre of development, to mainstream the valuation of ecosystems in the planning of different sectors and levels of government, including municipalities. In turn, the outputs and activities proposed to generate the expected results under each component are logically related and reflect an adequate theory of change to contribute to the desired impacts.

The project strategy does not fully reflect the growing participation of the private sector in the economy, nor the presence of other new actors, and does not systematically address key sectors for development planning. Although the project works in some instances with the private sector, the strategy outlined in the Project Document does not specify the modalities of private sector involvement[12]. On the other hand, since the promotion of the creation of small and medium-sized enterprises (SMEs) and cooperatives beyond the agricultural sector comes after the project has been drawn up, the project document does not address it, which is reasonable. The multiplication of small and medium enterprises, however, opens up multiple opportunities for their participation in the implementation phase, some of which are already being addressed during implementation[13]. Similarly, the trend towards gradual decentralisation of management in state-owned enterprises (e.g. in the hydrocarbon sector) could lead to collaborative spaces in the areas of intervention.

On the other hand, the project design does not directly cover strategic sectors for development planning, such as housing, water and sanitation, electricity and transport. While in the implementation phase the scope of the project has been expanded to additional sectors, taking advantage of windows of opportunity opened by the updating of laws and planning instruments (see Section 3.3.1), the project design does not provide a systematic approach to address them.

Ecovalor builds on previous initiatives in economic valuation and environmental finance. The project builds on work carried out since 2002 in CITMA's Environment Directorate, which included the production of a guide for the valuation of ecosystem goods and services in 2008. The project also adds to the previous experience of assessing the impacts of extreme weather events which, after Hurricane Sandy in 2012, began to incorporate the economic valuation of the loss of ecosystem services and the resources needed for their restoration, which led to the training of teams at national and provincial level, as well as the updating of information collection manuals of the National Office of Statistics and Information (ONEI) for four priority ecosystems (mangroves, coral reefs, sandy beaches and forests).

The project also builds on work previously carried out by UNDP and CITMA through the Biodiversity Finance Initiative (BIOFIN), which was launched in Cuba in 2016 and consists of the application of a methodology to estimate biodiversity financing needs and develop national strategies aimed at mobilising resources for it[14]. During the first phase of BIOFIN (2016-2019), the country's capacities in environmental economics were strengthened, an inter-institutional committee was formed that incorporates the country's main economic actors, and 20 solutions were identified that have been considered and complemented during the implementation of Ecovalor. It is important to mention in this regard that there was strong feedback between the implementation of the first phase of BIOFIN and the design of Ecovalor (the development of its concept note in 2015 and the Project Identification Format (PIF) in 2016), with the BIOFIN

[12] The project works with the private sector in the agricultural intervention sites (soil, water and forest polygons) and in nature tourism in Ciénaga de Zapata and Viñales. In addition, in the Environmental Management Models, actors from the communities are invited, some of whom represent the private sector.
[13] The fishing UEB of Puerto Manatí, in the province of Las Tunas, is in the process of changing to this new form of management. The project is strengthening it.
[14] See: https://www.biofin.org/sites/default/files/content/knowledge_products/Compilaci%C3%B3n%20BIOFIN-Cuba.pdf

implementation and ECOVALOR formulation teams working together to identify financial solutions. Although the economic valuation of ecosystem goods and services was worked on tangentially in the framework of BIOFIN, as well as the Living Mangrove project (2014-2020)[15], Ecovalor is the first project entirely focused on it in Cuba.

The Project Document proposed to take lessons learned from other completed or ongoing UNDP-GEF projects. Five projects were identified that could provide lessons learned in the different sectors that Ecovalor focuses on, such as tourism, fisheries and agriculture (Table 1). However, it was not detailed which specific lessons derived from these projects are relevant for Ecovalor, which does not allow verifying how these were integrated into the project design.

Tabla 1. UNDD-GEF projects with lessons learned potential

GEF ID	Time period	Name of the project	Area of lesson learned
4846	2014 - ongoing	"A landscape approach to the conservation of threatened mountain ecosystems".	Landscape approach
3955	2011-2019	"Improving the prevention, control and management of invasive alien species in vulnerable ecosystems".	Management of Invasive Alien Species
3607	2009-2017	"Application of a regional approach to the management of marine and coastal protected areas in the archipelagos of southern Cuba".	Sustainable fisheries
3587	2010-2017	Capacity building for coordination of monitoring/MST information and systems in areas with water management problems".[16]	Sustainable agriculture
2633	2008-2018	"Incorporation and maintenance of biodiversity conservation in three productive sectors of the Sabana Camagüey ecosystem".	Sustainable tourism

Source: Own elaboration based on Project Document and GEF project database: https://www.thegef.org/projects

The Project Document identified possible synergies on the ground with the following GEF projects: "Capacity building for sustainable financial mechanisms / SLM in dry forest ecosystems and livestock areas" (GEF ID 9301), with intervention sites in Villa Clara, which will benefit from the information produced[17]; and "Introduction of new farming methods for the conservation and sustainable use of biodiversity, including plant and animal genetic resources, in production landscapes in selected areas of Cuba" (GEF ID 943524), which shares three PNAs with Ecovalor among its intervention sites.

[15] This is the UNDP / Adaptation Fund project "Reducing vulnerability to coastal flooding through Ecosystem Based Adaptation in the southern provinces of Artemisa and Mayabeque". See: https://cuba.un.org/es/101351-manglar-vive
[16] Project 2 of the Country Partnership Programme on Sustainable Land Management.
[17] Project 3 of the Country Partnership Programme on Sustainable Land Management.

In addition, interviews indicate that, in the implementation phase of the project, close collaboration has been established with three ongoing initiatives:

- BIOFIN's second phase (2020-2025), which among other aspects seeks to strengthen the National Environmental Fund, launch the Green Banking Cuba, generate a package of solutions to favour ecosystem services linked to agro-diversity and update the financial gap study for the country's protected areas. It should be noted that BIOFIN and Ecovalor share the same Steering Committee, which has facilitated the articulation and organisation of joint activities[18].
- The GEF/UNDP project "Integrating Rio Convention commitments into national priorities by strengthening knowledge and information management for improved planning and decision-making (INFOGEO)" (GEF ID 9319, 2018-2022), with which Ecovalor signed a collaboration agreement to standardise information flows, indicators, technologies and work platforms.
- The Country Partnership Programme on Sustainable Land Management, with which Ecovalor is developing a collaboration agreement that considers two possible areas of joint work: the promotion of financial incentives for the conservation of natural resources, such as payment for environmental services, and the declaration of some farms that are part of Ecovalor as farms with sustainable land management so that they can access the corresponding financial mechanisms.

3.3.1.3 To what extent does the project respond to national priorities and context?

At the time of its design, the project was consistent with Cuba's national priorities and international commitments. As indicated in the Project Document, Ecovalor is in line with eight of the 20 Aichi Targets (2011). A review of these targets shows that the project most directly contributes to Strategic Objective A, which refers to mainstreaming biodiversity in all spheres of government and society by integrating the value of biodiversity into planning and adjusting incentives for the conservation and sustainable use of biodiversity (targets 2 and 3). In line with this, the project is aligned with the **National Biodiversity Programme 2016-2020**, which supports the implementation of the convention in this area and includes studies on the economic valuation of ecosystem services among the priority areas for action, also defining four specific actions for this in line with Aichi Targets 2 and 3.

The Project Document also adequately identifies the project's contribution to the **National Programme to Combat Desertification and Drought (2000)**, which stems from the United Nations Framework Convention on Desertification and Drought, by providing for the generation of information on the economic value of ecosystem services related to productive agro-ecosystems, which until then had been addressed in a limited way in that programme. Similarly, Ecovalor's cross-cutting contribution to the **State Plan to Combat Climate Change**,

[18] Note that, at the second meeting of the project's National Steering Committee (May 2021), it was agreed to "Establish with the BIOFIN initiative a working system that allows for coordination and systematic dialogue on the different financial mechanisms to be addressed by the ECOVALOR project, with a view to optimising the achievement of its results" (Agreement 7).

known as Tarea Vida (2017), is adequately determined, by promoting the health of ecosystems and strengthening financial mechanisms in environmental matters, thus contributing to Cuba's commitments with respect to the United Nations Framework Convention on Climate Change.

In addition to the strategies mentioned in the Project Document, Ecovalor contributes to the implementation of other strategies not emphasised in that document. Crucially, Ecovalor is in line with the **Constitution (2019)** of the country, which in its Article 75 recognises environmental protection as a precondition for the sustainable development of the economy and society. The project is also aligned with the **National Economic and Social Development Plan until 2030 (2016)**, the guiding document of the national planning system, in its strategic axis "Natural resources and environment", in particular with its specific objective 12, which refers to implementing economic incentives to achieve financial sustainability in the use and conservation of natural resources. Similarly, the project is congruent with the **National Environmental Strategy 2016-2020**, as it is related to the strategic direction "Rational management of natural resources", ...which contemplates the integration of biodiversity values in territorial and sectoral programmatic frameworks, as well as the implementation of economic valuation studies of ecosystem goods and services as a basis for the foundation of economic instruments, among other aspects.

Ecovalor has influenced the process of updating the country's legal and programmatic framework to mainstream ecosystem valuation into national priorities. The development of the aforementioned programmes is part of the process, begun in 2011, to update Cuba's economic and social model. The fact that the project design has occurred alongside this process has allowed for a strong alignment with national priorities. Similarly, the approval of the new Cuban Constitution in 2019 has led to a process of updating the legal and programmatic framework, in which the project has managed to influence in multiple ways during its implementation to mainstream ecosystem valuation and the use of economic-financial instruments, ensuring consistency with them:

- **Incidence on approved policies**: within the framework of the Macroprogramme for Natural Resources and Environment 2021-2030, Ecovalor has contributed technical elements to Project No. 1 on strengthening the institutional and legal framework and Project No. 6 on financial sustainability of environmental development. Ecovalor has also influenced the State Plan for the prevention and confrontation of crimes and illicit activities affecting forest resources, wildlife and other natural resources, the Policy for the conservation, improvement and sustainable management of soil and the use of fertilisers (2020), Decree 33/2021 for the Strategic Management of Territorial Development, which forms part of the regulatory framework of local administration, and the National Environmental Strategy 2021-2025 (2021).
- **Advocacy on policies in the approval phase**: the Forestry Policy, which includes the updating of the regulations of the National Forestry Development Fund (FONADEF) and a Payment for Environmental Services scheme, as well as the Land and Urban Planning Policy and the Cultural and Natural Heritage Policy.
- **Impact on normative instruments in the approval phase**: the Law on Natural Resources and Environment, which includes a section on economic-financial instruments; the Law on Cultural and Natural Heritage; the Decree-Law on Protected

Areas, which includes a section on the financing scheme of the National System of Protected Areas; the Decree-Law on Coasts and its Regulation; the Decree on Climate Change; the legislative package of the Sustainable Use and Conservation of Soil System; and the legislative package for the improvement of the Territorial and Urban Planning System.

- **Impact on the budget process**: a tax for the use and exploitation of bays and a tax for the dumping of waste in Matanzas Bay were included in the State Budget Law for 2021.

On the other hand, as noted, the National Land Use Planning Scheme (2018) was used in the prioritisation of the locations and sites where the project is focused.

3.3.1.4 To what extent does the project contribute to the priorities agreed by UNDP and the Government of Cuba?

The project contributes directly to UNDP's priorities in Cuba. Ecovalor is aligned with Direct Outcome 7 of the **United Nations Development Assistance Framework (UNDAF) 2014-2018 in Cuba**, which refers to strengthening the integration of environmental considerations in the development plans of productive and service sectors, including the promotion of financial instruments and mechanisms to assess and manage environmental elements related to economic and social activities. In accordance with the UNDAF, the **UNDP Programme for Cuba (2014-2018)** aims to contribute to strengthening the harmonisation of environmental and risk reduction considerations with economic development, supporting the incorporation of such considerations in sectoral regulatory frameworks and territorial planning instruments[19].

More recently, the **Cooperation Framework for Sustainable Development Cuba 2021-2024** established that, in order to achieve output 3.1 "Capacities of key actors for the sustainable management of natural resources and ecosystems and for the improvement of environmental quality are strengthened", the economic valuation of environmental goods and services will be supported, among other measures. Along the same lines, in its **UNDP Cuba Programme Document (2020-2024)**, UNDP proposes to support the creation of an environmental information system and strengthen environmental statistics with methodological tools to value ecosystem goods and services and carry out focused scenario analysis studies, in order to favour a more efficient incorporation of the sustainability approach in economic decisions (priority A).

In addition, the project is aligned with UNDP's priorities at the global level, particularly with regard to TSA, an area in which the project draws on the agency's global experience. This methodology, which integrates traditional cost-benefit analysis with different economic valuation methods, was introduced in 2013 by UNDP to project the consequences of the implementation of an intervention in terms of changes in selected physical, financial, economic and social indicators. Since then, UNDP has accompanied 10 countries in developing TSA

[19] See also the GoC-UNDP Country Programme Action Plan 2014-2018.

processes around the world to inform decision-making[20]. Prior to this project, however, UNDP had no experience in the application of this tool in a Caribbean Small Island Developing State, so it is hoped that this experience will generate lessons learned that can then be replicated in such countries. Furthermore, the project is consistent with UNDP's current corporate priorities at the global level, as formulated in its Strategic Plan 2022-2025.

3.3.2 Have the perspectives of all stakeholders been taken into account during project design?

The project design was carried out with broad stakeholder participation. The Project Document does not detail the consultations carried out during project design, but the Project Management Unit clarified that validation workshops were carried out from the FIP development stage. In addition, the project inception workshop report reports the participation of 188 key stakeholders representing the national and local level from the eight sectors (agriculture, forestry, fisheries, tourism, hydrocarbons, conservation, planning, economy and finance) and the five provinces (Holguín, Las Tunas, Villa Clara, Pinar del Río and Matanzas) involved in the project, including governmental stakeholders and, to a lesser extent, scientific institutions and business organisations. For their part, the interviews confirm that there was broad participation and that stakeholder priorities were considered, especially in selecting intervention sites and establishing articulation with other ongoing initiatives. However, as noted in Section 3.1.1.2, this broad participation was not reflected in the integration of some key sectors in the project design, but later in response to the specific demands of local stakeholders, as in the case of the water and sanitation work undertaken in Matanzas Bay. Once project implementation has begun, the agreements reached at the two meetings of the National Steering Committee, which took place in January 2020 and May 2021, have been largely aimed at ensuring coordinated decision-making and action with the OACEs and with complementary initiatives such as BIOFIN and INFOGEO.

3.3.3 To what extent were gender aspects taken into account during project design?

The gender analysis included in the Project Document is limited. The Project is rated GEN2, in the sense of having gender equality as an objective, and contributing to closing gender gaps in access to and control over resources, improving women's participation and decision-making in natural resource governance, and targeting socio-economic benefits and services for women. The safeguards review conducted at the project design stage did not identify risks to gender equity and women's empowerment. More specifically, it explains that the project considers gender equity in its interventions related to capacity building and promotion of economic and productive activities. However, the Project Document only includes one paragraph on gender analysis, where it states that women's participation in decision-making, control of the factors of production and enjoyment of the benefits of

[20] See https://www.greencommodities.org/content/gcp/en/home/media-centre/no-more-_business-as-usual--undps-targeted-scenario-analysis-con.html

productive processes is already high, and that the public sector has strategies and norms to ensure such participation. Thus, this analysis does not identify the specific barriers faced by women in the productive sectors and localities covered by the project, nor does it delve into the intersection of gender with other characteristics such as skin colour, age and/or socio-economic vulnerability.

The Project Document identifies indicative actions to mainstream the gender perspective, but these are not articulated by an integrating vision. In view of the above, the Project Document identifies gender mainstreaming actions for all expected outputs of the project, which focus mainly on the equal participation of women in activities, the consideration of gender differences in analysis, training and communication activities, as well as the disaggregation of information generated by gender. However, like the gender analysis, these are generic and do not respond to the specific challenges of different productive sectors and localities. Furthermore, they are not integrated into a detailed gender strategy, which according to the Project Document would be validated during the initial phase of the project. The interviews also indicate that, since the formulation phase, it was agreed to develop a case with a gender approach in the fishing sector in the municipality of Manatí (province of Las Tunas). However, this was not specified in the Project Document, nor was the approach to be adopted defined from the design stage.

The project developed a Gender Action Plan during implementation, which was elaborated on the basis of meetings, workshops and the application of the survey to decision-makers, representatives of the sectors, as well as women and men from the participating communities. This plan identifies eight needs, which mainly refer to the lack of knowledge on gender equality, gender biases in communication materials, the need to mainstream gender in economic appraisal and environmental education, and women's reduced access to resources and paid employment in the communities, where they are often engaged in domestic activities. While these add specificity to the Project Document, **the plan does not reflect a systematic and in-depth analysis**. To address the needs identified, the plan sets out seven strategic lines of action, indicating the objective, expected results and actions to be carried out for each of them, as well as four steps for gender mainstreaming in the project. These lines of action and steps provide a general orientation, but **do not define specific, time-bound and verifiable goals**. As an example, action line 1 includes among the proposed actions "Conduct gender equality capacity, knowledge, needs and learning assessments", without specifying how many assessments would be conducted, when and where. This may make it difficult to operationalise and monitor the plan.

3.1.2 Logical framework / Results framework

3.1.2.1 How clear and well integrated are the project objectives, outcomes, outputs and activities?

The different elements of the project are well integrated vertically and horizontally, but although some important elements are considered, cross-sectoral aspects are not addressed in a sufficiently broad and direct manner and some key sectors are not given

attention. Vertically, there is good integration between the national, provincial and municipal scales, working at the latter two scales with different intensities. In this regard, the project strengthens the municipal level, recognising that some competencies are at the national level, and that sustainable development requires a solid interweaving between scales of government, strengthening the interrelationship between ministries, provinces and municipalities.

The project addresses different types of key barriers in an articulated manner, working in a concatenated way on the legal, normative and regulatory framework, institutional structures, availability of methodologies and tools and the generation of information, training and awareness raising, and the development of pilots. From this perspective, the components are logically threaded together. Component 2 is the backbone in terms of developing methodologies and tools and generating knowledge, component 1 provides the policy basis and component 3 implements it on the ground. The components feed off each other. In the project document, and in the project presentation itself, there is no adequate integration of the multi-sectoral and sectoral aspects. In these formulations the project focuses on six sectors, and directly addresses only a few cross-sectoral elements at national, provincial and municipal levels[21]. Specifically, the project design considers the strengthening of cross-sectoral platforms for the negotiation of environmental conflicts and land-use planning models at provincial and municipal level, which considers the relationship between all sectors. However, in the project document the scope of the cross-sectoral platforms is vague. In practice, however, during implementation the project adds to this cross-sectoral development planning. In this sense, the project involves MEP, Finance and Prices, the Central Bank, the National Institute of Land Use and Urban Planning and ONEI, generates cross-sectoral dialogues, has contributed to the updating and refinement of the cross-sectoral normative framework. Overall, however, there is room for improvement in addressing conflicts between sectors, which requires further analysis and more expeditious treatment of the interrelationship between them. Furthermore, from a logical framework point of view, as argued in sections 3.1.1.2 and 3.1.1.5, there is a lack of a more direct and comprehensive approach to some key sectors, such as construction, water and sanitation, electricity and transport, all of which are vital economic sectors with a high impact on natural resources. The project addresses these aspects only in an ad hoc manner. In sum, although the project is a step forward in horizontal integration, cross-sectoral and interdisciplinary work, in terms of the logical framework, there is room for improvement in the inclusion and interaction between sectors and disciplines.

The objectives, outcomes and outputs are realistic considering the time and budget of the project, considering that the activities in component 3 have a pilot character. It should be underlined that the goals were defined in a highly participatory manner, which contributes decisively to their feasibility. However, it is important to remember that, as indicated in section 1.2.2, mostly output rather than outcome indicators were defined and many of the indicator systems were not specifically defined.

[21] We refer to the relationship between all sectors and not just two sectors.

3.1.2.2 How effective is the monitoring and evaluation system (indicators, baselines, targets, methods and sources of verification) for measuring project progress/results?

The results framework included in the project document is not entirely adequate to measure the impact of the project. The outcome indicators are mostly output indicators (e.g. number of people trained) and not outcome indicators (e.g. level of capacity as a result of training). In addition, many of the indicator systems (i.e. the system consisting of an indicator, a baseline, a mid-term and final target, a verification method and a source of verification) are not accurate or consistent. Additionally, in many cases the results framework included in the project document does not indicate a baseline, nor, more worryingly, a defined methodology for establishing such a baseline. Furthermore, the indicator system does not disaggregate by gender where relevant. The results framework includes 4 indicators at the objective level and 9 indicators at the outcome level. Of these, 4 outcome indicators (1.3, 2.2, 3.2 and 3.4) are not appropriate. Table 2 provides a detailed analysis of each indicator system.

3.2 Effectiveness

3.2.1 To what extent have the planned outputs, outcomes and objectives of the project been achieved so far? To what extent is the project expected to meet its targets by its closing date (September 2024)?

As of 30 September 2021[22], i.e. mid-term, progress is satisfactory both at the objective and the outcome levels. The project is on track to meet its final targets at the end of the project in the four objective indicators (O2, O3 and O4)[23]. Progress can be assessed on 8 of the 9 result indicators, with significant assumptions in some cases. In these the project has achieved the final targets in 2 indicators (1.1 and 3.2), is on track in 3 indicators (1.2, 1.3 and 2.2) and not on track in 1 (2.1). Indicators 3.1 and 3.3 include several indicators. In indicator 3.1, the project is on track on all sub-indicators; in indicator 3.3, it is on track on 3 of the 4 sub-indicators. Progress cannot be assessed for indicator 3.4. Table 2 presents the analysis for each indicator, justifying the ratings. By component, **progress is satisfactory in component 1, moderately unsatisfactory in component 2 and satisfactory in component 3**, taking into account the indicators on which performance can be assessed.

It is useful to qualitatively analyse the project's progress on the three expected results beyond the indicator system. The project has improved the multi-sectoral and sectoral legal, policy and institutional framework for the generation of global environmental benefits (outcome 1).

[22] Note that in some cases this analysis reflects information as of December 2021, which was provided in January 2022.
[23] This analysis does not focus on the mid-term achievement of the mid-term goals, but rather, following UNDP/GEF guidelines for this type of evaluation, on the probability, from the mid-term perspective, of achieving the final goals at the end of the project.

This has included 7 policies, 7 regulatory instruments and 3 economic and financial instruments. The process of regulatory updating and the comprehensiveness of the project's institutional structure has been instrumental in this. In addition, numerous trainings have been provided, although their outcome is not known[24]. The project has defined institutional arrangements for sharing a wide range of documents and information, but there has been limited progress in developing TSAs to guide decision-makers on the implications of different courses of action in the target sectors that could affect natural resources and global environmental values (outcome 2), partly because of the pandemic. Finally, the project has advanced in the implementation of pilot experiences that generate, validate and demonstrate mechanisms for optimising and internalising the values of ecosystem goods and services in the target sectors and associated landscapes (output 3), working on a significant number of instruments and types of sites, and covering both provincial and municipal levels. Equipment has also been delivered, several of which are very useful for advancing the sustainable use of natural resources. Important steps have been taken to improve the management plans of all the country's PAs.

Progress in meeting the targets in the GEF monitoring tools is mixed, reflecting the above. On biodiversity, quantitative targets have been exceeded by a wide margin in forest ecosystems, half of the target has been achieved in agricultural ecosystems and around 60% of the target in marine ecosystems. In qualitative terms, there has been progress in the inclusion of biodiversity considerations in sectoral policy and regulations, although there are still only partial impacts in their approval, implementation and monitoring. Increased funding for biodiversity and ecosystem management has been identified. Economic-financial instruments have been designed, but the expected figures are far from being collected. With regard to sustainable forest management, the target has been achieved halfway through the project. There is no clear information to determine the progress in meeting the land degradation targets in the TT, in the sense that the target and its degree of achievement at mid-term is not indicated[25]. However, this relates to indicators O3 and O4 of the results matrix, which suggest that the final hectare target is not likely to be met, while the carbon target is likely to be met, following the methodology used in the project document.

It is worth mentioning that **the project has generated unanticipated positive outcomes**. These include:

- The incorporation of the principles of conservation and sustainable use of ecosystems, and of methodologies and instruments for this, in some laws, norms and regulations not initially foreseen, such as, for example, the Heritage Law and the extension of the tax law, which in addition to the Cienfuegos bay now contemplates the Matanzas bay.
- Work in the bay ecosystem, in particular through work in the province of Matanzas.

[24] In this respect, only anecdotal information is available. For example, it can be argued that the trainings have allowed sector and territory representatives to elaborate the ToR of the TSAs, together with a technical team, and that the provincial representatives have been able to gather information for the land-use planning models. More generally, the training has contributed to the incorporation of the issue of EABs and their economic value into the political, legal and regulatory framework, the development of methodologies, in particular on carbon balance analysis, and the setting up of new oyster farms in the intervention sites.

[25] In recent times there have been many changes in the GEF TTs, and it has not been very clear how projects report or should report, so this difficulty is not unique to Ecovalor

- The official creation in Holguín province of an integrated coastal environmental management unit, linked to tourism development, which will manage protected areas and carry out environmental impact studies and economic valuation studies. Ecovalor supports the provision of technological infrastructure.
- Support for rapid economic impact assessments (Hurricane Irma in 2019). Whenever there is a fire, hurricane or oil spill, they apply this methodology, analysing how ecosystems react. These analyses have served as a baseline for civil claims for such damages in the case of groundings and oil spills.
- The extension of the universe of people to be trained, and replication of approaches and communication strategies. The development of undergraduate and graduate university programmes on the project's subject matter.
- Strengthening the links between academia and the productive sector.
- More explicit and direct incorporation of climate change adaptation.

Table 4. Progress Towards Results Matrix (Achievement of Outcomes against End-of-Project Targets)

Objective	**To promote the generation of multiple environmental benefits based on integrated economic valuation of ecosystem goods and services, as a tool for decision making at different levels**						
Description of Indicator	**Baseline Level**	**Midterm target level**	**End of project target level**	**Cumulative progress since project start (midterm level and assessment)**	**Comments to the indicators system and reporting**	**Rating (Justification)**	**Rating[26]**
O1. Production landscapes managed to favour BD as a result of the promotion of sustainable resource management practices, improved protection of ecosystems and the incorporation of the results of economic valuations of ecosystem goods and services into instruments for environmental planning and management (BD indicator)	Planning and management instruments over the target areas do not specifically provide for consideration of the economic values of ecosystem goods and services	Municipal and provincial governments in the target areas are in process of incorporating provisions for the consideration of the economic value of ecosystem goods and services in instruments for environmental planning and management	Total area of target landscapes, subject to improved overall landscape management to favour connectivity, habitats and the reduction of threats and drivers affecting BD: 1,703,716ha, as measured by the incorporation of the results of economic valuations of ecosystem goods and services into instruments for environmental planning and management.	The environmental dimension and the valuation of ecosystem goods and services (EGS) are incorporated within the regulatory framework of local administration, as of the approval of Decree 33/2021 for the strategic management of territorial development, with specific references in articles 3.8.1, among others. This allows the national policy scenario could be favourable to incorporate the economic valuation of EGS in planning instruments at the local level. In 9 municipalities -covering 966.645,00 ha that represent 40% from the total area of the project-, in conjunction with local governments, work is being done to incorporate the economic valuation of ecosystem goods and services (EGS) in environmental planning and management instruments. For instances: Environmental Spatial Planning Models (ESPM), local development strategies and disaster plans.	The indicator is not entirely adequate as it does not specify the instruments in which environmental considerations should be incorporated. Reporting is mostly adequate, but aggregate figures should be given in line with the indicator, clarifying the provinces to ensure there is no double-counting[27].	As of 30 September, the project has made considerable progress in the process of integrating environmental considerations into the plans of 25 municipalities, covering a total of 2,721,600 ha, exceeding by 60% the ha foreseen for the end of the project[28]. In particular, work is being	On target to be achieved

[26] Following the guidelines for mid-term evaluations of GEF-funded projects implemented by UNDP, the likelihood of meeting the final targets at the end of the implementation period is assessed.
[27] It is not entirely clear whether the 9 municipalities mentioned first and the 2 indicated later are located in Matanzas province, and therefore whether their hectares are already included in the figures reported for the province.
[28] It is assumed that the 11 municipalities mentioned first are not located in Matanzas, and therefore their hectares are not counted twice.

				Covering 480.430,00 ha, which represents 20% of the total project area, two municipalities are working on the culmination of the SPM diagnosis process, where the EGSs are considered by environmental units. In addition, in the municipality of Sagua La Grande - with 96,190.00ha covered that represents 4% of the total project area- the ESPM characterization phase begins by compiling environmental information, identifying gaps in the policy, legal, regulatory and institutional framework; and the identification of EGS by environmental units. Moreover, the project is working on improving the provincial land use plan of Matanzas, covering 1,178,335 ha, by better integrating environmental aspects.		done on environmental management models, development plans and natural disaster risk management plans. It is important to mention that there has also been an impact at the national level, particularly with regard to the environmental law, the land and urban planning law, and the decree on the strategic management of territorial development, which facilitates work at the local level. In these circumstances, it is considered that the project has met its mid-term goal and will	

						exceed the its final target, assuming that by then ongoing processes will be completed.	
O2. Level of application of production practices that optimise flows of ecosystem goods and services, in pilot localities (SLM indicator)	Target production systems are subject to inadequate agricultural, grazing and forestry management practices (without adequate provision for promoting flows of environmental goods and services)	Resource managers responsible for the management of 1,703.43 ha are taking active measures to improve their production systems to optimize flows of ecosystem goods and services	1,703.43 ha of production systems in 10 SLM polygons in Pinar del Río, Matanzas, Villa Clara, Las Tunas and Holguin are under SLM practices that optimise flows of ecosystem goods and services: □ 1,218.04 ha of agriculture (including food crop, tree crop, and crop-livestock) - 216.54 ha of rangeland - 231.89 ha of pasture land - 26.04 ha of forests - 10.92 ha of mixed systems	The project is implementing active measures in 10 polygons of soil, water and forests in the five provinces (Evidence 5A, 5B, 5C, 5D, 5E, 5F, 5G, 5H, 5I), which covers a total of 1,703.43 ha committed as a goal under this indicator (Evidence 5). For instance, it is possible to highlight the application of organic material, crop residues, and green manures to favour support services, crop rotation to improve production yields, execution of contour lines to avoid erosion, and apiary establishments associated with crops areas to increase pollination. The implementation of these measures, financed through co-funding from the National Program Improvement and Soil Conservation (NPISC) (Evidence 6), will allow EGS flows of soil carbon removal, food provision, erosion control, pollination and recreation. These will be measured by the indicators defined in the methodology for monitoring ecosystem services to be validated from the second half of 2021.	The indicator system is not sufficiently specific with regard to site characteristics and SLM practices. This has been addressed during implementation. Reporting is adequate.	The final goal has been achieved at mid-term.	Achieved
O3. Area of high conservation value forests with improved	Target forests are subject to degradation from inadequate	134,000ha of forests in protected areas, with improved protection	329,509.34ha of mangroves, swamp forests, pine forests, deciduous forests, semideciduous forests	To guarantee improved management in 12 protected areas and 5 EAF, appropriate sustainable forest management practices are applied	The indicator is not specific enough in terms of how the improvement in protection/managemen	The mid-term target has been exceeded by 15%. Available	On target to be achieved

protection/management (SFM indicator)	application of management practices and illicit extraction of forest products		and evergreen forests in protected areas, with improved protection	In 154.525 ha of high conservation value forest are being applied proper practices to manage them in sustainable manners. For instance, reconstruction of forests, pruning, thinning, and fire protection measures. This guarantees better management in 151.525 ha of protected areas (Evidence 7A) and 3000 ha from EAF (Evidence 7C), all of this with the co-financing from the National Forest Development Fund (FONADEF) (Evidence 7B). In addition, on a pilot basis, the lifting and assembly of 239 plots of land in 33 work areas is completed, which are intervention sites for the project to assess forest degradation. Field validation of the methodology for assessing forest degradation enabled the identification of the degradation level in 11,546 ha of forests, defining the principal causes of this and the actions for its management (Evidence 8). At the same time, 1,473 ha of forests were reforested using the seedlings obtained from some nurseries for promoting plantations and restoring degraded natural forests in accordance with the commitment for this stage, with support from the national co-financing of FONADEF (Evidence 7B). It is likely that in 2022, 2023 and 2024 the project will cover the pending 174.984.34 ha, as the project has trained staff, defined the baseline and work areas and FONADEF projects have been approved, including new reforestation areas in EAFs and Aps.	t is measured. It has been addressed during implementation. Reporting is adequate, but aggregate figures should be given in line with the indicator..	information suggests that it is feasible to meet the end-of-project target at the end of the project, given favourable conditions, although not certain because no figures are available for the projected hectares for 2022, 2023 and 2024..	
O4. Net reduction in CO2 emissions (SFM indicator)	*(not set or not applicable)*	*(not set or not applicable)*	2,885,699tCO2eq	The assembly of 239 plots in 33 worksites in the five provinces has allowed to validate and adjust the methodology for assessing carbon dioxide (CO2) from the project and define the baseline for the net reduction of CO2 emissions, bearing in mind the	The indicator is not sufficiently precise, particularly with regard	There is no mid-term goal. The likelihood of meeting the end-of-project	On target to be achieved

				balance of emissions from reforestation and degradation reduction activities. A removal of 2,767,758 tCO2eq is estimated in 20 years, of which 1,229,775 tCO2eq will be due to reforestation (81% of the goal) and 1,537,983 tCO2eq due to degradation reduction (115% of the goal). It equates to 97% of the initial commitment and an uncertainty greater than 35%, using the ex-ante evaluation of the carbon balance with EXACT 7.20 version agreed in the PRODOC and using default emission factors. However, using 8.6.3 version of the ExAct and the use of national emission factors, removal of 1,218,259 tCO2eq is estimated in 20 years, of which 565,309 tCO2eq will be due to reforestation (37% of the goal) and 652,959 tCO2eq due to decreased degradation (49% of the goal), which is equivalent to 43% of the initial commitment Considering the criteria defined in PRODOCs for ex-ante carbon balance using version 7.20 of EXACT and default emission factors, the Project Management Unit, together with national institutions, will evaluate additional measures to implement mechanisms to reinforce the mitigation actions for reforestation, to ensure that the goal agreed with GEF can be fulfilled in 100%.	to methods and sources of verification. The reporting is adequate.	target depends on the measurement tool used. If you use the latest ExAct model, the project is not likely to achieve the target. If you use the model mentioned in the Project Document, which would be reasonable, it is very likely that the project will achieve the target at completion (with the current measures you would meet 97% of the target, but you plan to take measures to meet the remaining 3%, which seems feasible).	
The progress of the objective/outcome can be described as:	Moderately satisfactory						

Outcome 1	**Component 1: Favourable legal, institutional and policy frameworks in key sectors for the generation of global environmental benefits (BD, LD, SFM)**						
Description of Indicator	**Baseline Level**	**Midterm target level**	**End of project target level**	**Cumulative progress since project start**	**Comentarios al Sistema de indicadores y el reporte**	**Calificación (Justificación)**	**Calificación**
1.1 Number of policy, planning and strategy documents, regulatory instruments and economic and financial instruments with implications for the directions, priorities, nature, locations and environmental implications of the target sectors, that take into account the results of economic valuations	The value of ecosystem goods and services are not currently reflected in a consistent manner in documents and instruments	Proposals generated for the incorporation of the results of economic valuations into at least 6 policy, planning and strategy documents, 5 regulatory instruments and 3 economic and financial instruments	At least - 6 policy, planning and strategy documents - 5 regulatory instruments - 3 economic and financial instruments	The recognition of multiple environmental considerations and EGS and their economic valuation are incorporated into 5 national and sectoral policies, of which 2 are approved and, 3 are in the approval phase: - Environmental policy (approved): □ The ECOVALOR project provides technical elements in two governance projects within the macro program for the axis of Resource Natural and Environment: Project No. 1 Strengthening the institutional and legal framework for the implementation of the policy to improve the environmental system; and Project No 6 Financial sustainability of environmental development. These projects respond to the Program for "Implementation of the new cycle of the Environmental Strategy 2021-2030 (Evidence 9) □ ECOVALOR has an impact on the State Plan for the prevention and confrontation of crimes and illegalities that affect forest resources, wildlife and other natural resources. (Evidence 10) □ The project takes into consideration the strategic projections of the State Plan for Confronting Climate Change (Life Task) for the period 2021-2025 (Evidence 11). - Policy for the Conservation, Improvement and sustainable management of soil and	The indicator system is insufficiently precise in relation to the definition of instruments and their approval and/or implementation status. As a result, the report is somewhat confusing in terms of policy characterisation and aggregation. The report as of 30 September 2021 does not seem to integrate all the achievements indicated as of 30 June 2020.	The mid-term and final target of the project, which is the same, has been exceeded at mid-term (7 policies, 7 regulatory instruments and 3 instruments). Given the favourable regulatory review context and the contacts established, it is likely that this target will be largely exceeded by the end of the project.	Achieved

				use of fertilizers, approved in April 2020 (Evidence 12) - Forest Policy where the forest development fund is reformulated (FONADEF) (Evidence 13) - Territorial and Urban Planning Policy - Cultural and Natural Heritage Policy Also, the topics of economic valuation of BSE and the use of economic-financial instruments are incorporated in 7 regulatory instruments, all of them into the approval phase: - Natural Resources and Environment Law, which includes a section about economic-financial instruments - Cultural and Natural Heritage Law (approval phase) - Decree-Law of Protected Areas (approval phase): a section regarding the financing scheme of the National System of Protected Areas is added. - Decree-Law of Coast and its Regulation which is a decree (approval phase): - Climate Change Decree (approval phase): - Legislative package of the Sustainable use and soil conservation system: with 1 Decree-Law and a specific Regulation (approval phase) - Legislative package that implements the improvement of the Territorial and Urban Planning System (approval phase) The development and implementation of 3 economic and financial instruments have been supported, of which 2 are already established and 1 in conciliation with the national authorities: □ A proposal for a Payment for Environmental Services (PES) procedure for carbon removal is prepared for the forestry sector, as part of the			

				legislative package of the forestry policy, which also includes updating the FONADEF regulation. □ It is included in the 2021 state budget law the extension of the scope of application of the tax law referring to: - Tax for the use and exploitation of Bays in the Bay of Matanzas. - Tax for the discharge of residuals, approved in hydrographic basins in the tributary Basin of the Bay of Matanzas (Evidence 22, 22A and 22B).			
1.2 Levels of human and institutional capacities strengthened for the incorporation of economic valuation of ecosystem goods and services in the institutions covering the target sectors	- No specific training has been delivered on the incorporation of the results of economic valuation of ecosystem goods and services - No methodological proposals have been developed	- 25% of the members of target institutions and stakeholders have received training - Methodological proposals are under development	- 50% of the members of the national institutions and key project stakeholders (of whom at least 50% are women) have increased capacities for the incorporation of the results of economic valuation of ecosystem goods and services (methodology for assessment of the effectiveness of capacity development to be confirmed at project start-up). - Methodological proposals providing for the incorporation of the results of economic	A cumulative of 977 people (556 men and 421 women) have been trained, which represents 51.4% of the key institutions' members and stakeholders with capacities for the project's implementation. In addition, the methodology to evaluate the impact of the training strategy has been developed and currently is in the validation phase, according to what was defined in the Training Strategy. Also in progress, a review of the methodologies of key ecosystem services baseline and monitoring indicators, which is carried out by experts.	The indicator is not adequate. It focuses on the percentage of people trained, but not on the outcome of the trainings in terms of an increase in the capacity of the trained people, which requires a specific methodology that should have been defined during the design and implemented from the start of the project, with a concrete baseline. Furthermore, the indicator seems to refer to technical capacities, and not to human capacities (in terms of number of employees) or institutional	At mid-term, the target on percentage of people trained has been slightly exceeded (51.4% vs. 50%), although the gender quota has not been met (43% vs. 50%). Progress on the second sub-indicator cannot be assessed in a sufficiently robust way[29].	On target to be achieved NA

[29] See footnote above for anecdotal indications of some results..

			valuation in decision making have been technically approved in 50% of the institutional stakeholders of the project		capacities (in terms of institutional structures and arrangements). Also, it is not appropriate to have two sub-indicators in the same indicator. In the first indicator the target is not clear (how many people are 50% of that universe?). The second sub-indicator is very confusing because it is not clear what the target is (the institutions or the actors). The report is adequate with respect to the first sub-indicator in quantitative terms, but not in terms of impact. The report is inadequate with respect to the second sub-indicator. Progress on the second sub-indicator cannot be assessed. Training is confused with communication, but they are different strategies with different results. Communication is not capable of achieving substantive capacity building.		

					Again, the 2021 report does not seem to comprehensively include 2020 progress (e.g. with respect to the National Methodological Guide of Economic Valuation of Ecosystem Goods and Services and Environmental Damages).		
1.3. Effectiveness of the application of landscape planning and management processes based on the results of the economic valuation of ecosystem goods and services (see explanation in table following the Strategic Results Framework)	Planning = 0 Participation = 0 Communication = 0 Integration = 3 Responsibility = 0 Balance =0	Planning = 3 Participation = 3 Communication = 3 Integration = 5 Responsibility = 3 Balance =3	Planning = 5 Participation = 5 Communication = 5 Integration = 7 Responsibility = 5 Balance =5	The methodology for the evaluation of this indicator was defined, based on the outcomes of three participatory exercises. The baseline was adjusted. In December 2021 a new assessment was conducted. The findings of this assessment was the following: Planning = 5 Participation = 6 Communication = 7 Integration = 5 Responsibility = 5 Balance =4	The indicator is not adequate because there was no clear methodology. During implementation it has been addressed, although not finalised. The report was not adequate at the beginning of the evaluation, as no figures were given, but an analysis was completed in December 2021. .	As of December 2021, the mid-term targets have been exceeded. It can be considered that the pace of progress is likely to be maintained or accelerated as the various activities progress. As such, it is considered likely that the final targets will be met by the end of the project implementation period.	On target to be achieved

The progress of the objective/outcome can be described as:	**Satisfactory**						
Outcome 2	**Component 2: Targeted scenario analysis guiding decision-makers on the implications of different courses of action in the target sectors that could affect natural resources and global environmental values**						
Description of Indicator	**Baseline Level**	**Midterm target level**	**End of project target level**	**Cumulative progress since project start**	**Comments to the indicators system and reporting**	**Rating (Justification)**	**Rating**
2.1 Level of access of decision-makers to useful and relevant information on the environmental implications of different courses of action, based on the results of economic valuations, allowing policy formulation and decision making that optimizes the generation of environmental benefits	Reliable, useful and consistent Information based on the results of economic valuations, is not available to decision makers	Agreements reached with MEF, MFP, MINAGRI, MINTUR, MES, MINAL, MINEM, CITMA, ONEI, IPF, INRH, BCC and OLPP regarding arrangements for ensuring the effective flow of information based on the results of economic valuations	Information on the environmental implications of different courses of action, based on the results of economic valuations, flowing effectively to MEF, MFP, MINAGRI, MINTUR, MES, MINAL, MINEM, CITMA, ONEI, IPF, INRH, BCC and OLPP, including at least 6 results of targeted scenario analysis studies	The agreement signed between the ECOVALOR and InfoGEO projects guarantees the incorporation of useful and relevant information for decision-making generated within the framework of the ECOVALOR project, for instance, ecosystem services value, scenario studies, environmental impact studies, Environmental Spatial Planning Models. This will be communicated to key stakeholders such as the Ministry of Economy and Planning (MEP), Ministry of Finance and Prices (MFP), Ministry of Agriculture (MINAG), Ministry of Food Industry (MINAL), Ministry of Tourism (MINTUR), Cuba-Petroleum Union (CUPET) from the Ministry of Energy and Mines (MINEM), Institute of Physical Planning (IPF) and Governments, as the platform created by InfoGEO expands towards the frameworks of these sectors and national institutions. Six agreements signed between the ECOVALOR project and a significant group of institutions (MES, MINAL, MINAG, CUPET, IPF, MINTUR) to establish a flow of information that supports decision-making processes. The project's information is extended, addressing thematic keys to the project in Cuba on economic valuation of EGS and impact evaluation, incorporating 67 publications of studies in the environment	The indicator is mostly adequate, although there could be more consistency between the indicator, the mid-term target and the final target in relation to whether or not it refers to TSA (the former and latter suggest it; the latter do not). The report reflects this ambiguity. It refers to different types of information and materials and forms of communication, but not specifically to TTs, which are, however, explicitly mentioned in the final target.	The mid-term goal, in terms of institutional arrangements for sharing a wide range of documents and information, has been achieved. However, given the limited progress in TSA, it is unlikely that the final target will be met by the end of the project. Available information suggests that it is possible to complete 3 or 4	Not on target to be achieved

				repository (http://repositorio.geotech.cu/jspui/handle/1234/2390). In addition, Work is underway on 7 publications within the framework of the project in topics such as application of good practices on oyster farming, economic valuation guide and environmental damage, EGS monitoring indicators, among others. Developed a group of information and communication products that highlight the importance of EGSs and their economic value aimed at different target audiences: • General people: 3 public good advertising spots, 5 television programs, 514 news published on social networks and the website • Child population: 3 cartoons of public good • Preparation of a video to support the implementation of the National Plan for the Advancement of Women, together with the UNDP Gender Officer Institutional agreements have been signed for the development of four TSA and three ToRs have been developed, but none of them have been approved by all stakeholders, ToRs have not been developed for 3 sectors and formal agreements have not been signed in 2 sectors.		of the 6 planned TSAs.	
2.2 Number of target actors with awareness of and access to methodological tools for taking decisions on the basis of TSA that incorporates economic valuation of ecosystem goods and services	Target institutions lack awareness of and access to methodological tools for incorporating the results of TSA	Methodological tools are under development and agreements reached with target institutions regarding their design and use	At least 6 target institutional actors have awareness of and access to methodological tools for incorporating the results of TSA based on the economic valuation of ecosystem goods and services into decision-making with implications	Key actors from the agricultural, conservation, hydrocarbon and tourism sectors as well as from the Institute of Physical Planning have committed to conducting Targeted Scenario Analysis Studies (Evidence 28B, 28C, 28D, 28E, 28F) and are in the process of preparing and validating the Terms of Reference document for the studies of Targeted Analysis of Scenarios associated with these sectors (Evidence 34A, 34B, 34C)	The indicator is not appropriate. It is not clear to which methodological tools it refers specifically. Nor is it clear how awareness of and access to these tools is measured.	It can be assumed that by mid-term 6 institutions are in the process of becoming aware of and having access to 11 methodologies for	On target to be achieved

			for global environmental benefits (BD, SLM and/or SFM)	14 expert comments (Evidence 35A, 35B, 35C, 35D, 35E, 35F, 35G, 35H, 53I, 35J, 35K, 35L, 35M, 35N, 35O) are in the processing and analysis phase for their incorporation into the updated Guide for economic valuation of EGS and environmental damage. Participated in a global workshop on lessons learned on TSA Studies. It is also worth mentioning that the project has developed or improved 11 methodologies in support of TSA[30].	The report illustrates this weakness. Originally it referred to TSA methodology, when the indicator refers to methodological tools for incorporating TSA results. Subsequently, the methodologies were detailed, although it is not clear how they relate to the TSAs, nor the level of ownership of the institutions. In order not to leave this indicator unassessed, assumptions can be made. Progress with respect to the development of TSAs is assessed in indicator 2.1.	incorporating TSA results. In this sense, it can be considered likely that the target will be met.	
The progress of the objective/outcome can be described as:	**Moderately unsatisfactory**						

[30] Methodological guide for the construction and analysis of scenarios, methodological procedure for the characterisation of ecosystem services, methodological guide for the economic valuation of BES and environmental damages, methodology for the economic evaluation of impacts on BES, methodological procedure for the economic evaluation of productive practices, methodology for the design, application and control of economic-financial instruments, methodological procedure for the design, application and control of economic-financial instruments, methodological procedure for the design, application and control of economic-financial instruments, methodological procedure for the economic assessment of ecosystem-based adaptation options to climate change, methodological procedure for the spatial analysis of BSE in support of decision-making, methodological procedure for the design and analysis of strategies for decision-making, methodological guide for the socio-environmental analysis of problems on BSE, and methodology for assessing forest degradation in Cuba.

Outcome 3	**Component 3: Pilot experiences generating, validating and demonstrating mechanisms for the optimization and internalization of values of ecosystem goods and services in the target sectors and associated landscapes**						
Description of Indicator	**Baseline Level**	**Midterm target level**	**End of project target level**	**Cumulative progress since project start**	**Comments to the indicators system and reporting**	**Rating (Justification)**	**Rating**
3.1 Degree to which the results of valuations of ecosystem goods and services, and TSA, are reflected in decisions with environmental implications	Processes for Environmental Impact Assessment, municipal and provincial planning, management planning of SLM polygons and PA management do not specifically provide for the reflection of the economic value of ecosystem goods and services	Methodologies developed for the incorporation of provisions for reflection of the economic value of ecosystem goods and services in processes for Environmental Impact Assessment, municipal and provincial planning, management planning of SLM polygons and PA management in the target localities	Decisions with environmental implications are taken in an informed and consensus-based manner in the target localities and sectors, taking into account the valuation of ecosystem goods and services and the results of TSA, through improvements to processes for: - At least 4 new Environmental Impact Assessment studies of sector development initiatives will receive the technical support of the project to apply methodologies that include provisions for reflection of the economic value of ecosystem goods and services □ 17 municipal plans covering 1,494,875ha	Five studies about environmental damage associated with natural and technological disasters have been carried out. The results of those studies will be evaluated within the framework of the territorial planning schemes, in the management of the land, water and forest polygons, in the fishing management plans, in the environmental impact studies to be developed and in the management plans of protected areas. 480,430.00 ha belonging to the Viñales and Cienaga de Zapata municipalities are in the process of completing their diagnosis phase of the Environmental Spatial Planning Models, which includes the identification of EGS by environmental units. Local stakeholders are validating this process and because of COVID-19 it has not been completed. Besides, 96.190,00 ha belonging to Sagua La Grande municipality are advancing in the characterization stage of the ESPM as a prelude to the diagnosis phase. There is little progress on the other 2 municipalities. Twelve (12) municipalities will be covered by the improvement of the provincial land use plan of Matanzas, were progress has been slow due to COVID-19. Completing these MOAs will allow covering the expected area. Ten soil, water and forest polygons, which cover an area of 1,703.43 ha, are making progress in updating their management plans based on the identification	The indicator is inadequate in the sense that it does not clarify what the relevance of the results of the TSAs is (whether the incorporation of the results of the TSAs is necessary or not). The formulation "incorporation of provisions for reflection" is also unclear. It is also unclear what a methodology is in the context of this indicator. Furthermore, sub-indicators are included. It is not clear whether municipal plans are development plans or spatial plans. The report reflects these shortcomings. It refers to an information system and studies, which are not strictly speaking methodologies. In some cases	In the first sub-indicator, the final target has been exceeded (assuming that environmental damage studies are equivalent to environmental impact studies). In the second sub-indicator, the intermediate target has been met. It seems moderately likely that the final target will be met, in terms of number of municipalities (3 have been advanced when the target is 17, but	On target to be achieved

			□ 10 management programmes for demonstration areas (SLM polygons) covering 1,703.43ha, where SLM practices are prioritized in agricultural production - 15 PA management plans (covering 1,039,093.44ha) maximizing their effectiveness in tackling sector-based threats	and characterization of the EGS of agroecosystems and soil conservation and improvement measures. 980,795.74 ha, covering 10 Protected Areas (PA), have improved and effective management through the implementation of their Management Plans (MP) to reduce threats to socioeconomic activities. 7 PA have EGS economic valuation studies whose results will be incorporated into the corresponding MP update process (Evidence 39B). Importantly, the methodology for updating the management plans is being revised. Once approved this will be enforced by CNAP, probably affecting more than 15 PAs.	information is reported that does not directly refer to the indicator (sub-indicator 1).	all 17 could be covered in the remaining time) by meeting the area target. In sub-indicator 3, the final target is likely to be met, as plans covering the planned area are being updated. In sub-indicator 4, the final target is likely to be met and even exceeded in terms of area and number of APs. In aggregate terms, the final targets for all four sub-indicators can be considered likely to be fully met.	

3.2 Proportion of financial resources, delivered to producers and resource managers in the target sectors as incentives for the management and restoration of natural resources, that are subject to the optimization of flows of ecosystem goods and services and oriented by the results of economic valuations	Incentives provided by FONADEF and PNMCS are not specifically conditional on the optimization of flows of ecosystem goods and services	Provisions under development for making the provision of economic incentives to resource managers in the target areas conditional on the optimization of flows of ecosystem goods and services	$1.6 million of financial resources from FONADEF and PNMCS delivered to producers and resource managers in the target sectors as incentives for the management and restoration of natural resources, subject to the optimization of flows of ecosystem goods and services and oriented by the results of economic valuations	A procedure has been developed for the payment of ecosystem services (PSA) related to carbon removal as an incentive for FONADEF, to start its implementation in 2022. Projects for the management of the degradation of permanent forest plots were prepared and presented to FONADEF for their implementation during the year 2022. The procedure is in the process of being legally approved. According to the UMEP, as of June 2021, FONADEF had provided 4.056.932 USD as incentives for the management and restoration of natural resources. In addition, new incentives are identified in the improvement of the NSCMP -reflected in the policy and its legal framework-, which will be proposed to the Ministry of Finance and Prices and the Central Bank of Cuba. A group of economic incentives in the agricultural sector is in the feasibility evaluation phase: green banking, differentiated prices, PSA carbon in soil and environmental insurance. Of these, the one related to Green Banking is considered the most advanced.	The indicator is not precise enough in terms of identifying whether the resources are additional or not. Moreover, the mid-term target is very vague: it is not clear what exactly "provisions" means. Originally the report was inadequate, because it gave qualitative information when the final target is quantitative. The report did not indicate how much resource mobilisation was being attempted. Information provided in January 2022 makes it possible to assess compliance with the end-of-project target.	The project can be considered to have met its mid-term goal. With the information provided in January 2022, the final target can be considered to have been exceeded at mid-term, and will be further exceeded at the end of the implementation period.	Achieved
3.3 Production systems and conservation areas in target localities with improved management and protection to favour the generation of multiple global environmental benefits	Target production systems are subject to inadequate agricultural, grazing and forestry management practices (without adequate provision for promoting	- 2800ha of forests subject to improved management in 7 forest polygons - 1,500ha of reforestation (planted but yet to be certified under national regulations)	- 7,000ha of forests subject to improved management in 7 forest polygons (5 forest enterprises - Guanahacabibes, M. Matahambre, La Palma, Matanzas, Las Tunas - and 2 protected areas) - 3,500ha of reforestation	Improved management was initiated in 11,546 ha of forest, from the identification of the causes of their degradation by applying the methodology for assessing forest degradation. 1,473 ha of forests were reforested in the intervention sites for 95% survival. 865,66 ha of soil, water and forest polygons benefited from SLM measures in 10 soil, water and forest polygons.	The indicator includes four sub-indicators, which is not adequate. There is no indication of which practices should better conserve ecosystems and how ecosystem improvement will be measured. During implementation it has been addressed.	Assessing progress on the first sub-indicator is complex. A baseline study is a prerequisite for management improvement, but it does not properly imply the implementatio	On target to be achieved

	flows of environmental goods and services)	- 700ha of agroecosystems in 10 demonstration polygons - 400,000ha in 15PAs with improved management and protection	- 1,703.43ha of agroecosystems in 10 demonstration polygons - 1,039,093.44ha in 15 protected areas with improved management and protection	In 980,795.74 ha (10 APs) are being generated multiple environmental benefits due to the effective administration and management of natural resources 131 520 ha of fishing areas in the Alto del Norte in Villa Clara have implemented the use of selective gear for responsible fishing.		n of impactful practices, including those indicated in the 2020 report. From the first perspective, there is progress, and in fact the final target has been exceeded by 65%. From the second perspective, there is no progress, as improved practices have not yet been implemented. However, in both cases, the final target is likely to be exceeded at the end of the project. In the second sub-indicator, the mid-term target has almost been met. Since it is most difficult to start up, the project is likely	

						to reach the final target. In the third sub-indicator, the mid-term target has been exceeded by 24%. There are no clear elements to be able to determine whether the final target can be reached in the sense that the number of polygons seems to be given. In the fourth sub-indicator, the mid-term target has been exceeded, covering an area close to the final target. It is likely that the final target will be met at the end of the project. In aggregate terms, the final targets of sub-indicators 1, 2	

						and 4 can be considered likely to be fully met, and the final target of sub-indicator 4 partially met.	
3.4 Levels of knowledge and technical capacities among resource managers for the scaling up of production practices that optimize flows of ecosystem goods and services	Limited knowledge and technical capacities among resource managers mean that production practices that optimize flows of environmental goods and services are not scaled up	Resource managers responsible for managing 100,000ha of agricultural systems have training and capacities	Resource managers responsible for managing 200,000ha of agricultural systems have training and capacities necessary for the application of production practices that optimize flows of ecosystem goods and services	A group of agricultural equipment for administrators of agricultural systems has been delivered and start up, which will allow the appropriation of production practices that optimize the flow of ecosystem services such as carbon sequestration in soil, provision of food and control of soil erosion. New information provided by the UMEP in January 2022 claims that 100% of the required equipment has already been imported. Socialized with key actors in the agricultural sector the study proposal and the methodological guide of TSA, in order to guarantee its future scaling-up process, in follow-up to the training process reported in the previous PIR. 993 people (539 man and 454 woman) were trained through 101 provincial and local courses and workshops, mostly in virtual mode due to covid-19. In this way, 52.3% of decision-makers, producers, academics and researchers have received training. Compared to the previous report, there was no new people trained. New information provided by the UMEP in January 2022 claims that training has resulted in increased capacity, which is demonstrated by the improvement of the legal framework and the implementation of improved practices in the land, water and forest polygons.	The indicator is not adequate. It assumes that being subject to training and having a necessary level of technical training are equivalent, but this is not always the case. The indicator should focus on training outcomes, i.e. technical capacity. Moreover, it refers to capacity without specifying what kind of capacity (technical, human resources, financial, equipment, institutional...). In practice, the report suggests that the emphasis is on training and equipment. Also, the target is not specific because it is not known what training and equipment is needed. Nor is there any indication of the area covered. In summary, the information available does not	It cannot be assessed.	

					allow for an assessment of performance on this indicator.		
The progress of the objective/outcome can be described as:	Satisfactory						

3.2.2 What are the main obstacles to be addressed and the main opportunities to be seized based on current progress towards results?

The achievement of the targets set out in the results framework included in the project document has been negatively affected by several **inhibiting external factors**. The tightening of the economic, financial and trade blockade as a result of the sanctions and restrictions applied by the Trump administration made it difficult to procure and import key equipment, given the difficulty of importing equipment with US-produced components. The project has faced new restrictions, especially in the financial sector, which has impacted the operation of the project. Agreements already closed have fallen through at the last minute. CITMA has managed to overcome these challenges remarkably, being able to import a significant number of equipment, thanks to the process improvements carried out over the last few years, which were conceived even before the project was designed. However, difficulties persist in importing some goods, particularly those related to hydrocarbon equipment. In addition, the project has faced a major increase in freight costs, which have risen from USD 2,000 to USD 5,000, which has increased the price of the equipment to be imported by the project, in addition to the aforementioned challenge of the blockade, which limits the number of vendors.

Additionally, the project has been impacted by the COVID-19 pandemic. For almost two years, one or more of the provinces have been severely affected, sometimes with all five being badly hit. This has prevented field missions by the national and sometimes provincial teams, delaying processes. As discussed below, project actors have been able to move forward despite this difficulty, thanks to the willingness of local agencies and their knowledge of the territory, and on some occasions the issuance of special permits, but not at the same pace as they would have done without the pandemic.

Meeting targets has also been negatively affected by the country's economic and monetary reordering, which has included changes in prices and skills. This has created uncertainty and forced adjustments on the fly, causing delays. For example, an economic and financial instrument that was initially identified as viable is no longer viable. Some useful studies have become outdated.

Also, the progress of the project has been affected by difficulties in electricity supply, which have slowed down the pace of work (computers have to be switched off from 11am to 1pm) and affected mobility.

Finally, the interviews suggest that the project has faced a low level of initial technical capacity, addressing aspects that were new in many instances and for many actors, particularly in terms of TSA and more globally in the field of environmental economics, where natural resource conservation was conceived as an expense rather than an investment, despite previous experiences in universities and research centres. This has made it difficult to understand tools and methodologies and has meant longer than expected discussions and negotiations. This intersects with the complexity of the project in terms of the involvement of very diverse actors, sometimes with conflicting interests.

On the other hand, in terms of **external enabling factors**, the achievement of the project's goals has been favoured by the approval of public policies and the updating of the legal, normative and regulatory framework. Although it has entailed difficulties, the updating of regulations has constituted and constitutes an extraordinary opportunity to insert the conservation and sustainable use of natural resources in the legal, normative and regulatory frameworks, favouring the three components, but above all component 1. In this respect, the PND 2030 and the Macro-Programme on Environment and Natural Resources should be highlighted, which offer the possibility of converging in a single platform, providing a space for integration. Decree Law 33/2021 for the strategic management of territorial development establishes the Territorial Contribution for Local Development, whereby companies located in the municipality contribute 1% of their sales as a contribution to development. The municipality has the autonomy to decide on this budget[31]. The project helps municipalities to define the proportion to be allocated from this financial source towards previously identified environmental goals. More generally, although technical knowledge on concrete methodologies and instruments was low, the project has benefited from a positive willingness to promote environmental sustainability by applying environmental economics principles and lessons. To this must be added the interest of cooperation actors in promoting sustainable development, and more specifically environmental economics. As noted in section 3.1.1.2, Ecovalor benefited from the previous work of other projects, especially Biofin, and is now complemented by other initiatives, particularly Info-GEO and OP15. Moreover, cooperation actors have shown interest in promoting some of the Ecovalor-driven pathways. These include a GEF-7 project on nature-based tourism and a Green Climate Fund project on ecosystem-based adaptation in coastal zones.

Finally, although the pandemic had, as emphasised above, negative impacts, it provided an opportunity to reach out to more actors, boosting digital communication and remote working, which in the future may prove effective in certain circumstances.

3.3 Efficiency

3.3.1 Finance and co-finance

The project is close to implementing half of its total budget. As shown in Table 3, as of 30 September 2021, the executed budget is USD 4.6 million, equivalent to 47.5% of the total project budget (USD 9.6 million). Of the planned budget, 50.8% was executed for Component 1 (Legal, policy and institutional frameworks), 46% for Component 2 (TSA) and 41% for Component 3 (Pilot experiences). This is in line with the progress in project activities. The cumulative management cost of the project is 172,156 USD, corresponding to 3.7% of the executed budget. This amount is lower than the budget foreseen for this item in the Project

[31] This is really the only budget over which municipalities have decision-making power. The rest of the allocations for the different sectors/activities of the municipality are pre-established by the ministries that vertically govern these sectors.

Document and in the last revision, and in percentage terms is below both the planned (4%) and the GEF (5%).

The project budget has been subject to consecutive revisions. These revisions have consisted of redistributing the programmed expenditure over the project implementation period. Thus, the programmed expenditure for 2020 and 2021 was increased by 64% and 57%, respectively (Table 4). These budget adjustments have not affected the distribution of the budget between components, which remains almost unchanged (Table 3). UMEP indicated that these adjustments were made mainly to reflect the increased cost of importing equipment as a result of the tightening of the blockade. It should be noted, however, that the budget spent in 2020 remained close to what was planned in the Project Document and a similar trend is envisaged for 2021, as only about half of the revised budget has been spent as of 30 September. As explained in the next section, this is related to the cancellation of activities due to the COVID-19 pandemic, delays in equipment procurement processes and challenges in getting the TSA studies underway. As a result, the project has executed 52.7% of the revised budget for its first three years of implementation, and 73% of that originally planned, with the greatest progress in Components 2 and 3 (Table 3). In any case, it should be noted that, had the entire revised budget for the first three years of the project been spent, the cumulative disbursement up to 30 September 2021 would have been USD 8,629,264, representing 90% of the total project budget. This is despite the fact that the project is only halfway through its implementation period.

Table 3. Cumulative project finance per component as of September 2021 (USD)

	Cumulative					Total	
Concept	**ProDoc**	**Revision 2021**	**Executed**	**% ProDoc**	**% Revision 2021**	**ProDoc**	**% Executed**
Outcome 1	1,325,177	1,952,561	927,548	69.9%	47.5%	1,824,831	50.8%
Outcome 2	1,719,150	2,319,198	1,258,869	73.2%	54.3%	2,737,247	46.0%
Outcome 3	2,891,131	3,991,978	2,189,321	75.7%	54.8%	4,562,080	41.0%
PMC	291,668	365,527	172,157	59.0%	47.1%	456,207	37.7%
Total	**6,227,126**	**8,629,264**	**4,547,896**	**73.0%**	**52.7%**	**9,580,365**	**47.5%**

Table 4. Project finance per year as of September 2021 (USD)

Concept	**2018**			**2019**			**2020**		
	ProDoc	**Revision**	**Executed**	**ProDoc**	**Revision**	**Executed**	**ProDoc**	**Revision**	**Executed**
Outcome 1	21,000	21,000	1,000	513,653	513,653	1,008,590	410,604	722,682	312,983
Outcome 2	24,650	24,650	22,441	544,500	148,447	685,749	577,000	812,041	576,511
Outcome 3	6,750	6,750	250	1,008,590	544,500	87,700	947,936	1,664,428	963,314
PMC	38,116	38,116	42,128	87,700	237,981	15,961	96,866	125,250	84,090

Total	**90,516**	**90,516**	**65,820**	**2,154,443**	**2,154,443**	**1,088,1367**	**2,032,406**	**3,324,400**	**1,936,897**

Concept	2021 (September)		
	ProDoc	Revision	Executed
Outcome 1	379,920	695,227	465,119
Outcome 2	573,000	938,008	421,936
Outcome 3	927,855	1,312,210	540,009
PMC	68,986	114,461	29,978
Total	**1,949,761**	**3,059,905**	**1,457,042**

Source: Own, based on information provided by UMEP.

As of 30 September 2021, the project had mobilised USD 25,263,638 in co-financing, i.e. 67% of the co-financing identified in the Project Document (USD 37.9 million). The co-financing foreseen in the Project Document includes a contribution of USD 37,800,000 from the GoC and USD 85,000 from UNDP (Table 5). To date, the project has leveraged around 25.3 million USD provided by different GoC institutions, including FONADEF (63%), CTI projects (16%), CNAP (12%), the PNMCS (8%), and the FNMA (1%). This level of co-financing is high considering that the project is still in the middle of its implementation period. For its part, the 2021 PIR notes that in November 2020, the GoC issued a decree-law, which came into force on 1 January 2021, to unify the monetary and exchange values of the Cuban currency, which can potentially impact the value of the committed co-financing and increase the prices of local service providers for the project. In effect, these changes generated a devaluation of 2300% in the official exchange rate, which generated an inflationary spiral, linked to the increase in the prices of goods, services and salaries. In view of this, the project has entered into discussions with the co-financing institutions to readjust the figures without this leading to a decrease in the total value of the co-financing in the Project Document.

Table 5. Cofinancing (USD)

Type of cofinancier	Name of cofinancier	Type of cofinancing	Mobilized investment	Cumulative	Prodoc	%
GEF Agency	UNDP	In Kind	Recurrent expenditures	38,439	85,000	45%
Government of Cuba	CNAP	Support	Recurrent expenditures	2,953,481		
	PNCMS	Support	Recurrent expenditures	2,081,074		
	FONADEF	Support	Recurrent expenditures	15,814,596		
	FNMA	Support	Recurrent expenditures	310,000		
	CITMA PSCTI	Other	Recurrent expenditures	4,066,048		
			Total GoC	*25,225,199*	*37,800,000*	*67%*
			Total	**25,263,638**	**37,885,000**	**76%**

Source: Own, based on information provided by UMEP

The project has adequate financial controls in place. Two financial and performance audits were carried out by independent auditors for the years 2019 and 2020. In both cases, unqualified favourable opinions were issued. The audit reports detect delays in import procurement processes, as well as budget under-execution for field equipment and consultancies. In both cases, these situations are rated as low risk, with the recommendation to continue implementing actions to allow the execution of the pending budget lines. These actions include close monitoring of procurement processes through the joint CITMA / MINCEX / UMEP / UNDP monitoring mechanism with the importing company and evaluating alternatives for the organisation of international consultancies under the virtual modality in the face of the COVID-19 pandemic. By 2021, the project reports planned imports of USD

3,304,400, of which 29.3% (USD 965,700) has been executed to date, while an additional 49.8% has been contracted (USD 1,646,430).

3.3.2 Work planning

While the overall progress of the project is adequate, there have been delays in some activities compared to what was originally planned. As indicated in the financial analysis, the project has delays in all its components due to the combined effect of lengthy import procurement processes, which have nevertheless seen significant progress in 2021, as explained above. Another factor that, to a lesser extent, has generated delays has been the COVID-19 pandemic, which has caused the suspension of some activities and the need to adjust others to be carried out remotely. However, UMEP has made progress in institutional and methodological development work, while provincial teams have been able to continue work in the field to collect data and test methodologies.

As of 30 September 2021, Component 2 (TSA) was experiencing delays due to some differences in the understanding of the UNDP-driven methodology, which is unprecedented in the country. This has led to a dialogue between the GoC and UNDP[32] on methodologies and modalities for their application[33]. Recently, however, positions have been moving closer together. In this regard, in November 2021 it was agreed that UNDP will review and provide criteria on the ToR documents and the final results of each study, and that the first TSA study will be supported by the global UNDP TSA team, which has provided systematic monitoring of progress on the TSAs, in accordance with one of the agreements adopted at the January 2020 meeting of the project's National Steering Committee. It has also been agreed to first conclude the reconciliation of the ToR for agricultural sector TSAs before moving forward with the revision of the other ToRs. Other factors hindering progress in Component 2 have been the impact of the COVID-19 pandemic on the selected sectors (in particular the tourism sector), the ongoing institutional changes and the monetary adjustment process that started in 2020, which have caused high volatility in the national economy, in response to which the project is adjusting the ToRs of the studies. In this context, the TSA studies have not yet begun, but progress has been made towards their implementation: the most relevant stakeholders have been trained[34], the Steering Committee has approved the critical path of

[32] Specifically, UNDP Cuba, with the guidance of the RTA and the UNDP Senior Advisor for TSA, established channels of dialogue on this issue with the General Directorate of Environment (environmental policy maker) and the Directorate of International Relations (political and operational point of the GEF) of CITMA, and the CNAP (implementing agency).

[33] More specifically in the light of the ToR for the agricultural sector, UNDP recommended i) broadening the scope of the sample identified (46ha) so that it can be representative in the development of a study that should generate recommendations for public policies; i) review the specific method to be used for the development of the study, so that it corresponds to the TSA methodology; and iii) review the composition of the technical teams that develop the studies, and clearly define the roles and responsibilities of the different actors involved in the stages of a TSA study (preparation, technical review and approval).

[34] In July 2019, as part of the Ecovalor project activities and with the accompaniment of an expert from the UNDP Global TSA Team, a National Training Workshop on the use of the TSA methodology was organised. Representatives of national and territorial institutions and sectors identified by the project as key actors for the development of these studies in the country participated. In addition, members of the Ecovalor project team and other representatives of national institutions were invited by UNDP to participate in the Learning Workshop on the application of the Focused Scenario Analysis, held under virtual modality on 26 August 2021. This workshop

the TSAs and the issues to be addressed in each case, four sectors have formally committed to carry out these studies (agriculture, tourism, hydrocarbons and conservation) and three ToRs have been prepared (for the agricultural sector in March 2021 and for protected areas and hydrocarbons in November 2021), with the participation of national sectoral experts. However, there are still no ToRs approved by all parties, no ToRs have been elaborated for one sector with a formal commitment (tourism), and no formal agreement has yet been reached for the fisheries and forestry sectors. Given this level of progress, uncertainty was expressed in some interviews regarding the feasibility of finalising the six studies by the project closing date, which could also affect the implementation of Component 3, which is partially dependent on the completion of the studies.

3.3.3 Monitoring and Evaluation (M&E) System

The project has an adequate M&E plan. The M&E plan included in the Project Document defines in a clear and detailed manner the responsibilities of the different project actors, as well as the activities to be carried out in accordance with GEF and UNDP guidelines. For the implementation of these activities, a budget of USD 325,844 is envisaged, equivalent to 3.4% of the GEF grant, plus USD 324,562 in co-financing. This amount is in line with the good practice of reserving around 3% of the GEF grant for M&E activities in projects between 5 and 10 million USD[35].

As mentioned in section 1.2.2, the results framework included in the project document is not entirely adequate to monitor and evaluate project performance. Among other aspects, the results framework did not include in most cases a solid baseline, or even a clear methodology for defining such a baseline. During implementation, the project has made a remarkable effort in developing monitoring methodologies and defining baselines. This is a vital result, which can be used by other initiatives and projects in the future.

The monitoring of the project has been carried out in a timely manner. The 2020 and 2021 PIRs have been delivered in a timely manner, fully completed and supported by relevant evidence. Overall, the quality of reporting is good, but there are weaknesses in the reporting of progress in meeting indicators. Information is often provided that does not directly respond to the indicator, sometimes in 2021 it appears that no information is accumulated from 2020, aggregated information is not provided in all cases, and ratings often seem too generous or optimistic (see Table 4). In this regard, it should be noted that there have been differences in the interpretation of the ratings, particularly in relation to the rating of progress in TSA studies and how this affects the overall rating in the 2021 PIR (UNDP uses the rating "Moderately Satisfactory", while CNAP considers it satisfactory).

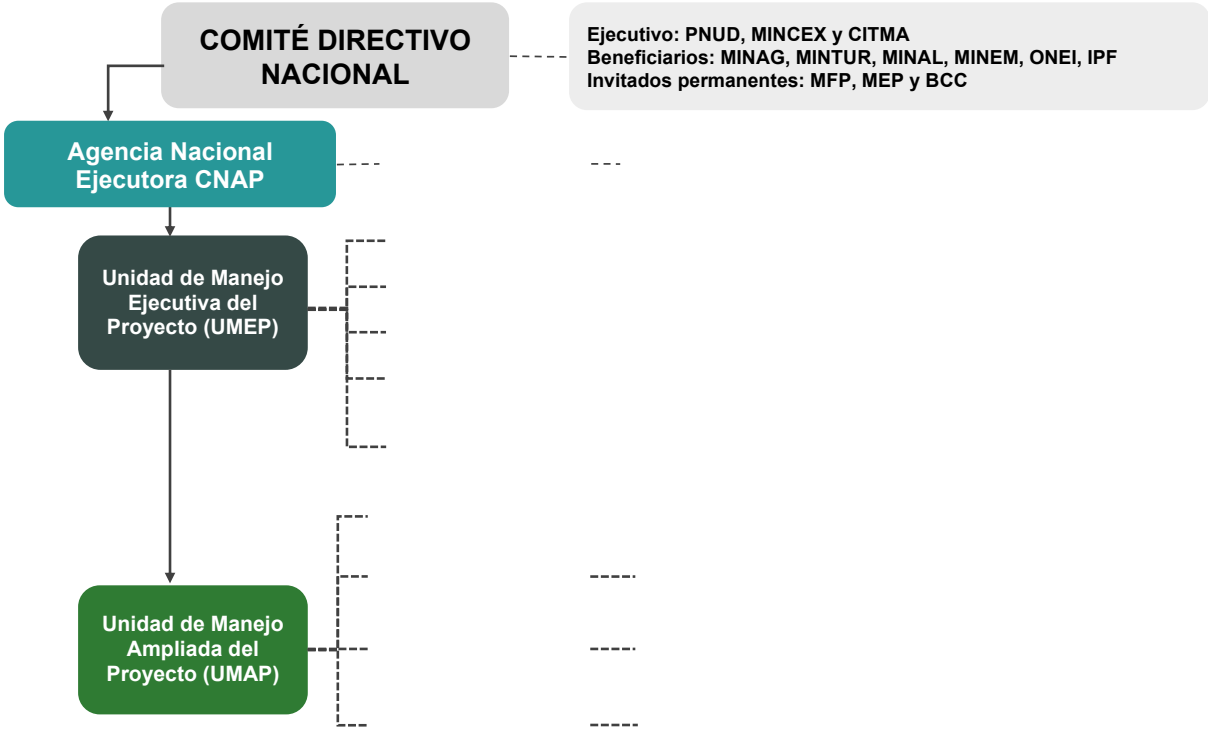
allowed the socialisation of the results and experiences resulting from the application of the TSA studies in various sectors in different countries at a global level.

[35] FMAM, 2020. *Guidelines on the Project and Program Cycle Policy*, p. 18, para 19.

3.3.4 Institutional arrangements

The institutional arrangements for project management are clearly defined. The project's governance system was defined from the design stage and brings together a multiplicity of actors from different sectors and decision-making levels, especially governmental (Figure 1). A particular feature of this system is the UMAP, which, in addition to the UMEP, includes representatives of national entities involved in the project, the productive sectors and the provincial coordinators of each of the five target territories. The Project Document details the responsibilities of each agency and category of actors, except those of the UMAP, but interviews suggest that it has been configured as a multi-sector and multi-level coordination and planning mechanism.

Figure 1. Project's institutional arrangements



Source: Presentation by UMEP, October 8, 2021

The GoC has succeeded in building a UMEP that effectively articulates multiple stakeholders. This has come about thanks to the multi-stakeholder composition of the UMEP. Although led and staffed mostly by CNAP staff, the UMEP also hosts staff from other institutions, such as the Directorate General of WADA and the Institute of Tropical Geography, whose expertise and networks have complemented CNAP's knowledge and networks. Together with CNAP's own efforts, this inter-institutional and multidisciplinary character has allowed UMEP to go beyond the boundaries of CNAP's mandate, which, being focused on Natural Protected Areas, is in principle restricted with respect to the broad scope of the project. The involvement of the DGAMA has been particularly key for component 1, and that of the Instituto de Geografía Tropical for component 2, allowing for the broadening of convening capacity and knowledge, which is key for a project with a cross-sectoral scope such as

Ecovalor. UMEP has adequately met this challenge, acting as a sort of secretariat for the project. This cross-sectoral and multidisciplinary approach was also applied to the other governance bodies of the project, such as the Steering Committee, the UMAP and the provincial teams.

The institutional arrangements have proved effective in facilitating coordination between the multiple actors involved in the project. The two meetings of the National Steering Committee, held in 2020 and 2021, have been widely attended; according to the interviews, they have provided a space for concertation and strategic decision-making that has been useful in guiding the implementation of the project. For their part, the UMAP and the Provincial Management Units meet quarterly and monthly, respectively; there are also specific planning meetings with the different sectors involved. The interviews agree that these arrangements have ensured coordinated action, both vertically and horizontally, even in a context of limited face-to-face meetings due to the COVID-19 pandemic, thanks in part to UMEP's efforts to strengthen the communication infrastructure.

The quality of implementation and execution is high. Interviews agree that UNDP, as the implementing entity of the project, has provided high-quality technical accompaniment and supervision, has been responsive to national priorities, and has maintained good communication with the GoC, which considers it a strategic partner. Similarly, interviews indicate that the CNAP has extensive experience in managing international projects, which is reflected in its capacity and operational agility (including procurement), as well as its ability to establish partnerships. The audit reports indicate that UMEP manages resources adequately, complies with the procedures established by UNDP for procurement, and has adequate control over the information and documentary evidence of the contracted services and project implementation activities.

3.3.5 Stakeholder involvement

The project has broad stakeholder involvement at national and sub-national levels. The Project Document identifies as stakeholders 31 central government entities (of which eight are attached to CITMA and seven to the Ministry of Agriculture), the Municipal Administration Councils and the People's Councils in the five intervention provinces, as well as five civil society organisations: the National Association of Small Farmers, the Cuban Association of Agricultural and Forestry Technicians, the Cuban Association of Animal Protection and the Federation of Cuban Women. The PIRs indicate that the project has had the participation of all these actors initially engaged at the national level and that regular meetings of the National Steering Committee, the UMAP and the Provincial Management Units have provided forums for their involvement. They also report that a series of exchange meetings and workshops (virtual or face-to-face, in accordance with the health protocols for the COVID-19 pandemic) have been held, which have allowed for continued participation and close monitoring of planned activities, such as the TSAs, the application of economic-financial tools, the design of indicators for monitoring and the management of co-financing. At the provincial level, the call for proposals has also been broad, involving sectors not prioritised by the project, such as water and sanitation in Holguín, housing in Las Tunas and port activities in Matanzas, among others. In some cases the project has also worked with the private sector. However, as already

mentioned in Section 3.1.1.2, there is an opportunity to involve more systematically other sectors and new emerging actors in the private sector, in particular SMEs.

While the project responds to the country's priorities and has public sector leadership, there are challenges to TSA implementation. As detailed in Section 3.1.1.3, the GoC's leadership since the design of the project has allowed its alignment with national priorities and the existing institutional framework in Cuba, as well as its coupling with the process of regulatory updating and economic change underway in the country. An example of this is that the project's National Steering Committee is chaired by the First Vice-Minister of CITMA, a public official at a strategic level[36]. However, as explained in Section 3.4.2, challenges are being faced in the implementation of the TSA, as it is a UNDP-driven methodology at the international level, with no exact precedent in the country[37].

Gender equity trainings have been carried out with equal participation of men and women, as well as pilot experiences with a gender approach. In accordance with the 2021 PIR, in the period from June 2020 to June 2021, activities were carried out to reduce the gender gap, supporting the use of management tools and access to knowledge, as a means of empowerment. A total of 993 people were trained in different gender-related activities, including 414 women, of whom 112 participated at the local level and 302 at the provincial level. Compared to the previous year, the proportion of women participating in different courses increased by 52%. The project is also implementing a pilot experience with a gender approach in the fishing sector in the port of Manatí (municipality of Las Tunas), in order to expand the employment capacities of this community. Twelve women are participating, which represents 37% of the women living in the project intervention site. In the municipality of Las Tunas, support is also being provided for the acquisition of equipment and inputs for the people working in the oyster processing plant and the oyster farms, most of whom are women. In addition, in Ciénaga de Zapata (municipality of Matanzas), Ecovalor is working in synergy with the "Small Transformations" project, financed by a French NGO, which seeks to empower rural women. In particular, workshops on food production and economic alternatives for women have been carried out with the participation of local families.

Despite these initial advances, challenges to women's equal participation in the supported communities remain. Reflecting the broad participation of women in the public sector, the project team at national and provincial level has an equal participation of men and women. However, this is not necessarily reflected in the mainstreaming of a gender perspective in project activities. In this context, the challenges identified in the interviews are: a) to understand and make visible the challenges faced by women in rural communities in terms of access to resources, benefits and decision-making; and b) the need to mainstream gender in sectors, such as forestry, where there is little previous work in this area.

[36] The project works with the private sector in the agricultural intervention sites (soil, water and forest polygons) and in nature tourism in Ciénaga de Zapata and Viñales. In addition, the Environmental Management Models involve community actors, some of whom represent the private sector.

[37] In Cuba, scenario analysis studies have been carried out, including environmental variables. Examples are prospective studies for energy issues and tourism development by the MEP, as well as others related to climate change adaptation in the agricultural sector by the BASAL project. However, the methodologies are not identical.

1.1.1. Social and environmental safeguards

The social and environmental safeguards review was carried out based on UNDP's then current policies, but does not reflect recent developments in this area. The Social and Environmental Safeguards Review Form (SESP) included in the Project Document identifies five potential risks: the implementation of activities near or within NPAs, the implementation of reforestation activities, the harvesting of fish stocks, the vulnerability of project outputs to climate change, and the susceptibility of project activities to flooding and extreme weather events. While the first three are rated as high probability (5) and the remaining two as medium probability (3), in all cases the impact was rated as low (1). Therefore, the overall risk rating of the project is low. Mitigation measures were identified for each risk identified, but a safeguards plan was not developed, as this was only required for medium or high risk projects. However, the monitoring plan foresees that the SESP and corresponding plans are updated on an annual basis. This is in line with the then existing GEF Social and Environmental Safeguards Policy. A new policy on the matter was approved in December 2018 (with an update in June 2019) and corresponding guidelines in December 2019. This policy applies to all new projects and programmes submitted as of 1 July 2019, which does not include Ecovalor[38]. For its part, UNDP updated its Social and Environmental Standards in 2019 and issued an updated Guidance Note on Social and Environmental Assessment and Management in November 2020. In this context, UNDP Cuba is preparing a process to train Ecovalor staff (along with other ongoing projects) to update its SESP, since, as the PIR 2021 points out, it is considered to be of low quality, as it does not reflect these recent developments[39]. Another aspect highlighted in the 2021 PIR is that, unlike the SESP included in the Project Document, the PIMS database shows a moderate risk rating, which would require the development of a safeguards plan; the PIR states that this conflict should be reviewed by the UNDP Country Office. There are plans for this in 2022. Indeed, the project's Annual Operational Plan (AOP) for 2022 foresees funding for consultancies to support the update of the SESP and the development of the respective Management Plan.

On the other hand, risks relevant to the project have been identified, but there are opportunities to specify mitigation measures. The Project Document also includes a risk matrix, which includes five additional risks to those identified in the SESP. For each risk, the matrix specifies its type, its impact and likelihood of occurrence, the mitigation measures to be implemented, as well as the tendency for the risk to reduce or increase; only risks related to climate change fall into this second category. It is also specified that the Project Manager will be responsible for monitoring the risks under the supervision of UNDP. The risks identified are adequate, but in some cases their likelihood was underestimated; also, in most cases, the mitigation measures envisaged are not specific and verifiable, which may make implementation and monitoring difficult (Table 6).

[38] For projects and programmes under implementation, this policy applies to mid-term reviews and final evaluations submitted after one year from the effective date (1 July 2019).

[39] As UNDP has strengthened the Environmental and Social Safeguards monitoring mechanisms, the Country Office began to structure a training process for implementing project teams. This training has focused on the understanding of the tool as a strength for the adequate management of environmental and social risks during the development of project activities.

Table 6. Comments to the risk matrix

Risk	Mitigation measure	Comment
Policy makers give higher priority to generating short-term financial and productivity considerations than to considerations of sustainability and cross-sectoral impact. Impact: 3 Likelihood: 3	Development of tools and capacities to help decision-makers weigh the net implications of different sector development scenarios. The project will develop technical capacity that will provide economic sector actors with technical options to reduce or offset their impacts.	The proposed mitigation measures are adequate, but defining them more specifically would facilitate their implementation and monitoring.
National budget constraints reduce the availability of incentives for management practices that generate or safeguard ecosystem goods and services. Impact: 3 Likelihood: 3	The project will promote capacity building on ecosystem goods and services to increase understanding of their importance for social and economic development, and will also propose viable financing options for sustainable management and conservation of ecosystems and their services.	The proposed mitigation measures are appropriate, but defining them more specifically would facilitate their implementation and monitoring.
Climate change and extreme weather events lead to the degradation of ecosystems and their capacity to deliver ecosystem goods and services. Impact: 3 Likelihood: 5	Valuation of ecosystem goods and services and awareness raising will result in increased investment in ecosystem restoration and restoration of ecosystem resilience and capacities to deliver ecosystem goods and services. The project could develop further methodological tools to reduce the vulnerability of ecosystems to climate change and extreme weather events.	The proposed mitigation measures are adequate, but defining them more specifically would facilitate their implementation and monitoring.
Institutional changes in the context of the process of updating the economic and social model in Cuba generate modifications in the key actors of the Project and their respective responsibilities. Impact: 3 Probability: 3	Systematic monitoring of the institutional situation and timely adjustments of roles in the coordination and implementation of the project.	The probability of this risk was underestimated
Delay in project implementation processes due to import delays. Impact: 3 Likelihood: 2	Timely identification of bottlenecks associated with import processes. Define and implement actions to speed up the import process (shipment) together with the actors involved in the process.	The likelihood of this risk was underestimated
Risks identified in the SESP		
Project activities are proposed within critical habitats or environmentally sensitive areas, including legally protected areas (e.g. a nature reserve or national park), areas proposed for protection or recognised as such	Project activities in or near protected areas will be formulated and implemented in close coordination with the PA authorities (the National Centre for Protected Areas is the lead entity for this project), and in strict accordance with the provisions of the management plans in each case.	The proposed mitigation measures are adequate, but defining them more specifically would facilitate their implementation and monitoring.

Risk	Mitigation measure	Comment
by authoritative sources and/or indigenous peoples and local communities. Impact: 1 Likelihood: 5		
The project will involve reforestation Impact: 1 Likelihood: 5	Reforestation activities will pose minimal environmental risk, as they will be located so as not to displace natural ecosystems, and will involve non-invasive native species, following at all times the technical guidelines developed by the Forestry Service. Planting and management will be supervised and the development of the trees will be monitored by the Forest Service	The proposed mitigation measures are appropriate, but defining them more specifically would facilitate their implementation and monitoring.
The project will involve the harvesting of fish stocks. Impact: 1 Likelihood: 5	Project actions and management practices will build on and learn from the experiences of the GEF project Integrated Coastal Zone Management in the Southern Archipelago of Cuba. Management measures will include the use of appropriate fishing gear, the definition and enforcement of closed seasons and quotas, and the definition of temporary or permanent closed areas to allow for reproduction and growth.	--
Sensitivity or vulnerability to climate change impacts and extreme weather conditions Impact: 1 Likelihood: 3	Provisions for climate change resilience will be incorporated into the selection and design of resource management practices to be promoted by the project. Take measures as part of the Civil Defence Action Plan of the project stakeholders at national and local levels.	No specific climate change risk analysis or linkage with Tarea Vida is envisaged.

Source: Own based on the ProDoc

Risks that affect or may affect the operation of the project were adequately monitored and managed. The following financial or operational risks are reported in the PIRs:

- Mobility restrictions associated with the COVID-19 pandemic affected stakeholder participation at the project sites. However, the project has taken measures to continue operating, which have included the acquisition of audio-visual and computer equipment, and increasing staff mobile data for mobile phones to organise virtual meetings, as well as the provision of technical equipment for data collection and training activities.
- In line with the fourth risk identified in the Project Document (institutional change), it is reported that the November 2020 Decree Law to unify monetary values and exchange rates could impact the value of co-financing and the cost of local suppliers, as well as generate difficulties for participating companies and producers, which may push environmental considerations into the background. Also, the highly volatile nature of the Cuban economy may affect the TSAs, which is why the project opted to sign agreements with four sectors where the studies will be carried out. More generally, the PIR recommends close monitoring of the economic situation in order to prevent any impact.

- In line with the fifth risk identified in the Project Document, it is indicated that the US blockade has generated price increases and delays in imports. However, as mentioned above, the PMU has implemented effective strategies to speed up imports.

Environmental risks are not systematically monitored, but there are examples of these being considered in the intervention sites. The PIRs do not include information on environmental risk management, but interviews provide examples that this has permeated project management at the provincial level and in the intervention sites, where analyses have been carried out and mitigation measures defined in various sectors. However, climate change adaptation has not been systematically integrated into the three components.

1.1.2. Adaptive management

The project has adapted well to the COVID-19 pandemic and has mechanisms in place to integrate lessons learned into the planning and implementation processes. As mentioned in the previous section, the main emerging risk the project has faced is the COVID-19 pandemic, which has limited travel and face-to-face activities. In response, the project has taken appropriate measures to continue operating. In addition to the transition to virtual work, a particularly successful strategy for adaptive management has been to decentralise decision-making to the provincial PMUs, prioritising the activities that they could implement according to the context of each territory. This allowed progress to be made in the collection of information, working in partnership with universities.

Additionally, it is worth mentioning that in December 2019 and 2020, workshops were held to review the progress made and validate the Annual Operational Programme for the following year. These workshops were widely attended by stakeholders and resulted in lists of agreements, consisting of specific activities to be carried out, with clearly defined responsibilities and deadlines, in order to advance in the implementation of the project. Thus, these spaces seem to have functioned as adaptive management mechanisms, guiding implementation based on emerging opportunities and challenges.

1.1.3. Communication, sensitization and knowledge management

The project's internal communication mechanisms are effective. According to the minutes of the 2020 meeting of the National Steering Committee, in the start-up phase of the project, the mechanism for information flow to the different levels, territories and sectors involved was established. In general, the interviews agree that internal communication flows well, both vertically and horizontally (see Section 3.4.4), and highlight the use of WhatsApp groups as a particularly effective tool. In one interview, however, the need to improve communication at the strategic level between National Steering Committee meetings was noted, for example by providing progress summaries every six months.

External communication is integrated transversally in the project design. The Project Document does not include a communication plan, but this aspect is integrated into the project's results framework, where Output 2.4 consists of communication mechanisms and

awareness-raising materials. Communication is also included in the criteria for rating the effectiveness of landscape planning and management processes (Output 1.3).

A large number of external communication activities have been carried out for different audiences. The National Steering Board of the project decided to allocate the second year of the project (2020) to communication and dissemination of the issues identified in the project to various target audiences. In line with the above, the 2021 PIR reports that the activities and results of the project have been disseminated through different media (such as television, radio and press), social networks, meetings and workshops, among others. In particular, it highlights that different materials have been shared on Facebook (369), Instagram (110), YouTube (17) and 18 other materials in the press and repositories. This has been possible because each provincial PMU has a communication team, which works in coordination with both the national PMU and local stakeholders, such as universities and the media.

Knowledge management has included educational activities, with room for improvement in the systematisation of experiences and lessons learned from the project. The Project Document does not include a knowledge management plan, but during implementation a training strategy has been elaborated jointly with the Ministry of Higher Education and the universities, based on a training needs assessment. According to the PIR 2021, 993 people were trained, corresponding to 82.5% of the people participating in Ecovalor. Also noteworthy is the creation, currently underway, of a master's degree in valuation of ecosystem goods and services at the "Marta Abreu" Central University of La Villas, as well as collaboration with the InfoGEO project to strengthen the National Environmental Information System and the inclusion of information generated by Ecovalor in the platform created by InfoGEO. Lessons learned" workshops were held in 2019 and 2020, but in reality these consisted more of strategic planning and AOP development exercises for the following year, rather than lesson systematisation activities. The documents do not clearly present what lessons are derived from implementation, to which actor and context they correspond, nor what implications they have.

3.4 Sustainability

3.4.1 Are the risks identified in the project document the most important and are they still up to date?

The project document includes a sustainability strategy (section V, paragraph 125). This is based on the development of normative instruments and methodological tools, the existence of well-established state institutions, and the development of capacities for the generation, management and use of information in the development and implementation of resource management practices by state enterprises, private investors and individual producers. Although brief, the strategy is **relatively sound and comprehensive**, leaving aside financial and some inter-institutional aspects. Interviews suggest that the UMP has been working on the sustainability of project results in a piecemeal fashion, as it goes along. However, **the sustainability strategy is substantively integrated into the components**, so that the implementation of the components contributes significantly to the implementation of the

sustainability strategy. Sections 3.3.2-3.3.5 analyse the factors favouring and disfavouring the sustainability of project results.

3.4.2 Do the legal, policy and regulatory framework, governance structures and processes pose risks that could jeopardise the maintenance of project benefits?

The legal, regulatory and policy framework will contribute to the sustainability of project results. First, the project results are consistent with the country's international environmental, economic change, risk management and social commitments. As explained in detail in section 3.1.1, the project results are also in line with the country's strategic development frameworks, such as the 2019 Constitution and the NDP to 2030, which are binding for an extended period of time at the vertical and horizontal levels. Furthermore, these outcomes are aligned with the programmes that derive from them, such as the Natural Resources and Environment Macro-Programme. In addition, the project is in harmony with cross-sectoral (e.g. land use and heritage, climate change and environment) and sectoral (land, forests, tourism, etc.) policies and strategies. As underlined, a decisive factor in this has been the ongoing process of regulatory updating in the country, which has facilitated the insertion of the project's vision and results into the national regulatory framework. The continuity of this process will strengthen the likelihood that the project results will be sustained, as through component 1 the project will continue to insert project results into the legal, policy and regulatory frameworks in the coming years, both cross-sectoral (e.g. the Environmental Law, expected in 2022) and sectoral (e.g. the Hydrocarbons Law, expected in 2023).

The project results are also consistent with decentralisation policies, which give municipalities greater management and financing capacity, as well as with local development and land-use plans. In addition, the project results are being integrated into the development strategies and investment plans of the enterprises, for example in the agro-forestry enterprises of Las Tunas and Pinar del Río (strategy to 2035) and the fishing enterprise of Villa Clara (strategy to 2030).

Some institutional factors will favour the sustainability of the project's results. The coordination structures linked to the Macroproject of natural resources and environment, the existence of several national groups in which relevant actors dialogue and coordinate[40], and the existence of some provincial groups and departments, some of them recently created, such as the department of integral management of the coast, contribute to the sustainability of the project's results. In general, the Cuban state, including its network of systems (national environmental information system, national system of protected areas...) and its ecosystem of training centres, research, technical support (extensionism) and its companies, and its funds for the promotion of good practices, for example in forestry (FONADEF) and soil management (PNCMS), constitute a good anchor for implementing laws, policies and regulations and giving sustainability to good practices. **However, there is room to strengthen inter-institutional**

[40] For example, the intergovernmental coordination platform for the Green Climate Fund coordinated by the Central Bank. Its functions have been expanding, first for the GCF, then for all international funds, and later for all economic and financial proposals. There are also instances of a more restricted character where several relevant actors meet, such as the National Commission for Nature Tourism and the Protected Areas Coordination Board.

structures to address cross-sectoral conflicts and ensure the participation of all key actors, also linking non-primary productive sectors, in particular industry and services. As mentioned, it is crucial that the sustainability of results is promoted, as expected, not only by the CNAP, which has a limited mandate, nor even by the Directorate General of CITMA, with a mandate more in line with the breadth of project results, but also by inter-sectoral coordination bodies at the national level, which seems likely. It also remains to be seen how the decentralisation process affects the provincial inter-sectoral coordination bodies in the light of greater municipal autonomy.

3.4.3 Are there any political or social risks that could jeopardise the sustainability of the project results?

From the political point of view, a high level of ownership is identified, as evidenced by the high participation of ministers and deputy ministers in processes and instances linked to the project, and the insertion of its vision and results in the legislative and regulatory framework, as noted above. The project is coherent with the priorities of the country's highest levels of leadership. Cuba's relative political stability also contributes to sustainability.

Its appropriation by social and productive actors will depend to a large extent on the degree of implementation in the territories and the benefits evidenced. As noted above, the project has carried out numerous and diverse awareness-raising and training activities. Although there is no concrete evidence of an increase in the perception of the importance of the issue addressed by the project and the technical capacity to manage it, it can be assumed that there has been progress, and that this will contribute to the sustainability of the other results of the project. Furthermore, the alliances forged with research centres and universities, including the creation of a master's degree and the promotion of graduate and doctoral theses, will continue to generate and disseminate knowledge, progressively increasing the social appropriation of the project's results. From the point of view of evidencing impacts, the project has developed robust methodologies to measure them, which will facilitate demonstration. In some sectors, such as soil conservation and sustainable soil management, thanks also to other projects, there are already some leaders ("champions") who are spreading their example.

On the other hand, **from a political and, to a much greater extent, social point of view, it cannot be ignored that the country is immersed in a process of transformation**, including the emergence of new social actors, such as small and medium-sized private enterprises. Greater autonomy of public enterprises is also expected. Unlike the decentralisation drive, which is addressed by the project, the latter has not yet addressed these adjustments, the first of which is very incipient and the second only planned, and which could have consequences on the social appropriation of the project's results.

3.4.4 What is the likelihood that financial and economic resources will not be available after GEF assistance ends?

As attested by the co-financing mobilised, **the country is likely to have adequate financial and economic resources to provide sustainability of project results once GEF support ends**. As noted, these are in line with the country's strategic plans, which structure its financial resources, reinforcing existing funds, such as FONADEF, PNCMS and FNMA, as well as various programmes, such as the biodiversity programme. The results of the project will indeed be linked to the national mirror projects linked to the Macroproject on natural resources and the environment. For example, FONADEF's budget was recently increased from 30 to 1,000 million CUC. In addition, the project itself and other complementary projects, such as Biofin, are working on the design and refinement of economic and financial instruments that can mobilise more resources to give continuity to the results (like the policies in component 1, these instruments are both an outcome of the project and an enabling factor for its other results)[41]. The country is also mobilising international resources to deepen and expand the project's results. The second phase of Biofin will run until December 2025. Other projects approved or under formulation will follow up on specific project results, e.g. in sustainable tourism (GEF 7 in this area[42]).

However, it is important to highlight the difficult macroeconomic context and economic reforms, which add uncertainty. The last two years have been particularly difficult for the country given the disruption of tourism, one of the country's main economic sectors, the tightening of the blockade on the country during the Trump administration, and the delay for several years of the domestic economic policy measures now being adopted. This has weakened the country's economy, and diminished its investment capacity. With the return of tourism and the opening up to SMEs, a revival is expected. On the other hand, the monetary reordering has resulted in a significant devaluation, which has had a negative impact on state-owned companies where a high percentage of their inputs are imported, but has benefited others, such as biotech companies. The economy is becoming dollarised. The debt with the Paris Club has just been renegotiated and this is going to make it easier.

3.4.5 Are there environmental risks that could jeopardise the maintenance of project results?

The project has not integrated climate risk in a sufficiently direct, clear or explicit way, which is a risk for the sustainability of its results, given that Cuba is located in an area of high climate risk, including both gradual changes in climate variables and increased frequency and intensity of extreme hydrometeorological events. There is a general alignment with Tarea Vida (e.g. in the determination of indicators) and it builds on lessons from adaptation experiences,

[41] For example, the environmental beach declaration will be associated with repair and maintenance actions to be financed by the state budget.
[42] Mainstreaming biodiversity conservation and climate change mitigation in sustainable tourism development in Cuba, with a budget of USD 3.6 million.

in particular on good practices in ecosystem-based adaptation. In some cases, such as in the work with the Ciénaga de Zapata and Viñales MOAs, climate change adaptation has been integrated. However, there is room for improvement in mainstreaming climate change adaptation, ensuring that all activities, both on the ground and in planning and training, are based on robust climate change analyses. There are also important limits to adaptation.

4. CONCLUSIONS, LESSONS AND RECOMMENDATIONS

4.1 Conclusions

Project design

- The problem addressed by the project is highly relevant in the context of the economic transformation that Cuba is undergoing, as well as the tensions between economic development and the conservation and sustainable use of ecosystems and natural resources in key productive sectors. The selected areas of intervention are emblematic of these issues.
- The project strategy is highly relevant to address the identified institutional and information barriers, but does not fully reflect the growing participation of the private sector in the economy, nor the presence of some new actors, in particular SMEs, and does not systematically address some key sectors for development planning, such as housing, water and sanitation, electricity and transport.
- The Ecovalor design builds on previous initiatives in economic valuation and environmental finance, both GoC's own and those arising from UNDP-implemented projects, and considers lessons learned from other completed or ongoing UNDP-GEF projects. In the implementation phase of the project, close collaboration has been established with three ongoing initiatives: the second phase of BIOFIN (2020-2025), the INFOGEO project and the Country Partnership Programme on Sustainable Land Management.
- The project is consistent with Cuba's national priorities and international commitments, and has influenced the process of updating the country's legal and programmatic framework to mainstream the economic valuation of ecosystem goods and services into national priorities. The project also contributes directly to UNDP priorities in Cuba and is aligned with UNDP priorities at the global level.
- The project design was carried out with a broad participation of stakeholders, whose priorities were considered, especially in selecting intervention sites and establishing articulation with other ongoing initiatives.
- The Project Document includes a limited gender analysis and identifies indicative actions for gender mainstreaming, which are not articulated by an integrating vision. The Gender Action Plan elaborated during implementation also does not reflect a systematic and in-depth analysis, nor does it define specific, timed and verifiable goals.

Logical framework / results framework

- The different elements of the project are well integrated vertically and horizontally, but while some important elements are considered, cross-sectoral aspects are not addressed in a sufficiently comprehensive and direct manner and some key sectors are not given attention.
- The results framework included in the project document is not entirely adequate to measure the project's impact. The outcome indicators are mostly output indicators rather than result indicators. Almost half of the outcome indicators are not adequate.

Effectiveness

- As of 30 September 2021, i.e. halfway through the implementation period, the project's progress is satisfactory at both the objective and outcome levels. Progress is satisfactory in Component 1 (Legal, Policy and Institutional Frameworks), moderately unsatisfactory in Component 2 (TSA) and satisfactory in Component 3 (Pilot Experiences), with mixed progress in meeting the targets included in the GEF monitoring tools. It should be noted that the project has generated multiple unanticipated positive results.
- The achievement of the targets set out in the results framework included in the project document has been negatively affected by several inhibiting external factors, such as the worsening economic, financial and trade blockade, which has caused delays in imports; higher freight costs; the COVID-19 pandemic; the ongoing economic and monetary reordering in the country; interruptions in electricity supply; and a low level of initial technical capacity, particularly in TSA, although there was previous experience in environmental economics in universities and research centres. In contrast, the achievement of the project's goals was favoured by the approval of public policies and the updating of the legal, policy and regulatory framework, coupled with a positive willingness to promote environmental sustainability by applying environmental economics principles and lessons, as well as by the previous work of other projects, especially BIOFIN.

Efficiency

- As of 30 September 2021, the executed budget was USD 4.6 million, equivalent to 47.5% of the total project budget (USD 9.6 million). 50.8% of the planned budget was executed for Component 1 (Legal, policy and institutional frameworks), 46% for Component 2 (TSA) and 41% for Component 3 (Pilot experiences). The cumulative management cost of the project is 172,156 USD, corresponding to 3.7% of the executed budget, which is below both the planned (4%) and the GEF (5%). The project budget has been subject to consecutive revisions, which have consisted of redistributing the programmed expenditure throughout the project implementation period. Despite this, the budget spent in 2020 remained close to what was planned in the Project Document and a similar trend is envisaged for 2021.
- As of 30 September 2021, the project had mobilised USD 25,263,638 in co-financing, i.e. 67% of the co-financing identified in the Project Document (USD 37.9 million). This level of co-financing is high considering that the project is still in the middle of its implementation period.

- The project has adequate financial controls in place. Two financial and performance audits were carried out by independent auditors for the years 2019 and 2020, both of which issued unqualified favourable opinions.
- While the overall progress of the project is moderately satisfactory, there have been delays in some activities compared to what was originally planned. In particular, Component 2 (TSA) shows delays due to both COVID and differences in the understanding of the methodology promoted by UNDP, which is unprecedented in the country. This led to a dialogue between the GoC and UNDP on methodologies and modalities for its application. Agreements on this have recently been sealed, but much work remains to be done.
- The project has an adequate M&E plan, but the results framework included in the project document is not entirely adequate to monitor and evaluate project performance. Project monitoring has been carried out in a timely manner. Overall, the quality of reporting is good, but there are some weaknesses in the reporting of progress in meeting the indicators.
- The institutional arrangements for project management are clearly defined and have proven effective in facilitating coordination between the multiple actors involved in the project. The GoC has managed to build a UMEP that effectively articulates the multiple stakeholders. The quality of implementation and execution is high.
- The project has broad stakeholder involvement at national and sub-national levels. While the project responds to country priorities and has public sector leadership, there are challenges to TSA implementation.
- Gender equity trainings with equal participation of men and women have been conducted, as well as gender-sensitive pilots. Despite these initial advances, challenges remain for the equitable participation of women in the supported communities and for the full mainstreaming of gender equity throughout the project.
- The review of social and environmental safeguards was carried out on the basis of the then current policies, but does not reflect recent developments in this area. UNDP is working to address this. The 2022 AOP of the project foresees funding for consultancies to support the update of the SESP and the elaboration of the respective Management Plan. On the other hand, risks relevant to the project have been identified, but there are opportunities to specify mitigation measures. Financial or operational risks that affect or may affect the operation of the project were adequately monitored and managed. Environmental risks are not systematically monitored, but there are examples that some of these are being considered at the intervention sites, with room for improvement in mainstreaming climate change adaptation.
- The project has adapted well to the COVID-19 pandemic and has mechanisms in place to integrate lessons learned into planning and implementation processes.
- The project's internal communication mechanisms are effective. External communication is integrated transversally in the project design and has included a large number of activities for different audiences. Knowledge management has included educational activities, with room for improvement in the systematisation of the project's experiences and lessons learned.

Sustainability

- The Project Document includes a relatively solid and comprehensive sustainability strategy, although it leaves out the financial and some inter-institutional aspects. The implementation of the components contributes significantly to the implementation of the sustainability strategy.
- The legal, regulatory and policy framework will contribute to the sustainability of project results, as will the institutional framework. However, there is room for strengthening inter-institutional structures to address cross-sectoral conflicts and ensure the participation of all key actors.
- From a political point of view, a high level of ownership of the project is identified. Its appropriation by social and productive actors will depend to a large extent on the degree of implementation in the territories and the benefits evidenced. On the other hand, the project has not addressed the emergence of new social actors, such as small and medium-sized private enterprises, as an effect of the country's transformation process, which could have consequences on the social appropriation of the project's results.
- As attested by the co-financing mobilised, the country is likely to have adequate financial and economic resources to ensure the sustainability of project results once GEF assistance ends. However, the difficult macroeconomic context and ongoing economic reforms create uncertainty.
- The project has not sufficiently directly, clearly or explicitly integrated climate risk, which may affect the sustainability of project results.

4.2 Lessons

Lessons can be drawn from the above regarding sustainable development planning, governance and design of projects that promote sustainable development, and the management of factors external to these projects.

<u>On sustainable development planning</u>

It is essential to generate, disseminate and use robust information in decision-making so that land management is conducted on a sound basis. This requires economic valuation of ecosystem goods and services, identifying the short-, medium- and long-term costs and benefits of using them in alternative ways, from full protection to full exploitation, through different degrees of conservation and different formulas for sustainable use. While general information is required, it is sometimes important to analyse the cost-benefit of very specific alternative uses.

Development planning takes place at various levels, including cross-sectoral, sectoral and territorial levels. Promoting sustainable development requires working at all of them. A purely sectoral approach is unlikely to have significant lasting impacts, given the interactions between sectors and that sectoral planning is guided by higher-level cross-sectoral legal, policy and regulatory frameworks.

The primary sector has an unequivocal link to natural resources and ecosystems. Agriculture, forestry and fisheries directly exploit these resources. Promoting sustainable development requires working with these sectors. In many cases tourism and always hydrocarbons and

conservation also have a direct and close relationship with natural resources. A project like Ecovalor is right to work in and with them. However, other sectors are also vital. Although their relationship is more indirect, the construction of housing and equipment, the provision of electricity, water and sanitation, and the mobility of people and goods also have significant impacts on natural resources and ecosystems. Making decisive progress towards sustainable development requires a holistic approach, also promoting more sustainable forms of operation in these sectors.

On the governance of projects that promote sustainable development

Complex projects such as Ecovalor need governance structures that involve multiple sectors, disciplines and scales. The challenge in this respect lies not only in the multitude of actors, but also in their articulation (intersectoral, interdisciplinary and interscalar and not only multisectoral, multidisciplinary and multiscalar), in order to identify conflicts and potential solutions. To this end, it may be useful to have not only a NSC and a PMU, the usual governance bodies in international projects, but also other bodies, such as an APMU and provincial committees that mirror them. When the project covers complex or very specific issues, it may be useful to involve specialised research institutions. In complex projects such as Ecovalor, where the scope goes beyond the mandate of a specific institution, it may also be effective for the PMU to be made up of staff from different institutions.

On designing projects that promote sustainable development

In the face of substantive challenges, it is vital to work in an articulated manner across different barriers, including the adequacy of the regulatory framework and governance structures, the development of methodologies, economic and financial mechanisms and instruments, the generation and dissemination of knowledge, and on-the-ground demonstration. While all these elements are essential, the importance of generating an economic incentive structure that is systematically aligned with development objectives, in this case the sustainable use of ecosystems, cannot be overemphasised.

Projects must be designed in a participatory manner, involving both decision-makers and beneficiary communities and individuals in the territories. In this sense, the design should be based on a dialogue between international consultants and national counterparts on the aspects that are viable in a given country. In the case of Cuba, which is unique in some respects, this is especially important.

When designing and implementing international projects, it is essential to build on what has been built and to look for synergies with other projects both over time, but also at any given moment.

Monitoring and evaluation are essential elements of international project design and implementation. In this respect, it is essential to define baselines on the basis of sound methodologies, which in some cases may involve substantive methodological work. Although ideally these methodologies and baselines should be defined during design, when methodologies do not exist at that time, they should be elaborated in detail and used to develop the baseline during the very early stages of implementation.

On factors external to projects that promote sustainable development

Regulatory updates are an opportunity to influence legal frameworks, but they are also a challenge because they create uncertainty and can have unforeseen impacts. In this sense, monitoring the context and adjusting project processes, i.e. adaptive management, is crucial. The pandemic linked to COVID-19 reinforces this point.

4.3 Recommendations

In view of the findings presented in section 3, the following recommendations can be made:

Recommendation 1: Strengthen the inter-institutional dimension. UMEP and more broadly the CITMA Directorate General, in coordination with the NSC, should continue to strengthen the inclusion of economic valuation of ecosystem goods and services in the Natural Resources and Environment Macro-Programme and spatial planning. At the same time, they should identify other inter-institutional standards, instances and processes where the vision and results of the project can be incorporated. The National Assembly's Committee on Science and Environmental Affairs could, for example, be an ally.

Recommendation 2: Broaden the sectoral horizon. UMEP in coordination with the NDC should seek to link more sectors, such as housing and equipment construction, water and sanitation, electricity and transport. Although, given the budgetary limitations, since it is not part of the project design and must be followed during implementation, the project cannot implement pilots in these sectors, it can consider them in the revision of the legal framework and invite their representatives to the trainings, at least to build the foundations so that in the future these sectors can join the path taken by the six prioritised sectors in a more determined manner.

Recommendation 3. Extend the horizon of economic actors. UMEP should analyse how the project can involve the private sector beyond the agricultural and fisheries sector, particularly small and medium-sized enterprises, in order to promote the sustainable use of natural resources. To this end, UMEP, in coordination with UMAP, should examine the challenges that the emergence of this actor implies for the management of natural resources and identify ways in which the project can promote a more sustainable use of natural resources by this actor, defining specific awareness-raising and training strategies, among other activities.

Recommendation 4. Accelerate implementation and monitor progress. In coordination with UNDP and the CRC, UMEP should accelerate the implementation of the TSAs, particularly in the two sectors where progress is most limited. In addition to accelerating implementation, the PMU should closely monitor progress in all components. Within one year of implementing the recommendations included in this report, the UMP should review whether and for how long an extension should be requested and begin to manage the process, if deemed necessary. This review should consider the capacity to meet the quantitative and qualitative targets, considering also the quality of the outputs.

Recommendation 5. Strengthen project management. UMEP should i) strengthen the results framework, so that performance on all indicators can be measured and reporting on

progress towards results can be strengthened[43]; ii) update the social and environmental safeguards, including defining more precise risk management strategies, integrating more systematically climate change adaptation and mitigation of other emerging risks; iii) strengthen mainstreaming and mainstreaming of the project's results in the project's management; iv) strengthen the project's management and monitoring of the project's performance; v) strengthen the project's management of the project's results; iii) strengthening gender mainstreaming by strengthening gender analysis and developing a more detailed and specific gender action plan; and iv) documenting lessons learned. For UNDP, it is particularly important to document lessons learned in relation to the development of TSA studies and the learning that has occurred in this project around the economic valorisation of natural resources in order to strengthen the exchange of these experiences at regional and global levels. Another aspect that should be documented is the definition of technical specifications for equipment based on pilot SLM practices and in the fisheries sector.

Recommendation 6. Continue to take advantage of external enabling conditions, and manage inhibiting ones. With regard to the former, UMEP, UMAP and UNDP should continue to create synergies with existing and emerging national and international projects, with a special focus on Biofin Phase II. In addition, the PMU and the NDC should continue to monitor the updating of the country's legal and programmatic framework. For example, among many other aspects, the project should influence the preparation of the hydrocarbon law, and the national oil spill contingency plan decrees. On the other hand, the UMP should carry out a review and update of the project products developed so far, the content of which has been affected by the monetary reordering and devaluation.

[43] Except for indicator 1.3 it would be advisable to review all indicators. The most urgent is to review indicators 1.2, 2.2 and 3.4 where differences in the indicator make it impossible to assess performance. In indicators 1.2 and 3.4 it would be important to define an indicator focused on the outcome of the training in terms of an increase in the technical capacity of the people trained, developing a specific methodology and a concrete baseline. If indicator 1.2 is maintained, in the first sub-indicator it would be useful to clarify the target (indicate how many people are 50% of this universe) and in the second sub-indicator to clarify the object (institutions or actors). In indicator 3.4, it would be useful to specify the capacities and equipment needed. In indicator 2.2, it is recommended to specify which methodological tools are referred to and how awareness and access to these tools is measured. The adjustments in the other indicators also lie in specifying some aspects. In O.1 it is recommended to specify the instruments in which environmental considerations should be incorporated, in O.2 the characteristics of SLM sites and practices, in O.3 how improvement in protection/management is measured. In 0.4 the methods and sources of verification, building on progress in implementation; and in 1.1 the instruments and their approval and/or implementation status. In 2.1 it is recommended to strengthen the consistency between the indicator, the mid-term target and the final target in relation to whether or not it refers to TSAs (the former and the latter suggest it; the latter do not); in 3.1 to clarify what the relevance of the results of TSAs is (whether or not the incorporation of the results of TSAs is necessary). The formulation "incorporation of provisions for reflection" is also unclear. It is also unclear what a methodology is in the context of this indicator. Also clarify whether the municipal plans are development plans or land-use plans, in 3.2 identify whether the resources are additional or not, and clarify the mid-term target; in 3.3. Specify the practices that should better conserve ecosystems and how the improvement of ecosystems is measured.

5 ANNEXES

5.1 Evaluation matrix

Table 7. Evaluation matrix

Evaluation criteria and questions	Indicators	Sources	Methods
1. Project strategy: To what extent is the project strategy relevant to country priorities, country ownership and the best route to the expected results?			
1.1 Project design			
1.1.1 To what extent is the problem addressed by the project relevant to its context and to the assumptions identified?	• Relevance of the problem in the project sites: coherence with the human development needs of the target provinces and the intended beneficiaries • Level of alignment between the key assumptions formulated in the prodoc and the situation in the project sites.	• Project document • PIRs • Interviews with UNDP Cuba and Regional Technical Advisor, the project team, CNAP, representatives of provinces, municipalities and pilot polygons.	• Document review • Interviews
1.1.2. How effective is the selected strategy in achieving the expected results?	• Degree of appropriateness of the selected implementation methods to the development context • Level of coherence between outcomes, outputs and activities • Evidence that planning documents use lessons learned/recommendations from previous projects as input to the planning/strategy process	• Project document • PIRs • Interviews with UNDP Cuba, the project team, CNAP, representatives of provinces, municipalities and pilot polygons	• Document review • Interviews

Evaluation criteria and questions	Indicators	Sources	Methods
1.1.3. To what extent does the project respond to national priorities and context?	• Level of alignment of project outcomes and outputs with national priorities (a) at the beginning of the project; (b) in the mid-term • Contribution of the project to the implementation of national policies	• Project document • PIRs • National policies and strategies (National Development Plan, National Climate Change Plan, Nationally Determined Contribution) • Interviews with CNAP, UNDP and project team	• Document review • Interviews
1.1.4 To what extent does the project contribute to UNDP Cuba's priorities?	• Alignment of the project with the priorities agreed between UNDP and the government of Cuba	• Project document • Country Programme 2014-2018 and 2020-2024 • Interview with UNDP	• Document review • Interviews
1.1.5. Have the perspectives of all stakeholders been taken into account during project design?	• Number and type of stakeholders consulted during project design • Evidence that the concerns expressed are used to adjust the project strategy	• Project document • PIRs • Minutes of Steering Committee meetings • Interviews with UNDP Cuba and Regional Technical Advisor, the project team, CNAP, representatives of provinces, municipalities and pilot polygons	• Document review • Interviews
1.1.6 To what extent were gender issues taken into account during project design?	• Number and types of activities undertaken during project design to assess gender and women's equality needs for the project • Evidence of incorporation of these needs into the project document • Existence of a gender analysis and gender action plan	• Project document • PIRs • Minutes of Steering Committee meetings • Interviews with UNDP Cuba and Regional Technical Advisor, the project team, CNAP, representatives of	• Document review • Interviews

Evaluation criteria and questions	Indicators	Sources	Methods
		provinces, municipalities and pilot polygons	
1.2 Logical framework / Results framework			
1.2.1. To what extent are the project outcomes and objectives clear, practical and feasible? Are the objectives and timelines realistic?	• Consistency between project objective, outcomes, outputs and activities • Feasibility of the objectives, outcomes and outputs within the project's budget and timeframe	• Project document • PIRs • Interviews with UNDP, project team, CNAP	• Document review • Interviews
1.2.2 How effective are the indicators, baselines and objectives of the logical framework in measuring the project's effects?	• Quality of the results framework in the project document • Use of SMART sets of indicators, baselines, targets and means of verification • Use of gender-disaggregated indicators and targets • Evidence of project impacts on development or the environment that are not measured by current indicators	• Project document • PIRs • Interviews with UNDP, project team, CNAP	• Document review • Interviews
2. Progress towards results: To what extent have the expected results and objectives of the project been achieved so far? (effectiveness)			
2.1 To what extent have the project's planned outputs, outcomes and objectives been achieved so far? To what extent is the project expected to meet its targets by its closing date (September 2024)?	• Extent to which the objectives, outcomes and outputs indicated in the results framework have been achieved. • Expectation to meet the project's targets by its closure date • Progress between the most recent GEF monitoring tool and its baseline version • Existence of unplanned activities and outcomes and their impact	• Project document • PIRs • Interviews with UNDP, project team, CNAP	• Document review • Interviews
2.2 What are the main obstacles to be addressed and the main opportunities to be seized based	• Nature and extent of factors that are hindering progress towards the objectives and expected results. • Nature and extent of opportunities generated by the most significant achievements to date	• Project document • PIRs • Memoirs of Consultative Committee meetings	• Document review • Interviews

Evaluation criteria and questions	Indicators	Sources	Methods
on current progress towards results?		• Interviews with UNDP, project team, CNAP	
3. Project implementation and adaptive management: Has the project been implemented efficiently and cost-effectively, and has it been able to adapt to any changing conditions so far? To what extent do the project's monitoring and evaluation systems, reporting and communications support project implementation? (efficiency)			
3.1 Financing and cofinancing			
3.1.1 Are there any discrepancies between planned and actual expenditures? Why?	• Level of discrepancy between planned and executed budget (total, by year and component)	• Project document • Financial reports • Budget execution analysis reports and adjustments made by project team • Interviews with UNDP, project team and CNAP	• Document review • Interviews
3.1.2 To what extent is the project mobilising the planned co-financing?	• Amount of resources that the project has leveraged since inception (and source(s)) • Level of discrepancy between co-financing planned and leveraged • Degree of integration of externally funded components into the overall project strategy/design	• Project document • Financial reports • Budget execution analysis reports and adjustments made by project team • Interviews with UNDP, project team and CNAP	• Document review • Interviews
3.1.3 Does the project have adequate financial controls to make informed management decisions on budget and cash flow?	• Availability, timeliness and quality of financial reports • Availability of audits	• Project document • Progress reports • Financial reports • Audit reports • Budget execution analysis reports and adjustments made by the project team • Cost benefit estimates of the project or similar projects • Interviews with UNDP, project team and CNAP	• Document review • Interviews

Evaluation criteria and questions	Indicators	Sources	Methods
3.1.4 To what extent are results achieved in a cost-effective manner?	• Level of management costs and discrepancy with planned costs • Costs related to the results achieved compared to the costs of similar projects	• Project document • Financial reports • Budget execution analysis reports and adjustments made by the project team • Cost-benefit estimates of the project or similar projects • Interviews with UNDP, project team and CNAP	• Document review • Interviews
3.2 Institutional arrangements			
3.2.1 How effective are the institutional arrangements?	• Evidence of clear roles and responsibilities • Evidence of timely and transparent decision making • Level of responsiveness of the project team and respective implementing agencies to changing project needs	• Project document • PIRs • Minutes of Consultative Committee meetings • Interviews with UNDP, project team, CNAP, local stakeholders	• Document review • Interviews
3.2.2 What is the quality of project implementation by the implementing agency and the implementing partner?	• Quality of the implementing agency's supervision and support • Quality of implementation by the implementing entity	• Project document • PIRs • Minutes of Consultative Committee meetings • Interviews with UNDP, project team, CNAP, local stakeholders	• Document review • Interviews
3.3 Work planning			
3.3.1 Have there been delays in implementation? If yes, why?	• Difference between actual and planned timetable for project implementation • Number of activities scheduled/completed according to the Annual Operational Plans (AOP) • Cause and total delays	• Project document • PIRs • Minutes of Consultative Committee meetings	• Document review • Interviews

Evaluation criteria and questions	Indicators	Sources	Methods
		• Interviews with UNDP, project team, CNAP, local stakeholders	
3.3.2 Have work planning processes been results-based? Has the logical framework been used during implementation as a management and monitoring tool?	• Extent to which the results framework has been used as a management tool?	• Project document • PIRs • Minutes of Consultative Committee meetings • Interviews with UNDP, project team, CNAP, local stakeholders	• Document review • Interviews
3.4 Project level Monitoring and Evaluation (M&E) System			
3.4.1 Is the M&E system operational and effective?	• Robustness of the M&E system (roles and responsibilities, work plan) • Funding of the M&E system • Relevance and quality of monitoring and progress reporting • Alignment with national systems and UNDP/GEF reporting requirements	• Project document • Progress reports and monitoring • Interviews to UNDP, project team, CNAP	• Document review • Interviews
3.5 Stakeholder involvement			
3.5.1 To what extent have effective partnership arrangements for project implementation been established with relevant stakeholders at sub-national level?	• Number and types of partnerships established between the project and local bodies/organisations • Extent and quality of interaction/exchange between project implementers and local partners	• Project document • Progress reports and monitoring • Interviews to UNDP, project team, CNAP	• Document review • Interviews
3.5.2 To what extent is the project country-driven?	• Appreciation of national stakeholders regarding the appropriateness of project design and implementation to national realities and existing capacities • Number, type and quality of mechanisms in place to promote stakeholder participation at each stage of project design, implementation and monitoring	• Project document • Progress reports and monitoring • Interviews to UNDP, project team, CNAP	• Document review • Interviews

Evaluation criteria and questions	Indicators	Sources	Methods
3.5.3 To what extent are women and girls involved?	• Proportion of implementing partners and participants in workshops, training courses or knowledge sharing who are women during implementation • Evidence of barriers to women's and girls' participation and degree of effort to address barriers • Likelihood of the project having the same level of positive and/or negative effects on women and men, girls and boys • Evidence of activities that mainstream gender in planning or activities as a result of the project	• Project document • Progress reports and monitoring • Interviews to UNDP, project team, CNAP, local stakeholders and beneficiaries	• Document review • Interviews
3.6 Social and environmental safeguards			
3.6.1 To what extent are the risks identified in the most recent SESP valid for the project?	• Quality of risk analysis in the project document / Completeness of risk identification during project planning and design • Extent to which the planning documents foresaw or reflected the risks already faced by the project during implementation • Quality of existing information systems to identify and analyse new risks • Quality of risk mitigation strategies developed and followed.	• Project document • PIRs • SESP • Steering Committee meeting minutes • Interviews with UNDP, project team, CNAP	• Document review • Interviews
3.6.2 How effective and efficient is the implementation of the project's social and environmental management plan?	• Consistency of risk analysis and implementation of mitigation measures with UNDP standards • Degree of progress in the implementation of the environmental and social management plan • Adequacy of definition and implementation of measures to prevent negative effects of COVID-19 on technical and financial implementation	• Project document • PIRs • SESP • Steering Committee meeting minutes • Interviews with UNDP, project team, CNAP	• Document review • Interviews
3.7 Adaptive management (information)			
3.7.1. Adaptive management (changes in project design and project outputs during project implementation)	• Examples of changes in project strategy/approach as a direct result of recommendations made in PIRs and/or NSC meetings to adapt to a new context • Proportion of adaptive management processes documented and shared with partners - Proportion of adaptive	• Project document • PIRs • Steering Committee meeting minutes	• Document review • Interviews

Evaluation criteria and questions	Indicators	Sources	Methods
	management processes documented and shared with partners	• Interviews with UNDP, project team, CNAP	
3.8. Communication, sensitization and adaptive management			
3.8.1 How effective are communications in ensuring stakeholder awareness of the project?	• Existence of an internal communication plan, communication protocols and feedback mechanisms • Perceived level of stakeholder awareness of project results and activities / Project visibility	• Project document • Communication documents • Interviews with UNDP, project team, CNAP	• Document review • Interviews
3.8.2 Are there effective external communication mechanisms?	• Number and type of external communication mechanisms or activities in place • Stakeholders' perceptions of the usefulness of the communication activities	• Project document • Communication documents • Interviews with UNDP, project team, CNAP, local stakeholders	• Document review • Interviews
3.8.3 Has knowledge management been effective?	• Existence of a knowledge management strategy • Scope and relevance of activities included in the plan • Number and type of activities and products developed • Impacts of activities and products developed	• Project document • Communication documents • Interviews with UNDP, project team, CNAP	• Document review • Interviews
4. Sustainability: To what extent are there financial, institutional, socio-economic and/or environmental risks to sustaining project results in the long term?			
4.1. Are the risks identified in the project document the most important and are they still up to date?	• Existence and soundness of a sustainability and exit strategy • Level of implementation of the exit strategy • Extent of obstacles and/or risks to the sustainability of the project results	• Project document • PIRs • Interviews with UNDP, project team, CNAP	• Document review • Interviews

Evaluation criteria and questions	Indicators	Sources	Methods
4.2 Do the legal, policy and regulatory framework, governance structures and processes pose risks that may jeopardise the maintenance of project benefits?	• Existence and type of frameworks, policies, governance structures and processes that may jeopardise project benefits? • Type of frameworks, policies, governance structures and processes currently missing to ensure sustainability of project benefits	• Project document • PIRs • Interviews with UNDP, project team, CNAP, local stakeholders	• Document review • Interviews
4.3 Are there political or social risks that could jeopardise the sustainability of project results?	• Existence and type of political and social conditions that may affect the sustainability of the direct results • Existence of mechanisms for documenting and sharing lessons learned (including know-how) • Existence of actors that can promote the sustainability of project outcomes	• Project document • PIRs • Interviews with UNDP, project team, CNAP, local stakeholders	• Document review • Interviews
4.4 What is the likelihood that financial and economic resources will not be available after GEF support ends?	• Type and cost of activities that would require continued financial support after the end of the project in order to sustain results • Existence of sources of funding for these activities	• Project document • PIRs • Interviews with UNDP, project team, CNAP, local stakeholders	• Document review • Interviews
4.5 Are there environmental risks that could jeopardise the maintenance of project results?	• Existence and intensity of environmental conditions affecting the sustainability of the project results	• Project document • PIRs • Interviews with UNDP, project team, CNAP, local stakeholders	• Document review • Interviews

5.2 List of reviewed documents

In particular, the evaluation team has been reviewed:

- GEF Guide to Policy Guidelines for the Project Cycle.
- UNDP Guidance for Mid-Term Evaluations of UNDP-implemented and GEF-funded projects.
- UNDP Environmental and Social Protection Policy
- PIF
- Initiation Plan
- Project Document
- UNDP Social and Environmental Review Results
- GEF Review / Approval Documents
- Project Inception Report
- Project Implementation Reports (PIR) for the years 2020 and 2021
- All monitoring reports prepared in the framework of the project: annual project reports and for the provinces of Pinar del Rio, Villa Clara, Holguin, Matanzas and Las Tunas for the years 2019 and 2020, as well as several quarterly reports
- Evidence PIR 2020 and 2021, including, inter alia, monitoring indicators
- General Annual Operational Plans (POAs) for the years 2018, 2019, 2020 and 2021
- Provincial POAs for Holguín, Pinar del Río, Matanzas and Villa Clara for 2019, 2020 and 2021, and for Las Tunas for 2020
- Minutes of meetings of the National Steering Committee for 2020 and 2021
- Minutes of meetings of the Extended Project Management Unit (UMAP) for 2018 and 2019 (3)
- Project Executive Management Unit (PMU) Meeting Minutes 2018 (12) and 2019
- Combined Expenditure Reports for the years 2018, 2019 and 2020
- Budget revisions (in this regard a table will be sent to the team for them to complete)
- Audits for 2019 and 2020
- 2018 implementation arrangements and procedures
- Reports from national training workshops, meetings and walk-throughs
- 2019 and 2020 lessons learned workshop reports
- Documentation on social networking
- Documents generated by the project
- Consultancy documents
- Project location maps
- GEF Tracking Tool (TT) baseline of the GEF focal area at the beginning of the project, and the mid-term TT
- State Plan for the Confrontation of Climate Change in the Republic of Cuba (CITMA, 2017)
- Economic and Social Development Plan 2030
- GEF programming guidelines and GEF focus area monitoring instruments
- UNDP Cuba Programme Documents 2014-2018 and 2020-2024
- Other documents considered relevant

5.3 List of interviewed persons and institutions

No	Name	Institution	Position	Date
1	Gricel Acosta	Oficial de Programa	PNUD Cuba	11/10/2021
2	Yamilka Caraballo	Analista de Programa	PNUD Cuba	
3	Elizabeth Céspedes	Asociada de Programa	PNUD Cuba	
4	Simone Bauch	Asesora Técnica Regional	Centro Regional de PNUD	
5	Oscar Labrador Llanes	Director Forestal, Flora y Fauna Silvestre	Ministerio de la Agricultura (MINAG)	12/10/2021
6	Gloria Gómez Pais	Directora de Recursos Naturales y Cambio Climático de la Dirección General de Medio Ambiente	Ministerio de Ciencia, Tecnología y Medio Ambiente (CITMA)	
7	Omar Cantillo Ferreiro	Director del Centro Nacional de Áreas Protegidas (CNAP)	Ministerio de Ciencia, Tecnología y Medio Ambiente (CITMA)	
8	Dagoberto Rodríguez Lozano	Director de Suelos y Fertilizantes	Ministerio de la Agricultura (MINAG)	
9	Alexander Sierra Bouza	Director de Desarrollo	Ministerio Turismo (MINTUR)	
10	Anelys Marichal	Directora General de Ordenamiento Territorial y Urbanismo	Instituto de Planificación Física (IPF)	

11	Isis Dávila Rodríguez	Directora Técnica de la Empresa Cuba Petróleos (CUPET)	Ministerio de Energía y Minas (MINEM)	
12	Mildrey Granadino de la Torre	Viceministra del Ministerio de Economía y Planificación	Ministerio de Economía y Planificación (MEP)	
13	Aylem Hernández Ávila	Directora del Proyecto Centro Nacional de Áreas Protegidas (CNAP)	Ministerio de Ciencia, Tecnología y Medio Ambiente (CITMA)	13/10/2021
14	Juliett González Méndez	Coordinador Técnico Centro Nacional de Áreas Protegidas (CNAP)	Ministerio de Ciencia, Tecnología y Medio Ambiente (CITMA)	
15	Teresa Cruz Sardiñas	Coordinador del Componente 1.Dirección General de Medio Ambiente (DGMA)	Ministerio de Ciencia, Tecnología y Medio Ambiente (CITMA)	
16	Orlando Rey Santos	Coordinador del Componente 1. Dirección General de Medio Ambiente (DGMA)	Ministerio de Ciencia, Tecnología y Medio Ambiente (CITMA)	
17	Raúl A. Rangel Cura	Coordinador del Componente 2 / Asesor Temático.- Instituto de Geografía Tropical (IGT)	Ministerio de Ciencia, Tecnología y Medio Ambiente (CITMA)	
18	Abdiel Caraballoso Johnson	Coordinador del Componente 3.Centro Nacional de Áreas Protegidas (CNAP)	Ministerio de Ciencia, Tecnología y Medio Ambiente (CITMA)	
19	Ariel Ulloa Martín	Director Financiero. Centro Nacional de Áreas Protegidas (CNAP)	Ministerio de Ciencia, Tecnología y Medio Ambiente (CITMA)	
20	José Fidel Santana Núñez	Viceministro Primero. Preside el Comité Directivo Nacional (CDN)	Ministerio de Ciencia, Tecnología y Medio Ambiente (CITMA)	13/10/2021

21	Maritza García García	Presidenta de la Agencia de Medio Ambiente (AMA)	Ministerio de Ciencia, Tecnología y Medio Ambiente (CITMA)	14/10/2021
22	Ulises Fernández Gómez	Dirección de Relaciones Internacionales. Punto Focal del GEF / Cuba	Ministerio de Ciencia, Tecnología y Medio Ambiente (CITMA)	
23	Odalys Goicochea Cardoso	Directora General de Medio Ambiente	Ministerio de Ciencia, Tecnología y Medio Ambiente (CITMA)	
24	María Hortensia García Rodríguez	Directora de Desarrollo Social	Ministerio de Economía y Planificación (MEP)	
25	Antonio Guzmán Torres	Dirección Forestal, Flora y Fauna Silvestre	Ministerio de la Agricultura (MINAG)	
26	Miguel Soca Núñez	Dirección de Suelos y Fertilizantes	Ministerio de la Agricultura (MINAG)	
27	Edelmira Castro Blanco	Dirección de Ordenación.	OSDE. Grupo Empresarial Agro-Forestal (GAF)	
28	Marcía Quintana Rodríguez	Dirección de Conservación.	OSDE. Grupo Empresarial Flora y Fauna (GEFF)	
29	Amaury Rodríguez González	Instituto de Investigaciones de Ingeniería Agrícola (IAGRIC)	Ministerio de la Agricultura (MINAG)	
30	Yailen Peñalver Serrano	Dirección de Desarrollo	Ministerio de Turismo (MINTUR)	
31	Mario Abo Balanza	Dirección Técnica	OSDE. Empresas Cuba Petróleos (CUPET)	
32	Noelis Suárez Montes	Dirección de Pesca de Plataforma.	OSDE Grupo Empresarial de la Industria Alimentaria (GEIA).	

33	Yunaika Álvarez Carrazana	Coordinadora de Género en el proyecto. Centro Nacional de Áreas Protegidas (CNAP)	Ministerio de Ciencia, Tecnología y Medio Ambiente (CITMA)	15/10/2021
34	Ernesto Ramis	Dirección de Suelos y Fertilizantes (DSF)	Ministerio de la Agricultura (MINAG)	
35	Georgina Díaz Quintero	Fondo de Desarrollo Forestal (FONADEF)	Ministerio de la Agricultura (MINAG)	
36	Nilia Dalmendray	Dirección de Regulaciones Pesqueras y Ciencia (DRPC)	Ministerio de la Industria Alimentaria (MINAL)	
37	Susana Díaz Aguirre	Coordinadora de Capacitación en el proyecto. Dirección de Ciencia y Técnica	Ministerio de Educación Superior (MES)	
38	Luis Manuel Goméz	Dirección de Programas y Proyectos de la Agencia de Medio Ambiente (AMA)	Ministerio de Ciencia, Tecnología y Medio Ambiente (CITMA)	
39	Miguel Adrián Pino Prieto	Coordinador de Comunicación del proyecto. Centro Nacional de Áreas Protegidas (CNAP)	Ministerio de Ciencia, Tecnología y Medio Ambiente (CITMA)	
40	Yusimit Betancourt Alayón	Profesora / Investigadora Facultad de Economía. Universidad de la Habana	Ministerio de Educación Superior (MES)	
41	Obllurys Cárdenas López	Investigadora Principal en Ordenamiento Ambiental. Instituto de Geografía Tropical (IGT)	Ministerio de Ciencia, Tecnología y Medio Ambiente (CITMA)	
42	Arnaldo Álvarez Brito y Alicia Mercadet	Expertos Análisis de Carbono en Bosques. y ExAct. Instituto de Investigaciones Agro-Forestales (INAF)	OSDE. Grupo Agro-Forestal (GAF)	
43	Damaris Gallardo Martínez	Coordinadora Provincial de Pinar del Río	Ministerio de Ciencia, Tecnología y Medio Ambiente (CITMA)	18/10/2021

44	Nelvis E. Gómez Campos	Coordinadora Provincial de Matanzas	Ministerio de Ciencia, Tecnología y Medio Ambiente (CITMA)	
45	Marta Cristina González Domínguez	Coordinadora Provincial de Villa Clara	Ministerio de Ciencia, Tecnología y Medio Ambiente (CITMA)	
46	Amado Luis Palma Torres	Coordinador Provincial de Las Tunas	Ministerio de Ciencia, Tecnología y Medio Ambiente (CITMA)	
47	Norelis Peña Peña	Coordinadora Provincial de Holguín	Ministerio de Ciencia, Tecnología y Medio Ambiente (CITMA)	
48	Abdel Cabrera Pérez	Cooperativa de Créditos y Servicios (CCS) Rubén Martínez Villena	Productor	
49	Osmel Portales Almasa	Empresa Afro-Forestal (EAF) La Palma	OSDE. Grupo Agro-Forestal (GAF)	
50	Yoel Vázquez Pérez	Centro de Investigaciones y Servicios Ambientales (ECOVIDA)	Ministerio de Ciencia, Tecnología y Medio Ambiente (CITMA)	
51	Letys Rodríguez Álvarez	Universidad de Pinar del Río	Ministerio de Educación Superior (MES)	
52	Amaury Padrón Ferrer	Gobierno de Viñales	Gobierno Municipal	
53	Yoandri Martínez Arencibia	Empresa Pesquera Industrial de Caibarién (EPICAI)	OSDE Grupo Empresarial de la Industria Alimentaria (GEIA).	19/10/2021
54	Jorge Yeras Diaz-Velis	Centro de Investigaciones y Servicios Ambientales (CESAM)	Ministerio de Ciencia, Tecnología y Medio Ambiente (CITMA)	

55	Joan Hernández Albernas	Refugio de Fauna (RF) Cayo Santa María Gaviota.SA	OSDE. Grupo de Administración Empresarial (GAE).	
56	Elena Rosa Domínguez	Universidad Central “Marta Abreu” de las Villas (UCLV)	Ministerio de Educación Superior (MES)	
57	Edel Benitez Espinosa	Gobierno de Sagua la Grande	Gobierno Municipal	
58	Beatriz Crespín	Dirección de Organismos Económicos Internacionales (DOEI)	Ministerio de Comercio Exterior e Inversión Extranjera (MINCEX)	
59	Adalberto Leiva Segura	Empresa Pesquera de Las Tunas (PESCATUN)	OSDE Grupo Empresarial de la Industria Alimentaria (GEIA).	20/10/2021
60	Jorge Luis Padilla Carralero	Empresa Agro-Forestal (EAF) Las Tunas	OSDE. Grupo Agro-Forestal (GAF)	
61	Luz Marina Reyes Caballero	Centro de Información y Gestión Tecnológica (CIGET) Las Tunas	Ministerio de Ciencia, Tecnología y Medio Ambiente (CITMA)	
62	Diosdado Ruiz Martínez (Mayito)	Dirección Provincial de Suelos de Las Tunas	Ministerio de la Agricultura (MINAG)	
63	Ivan Cheris Díaz	Gobierno Municipal de Manatí	Gobierno Municipal	
64	Antonio Vega Torres	Centro de Investigaciones y Servicios Ambientales y Tecnológicos (CISAT) Holguín	Ministerio de Ciencia, Tecnología y Medio Ambiente (CITMA)	
65	José Walker Olaguibel	Delegación Territorial del Ministerio de Turismo (MINTUR) Holguín	Ministerio de Turismo (MINTUR)	
66	Maikel Ramírez López	Dirección Provincial de Suelos de Holguín	Ministerio de la Agricultura (MINAG)	

67	Yoania Calderón Martínez	Banco de Crédito y Comercio (BANDEC) Holguín	Banco Central de Cuba (BCC)	
68	Anabel Anido Tejeda	Gobierno Municipal de Gibara	Gobierno Municipal	
69	Mayra Casas Vilardell,		Iniciativa BIOFIN I y II	22/10/2021
70	Yoel Cuzán, Proyecto		GEF/PNUD InfoGEO	
71	Alfredo Martínez,		Proyecto GEF/PNUD CPP	
72	José Fidel Santana Núñez	Viceministro Primero. Preside el Comité Directivo Nacional (CDN)	Ministerio de Ciencia, Tecnología y Medio Ambiente (CITMA)	
73	Andria Fuentes Arcea	Empresa para la Conservación de la Ciénaga de Zapata (ECOCIENZAP)	OSDE. Grupo Empresarial Flora y Fauna (GEFF)	
74	Frank Huerta López	Delegación Territorial del Ministerio de Turismo (MINTUR) Matanzas	Ministerio de Turismo (MINTUR)	
75	José Miguel Verrier	Empresa de Perforación y Extracción de Petróleo del Centro (EPEP)	OSDE. Empresas Cuba Petróleos (CUPET).	
76	Caridad Caraballo Tápanes	Autoridad Portuaria del Puerto de Matanzas	Ministerio de Transporte (MITRANS)	
77	Humberto Rodríguez Sardiñas	Gobierno Provincial de Matanzas	Gobierno Provincial	

5.4 Statement of agreement of the evaluation consultants

Evaluators:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

Jon García

Evaluation Consultant Agreement Form

Agreement to abide by the Code of Conduct for Evaluation in the UN System

Name of Consultant: Jon García Bañales

Name of Consultancy Organization (where relevant)**:**

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at *London, United Kingdom* on 16*/11/2021*

Signature: 

Maria Onestini

Evaluation Consultant Agreement Form

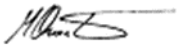
Agreement to abide by the Code of Conduct for Evaluation in the UN System

Name of Consultant: Maria Onestini

Name of Consultancy Organization (where relevant)**:**

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at Buenos Aires*, Argentina* on 16*/11/2021*

Signature: 

Oscar Fernandez

Evaluation Consultant Agreement Form

Agreement to abide by the Code of Conduct for Evaluation in the UN System

Name of Consultant: Oscar Fernández Estrada

Name of Consultancy Organization (where relevant)**:**

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at *Havana, Cuba* on 16*/11/2021*

Signature: 

5.6 Audit trail

Annex In separate file.

5.7 Terminal Evaluation Term of Reference

Annex In separate file.

5.8 Clearance

Midterm Review Report Reviewed and Cleared By:

Commissioning Unit:

Name: Gricel Acosta Acosta

Signature: DocuSigned by: 6CC618DD08A14AE... Date: 30-abr.-2022

UNDP-GEF Regional Technical Advisor:

Name: Ana María Núnez

Signature: DocuSigned by: 27BB148AE2334AF... Date: 03-May-2022