United Nations Development Programme
Global Environmental Facility

FINAL REPORT (19 August 2021)

Terminal Evaluation of the UNDP-Supported GEF-Financed Project

Conservation, Sustainable Use of Biodiversity and the Maintenance of the Ecosystem Services in Protected Wetlands of International Importance

GEF Project ID: 5749 UNDP PIMS ID: 5257

Solid waste removal

Water hyacinth proliferation (sources: project team)

Country:	El Salvador
Region:	Latin America and the Caribbean Region
GEF Focal Area:	Biodiversity (GEF-5)
GEF Agency:	United Nations Development Programme (UNDP)
Project Executing Agency:	Ministry of Environment and Natural Resources (MARN)
Evaluation Time Frame:	20 May – 19 August 2021
Evaluation Consultant:	Vincent LEFEBVRE, Environment Specialist

Acknowledgements:

The consultant wishes to acknowledge the hard work and commitment of project staff as well as the involvement of the beneficiaries and the Government staff. I would like to also express my appreciation for the support provided by UNDP and above all the project team for facilitating the meetings with Government and contacts with the final beneficiaries.

Compost production from agricultural waste

Mangrove ecosystem (sources: project team)

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Project Details	Project Milestones		
Project Title	Conservation, Sustainable Use of Biodiversity and the Maintenance of the Ecosystem Services in Protected Wetlands of International Importance	PIF Approval Date:	24/05//2014
UNDP Project ID (PIMS #):	5257	CEO Endorsement Date (FSP) / Approval date (MSP):	17/12/2015
GEF Project ID:	5749	ProDoc Signature:	12/07/2016
UNDP Atlas Business Unit, Award ID, Project ID:	00095068	Date Project Manager hired:	16/11/2016
Country/Countries:	El Salvador	Inception Workshop:	18/10/2016
Region:	Latin America and the Caribbean region	Mid-Term Review Completion Date:	28/03/2018
Focal Area:	Biodiversity	Terminal Evaluation Completion date:	20/08/2021
GEF Operational Programme or Strategic Priorities/Objectives:	BD1 Improve the sustainability of protected area systems	Planned Operational Closure Date:	30/09/2021
Trust Fund:	GEF Trust fund		
Implementing Partner (GEF Executing Entity):	Ministry of Environment and Natural Resources (MARN)		
NGOs/CBOs involvement:	-		
Private sector involvement:	Environmental Investment Fund for El Salvador (FIAES)		
Geospatial coordinates of project sites:	Laguna Olomega: 13.311433, -88.060861 Bahía de Jiquilisco: 13.239164, -88.556285 Cerrón Grande: 14.040560, -89.044319 Jaltepeque complex: 13.319358, -88.892570 El Jocotal lagoon: 13.332721, -88.249870 La Unión: 13.430250, -87.857109		

PDF/PPG	at approval (US$M)	at PDF/PPG completion (US$M)
GEF PDF/PPG grants for project preparation	0.091325	0.091325
Co-financing for project preparation		
Project	**at CEO Endorsement (US$M)**	**at TE (US$M)**
[1] UNDP contribution:	0.010	0.010
[2] Government:	2.955	3.067
[3] Other multi-/bi-laterals:	1.500	0.063
[4] Private Sector:	2.850	3.637
[5] NGOs:	1.600	0.376
[6] Total co-financing [1 + 2 + 3 + 4 + 5]:	8.915	7.153
[7] Total GEF funding:	2.192	1.935
[8] Total Project Funding [6 + 7]	11.107	9.088

Project description

The project "Conservation, Sustainable Use of Biodiversity and the Maintenance of the Ecosystem Services in Protected Wetlands of International Importance" focuses on the conservation of wetlands' biodiversity by increasing wetland protected areas, enhancing Government and other stakeholders' capacity to manage and protecting them with improved planning capability, and reducing threats through a variety of measures including the reduction of solid waste, invasive species, agrochemical pollution.

The project addressed a series of barriers : (i) Weaknesses in the regulatory framework to prevent the pollution in the wetlands; (ii) The lack of access to information and inefficient management plans, (iii) Insufficient protection of wetlands and need for protection status expansion, (iv) The lack of participation of local government, communities and the private sector in their management, (v) Invasive species and (vi) Accelerated wetland degradation through agricultural chemicals and solid waste.

The project targeted three wetlands of international importance, Olomega Lagoon, El Jocotal Lagoon and Jiquilisco Bay as well as more specific interventions in the protected wetlands of Jaltepeque Complex, the Gulf of Fonseca and also the Cerrón Grande Reservoir.

<table>
<tr>
<td>Objectives: Enhancing the conservation & sustainable use of biodiversity & maintaining ecosystem services in protected wetlands of international importance</td>
<td>Indicators:

- Coverage (ha) of the SNAP resulting from the creation of 3 new MUPA
- Presence of key indicator species in 4 PAs in the Jiquilisco Bay & Jocotal Lagoon HPII Complex in the lower watershed of San Miguel Río Grande
- Change in the management effectiveness of 3 PWIIs measured through the METT scorecard
- Change in the financial sustainability of 3 PWIIs according to that established through the total average score in the UNDP/GEF Financial Sustainability Scorecard</td>
</tr>
<tr>
<td>Component 1: Expanding the coverage of protected wetlands of international importance (PWII) & building institutional & individual capacity for their effective management

Outcomes:

Three newly established MUPAs increase the coverage of the NPAS by 37,709.46 ha.
The management effectiveness of three (3) PWIIs increases by 10 percent as measured by the Management Effectiveness Tracking Tool (METT).

Increased annual revenue by $160,00 USD contributes to the financial sustainability of three PWIIs

Outputs:
- Three new multiple-use protected areas covering the Jiquilisco Bay, the Islands of the Gulf of Fonseca & the Olomega Complex
- Management Plans for up to three wetlands of international importance updated or developed.
- Updated inventory of EI Salvador wetlands.
- Institutional & individual capacities strengthened in MARN & other relevant institutions.
- Equipped wetland staff & volunteers enable timely detection & reporting of floods & landslides.
- Local governance programme empowering local communities & municipal authorities.
- Environmental economic compensation for local development projects altering wetlands.
- Business plans developed for new & existing wetland PAs.
- On-site validated financial mechanisms that serve to increase the level of funding for 3 wetlands
- Visitor entrance fee scheme & revenue channelled to PAs from existing wetlands.
- Increased revenue from tourism in wetland PAs. Local-level land use plans developed for pilot areas to support sustainable utilization of range resources</td>
<td>Indicators:

- Representativeness (%) of the wetland ecosystems in the National System of Natural Protected Areas by wetland type
- Number of new wetland PAs that form part of the National System of Natural Protected Areas
- Change in the capacity development indicators for the sustainable management of PWIIs according to the total score of the UNDP-GEF Capacity Development Scorecard
- Number of staff from the MARN, municipalities, the MAG, & local organizations, incl. women, trained in the sustainable management of PWIIs
- Change in the financial gap (USD) to cover the basic management costs of 3 PWIIs
- Number of envir. compensation agreements established
- Total annual revenue generation for 3 PWIIs</td>
</tr>
</table>

Component 2: Addressing threats to biodiversity incl. the presence of invasive species & reducing solid & agrochemical waste originating in buffer areas of wetlands of international importance. Outcomes: *Presence of key indicator species in four PAs in the Jiquilisco Bay Complex and Jocotal Lagoon PWIIs in the lower watershed of the San Miguel Río Grande: i) Normandía and Chaguantique PA: Amazona auropalliata, Ateles geoffroyi; ii) El Tercio PA: Crocodylus acutus; iii) Jiquilisco Bay Area (includes San Sebastián Island): Andara grandis, Amazona auropalliata, Eretmochelys imbricata and Crocodylus acutus; and iv) Jocotal Lagoon Area: Amazona auropalliata, Crocodylus acutus.* *Pollution derived from agrochemicals, livestock wastes, and household and urban solid wastes reduced by 50% in three PWIIs by the end of the project.* *Reduced presence of two invasive species (water hyacinth [Eichornia crassipes] and the Neotropic cormorant [Phalacrocorax brasilianus]) in the Olomega Lake, the Jocotal Lagoon, and the Jiquilisco Bay PWIIs: i) 2,000 tons/year per wetland of water hyacinth (Eichornia crassipes) removed from the Olomega Lake and Jocotal Lagoon PWIIs; and ii) Abundance (number of individuals) of the cormorant duck (Phalacrocorax brasilianus) in the Olomega Lake, the Jocotal Lagoon, and the Jiquilisco Bay PWIIs (baseline and target will be established during the first year of the project).* *Sustainable use and extraction of resources contribute to the conservation of 18,720 ha of mangroves in the Jiquilisco Bay PWII and associated freshwater lagoons.*	**Indicators:** - Number of inter-institutional cooperation agreements established & operating for PWIIs management. - Number of farms implementing best practices for cattle ranching wastes management in 3 PWIIs, incl. farms run by women. - Solid waste accumulated (kg/ha) in the Jiquilisco Bay PWII - Volume (tons/year) of water hyacinth removed from Olomega Lagoon & Jocotal Lagoon PWIIs - Abundance (nr of individuals) of the cormorant duck in Olomega Lagoon, Jocotal Lagoon, & Jiquilisco Bay PWIIs - Coverage of mangroves in Jiquilisco Bay PWII & associated freshwater lagoons
Outputs: - Six inter-institutional cooperation agreements established in at least three wetland PAs. - Programme for the prevention, reduction & control of pollution derived from agricultural activities & human settlements in two wetlands & their buffer zones. - Incentive programme incl. green certification for the reduction of the use of agrochemicals in the cultivation of sugar cane & sustainable management of livestock in buffer zones of five wetlands. - Rules to regulate human activities that affect wetlands of international importance. - Monitoring IS to facilitate decision making to reduce threats for 3 wetlands. - Protocol developed to reduce threats to biodiversity in wetlands. - Strategies for the control of invasive species piloted in three wetland PAs & their buffer areas. - Participatory plans developed for the conservation & sustainable use of mangroves & flooded forests. - Participatory rehabilitation of at least 500 hectares of dry forest associated with mangroves	

Box 1: Summary of project components, outcomes, output & indicators

GEF global benefits included the protection of vulnerable and endangered species at global, regional and national levels and the protection of various habitats including mangroves, seasonally inundated floodplains and wetlands for species of international importance.

Findings

The project started officially in July 2016 for 4 years - July 2020 - and was later extended to close by September 2021.

Design: overall, it has been very ambitious both in geographical coverage and addressed issues, but it broadly responded to 2 main problems: (i) the insufficient capability of MARN to extend and manage its network of protected wetlands and (ii) the need to reduce biodiversity degradation in wetlands of international importance (RAMSAR sites)

A review of the *logical framework* showed that there was a series of 'Relevance' issues with outcome indicators or poorly defined outcomes evidencing the need for a review – flagged by the MTR – which resulted in adjustments only. A comprehensive *analysis of risks* was carried out, but many unstated *assumption*s were overlooked – too optimist -. Clearly, the global pandemic could not have been predicted in the analysis but has nonetheless had a profound impact on the project. Several existing interventions were taken into account, but the project would mostly collaborate with the wetland project funded by JICA in the same region but without overlapping. Several stakeholders were identified including central government agencies; overall, their participation remained

insufficient with no contact at all with several ministries (e.g., MAG). The project *replication approach* was vague with an assumption that project results would be institutionalised by MARN. The *management arrangements* consisted of a steering committee and a project coordination unit (2 contractual staff). This project was characterised by a high level of adaptive management eventually resulting in an excellent delivery after 2 no-cost extensions (4 years + 15 months: change in management, some minor changes in outputs and indicators, adaptation to COVID amongst others one of the weakest points of the project has been its inability to establish *inter-institutional linkages* even though the project is tackling a whole range of sectors (crop and livestock production, water pollution, solid waste, sanitation, environment, transport, fisheries…). This may reflect a strong MARN corporate culture based on silo implementation. An efficient *M&E system* was established, steering the intervention. When the project had nearly exhausted all funds, the 2nd no-cost extension had to be granted to cover the very slow implementation for the first 2-3 years (due to the combination of the minister retaking control of the management with a skeleton PCU team administrating a high number of contracts) and also COVID19. Both the *implementing partner and implementing agency* could have provided better support to the project.

Project's main achievements

The first Component of the project (expanded protected wetland coverage and improved management capacities) was achieved with an extension of the SNAP beyond expectations as well as the enhanced capacity of MARN to manage protected wetlands.

There were 3 outcomes under this component:

(i) *Three newly established MUPAs increase the coverage of the NPAS by 37,709.46 ha*: the total area of protected wetlands was increased by more than 37.000ha and 3 PAs were created, including one covering mangroves

(ii) *The management effectiveness of three (3) PWIIs increases by 10 percent as measured by the Management Effectiveness Tracking Tool (METT).* Staff were trained, two environmental monitoring systems (satellite and water physio-chemical characteristics) were established, and support was provided with less success to local governance structures (RAMSAR committees, ROLA network of volunteers…). The delivery was high but resulted in differentiated ownership and empowerment, being highest for MARN and the least for municipalities or other central government institutions.

(iii) *Increased annual revenue by $160,00 USD contributes to the financial sustainability of three PWIIs*: this was achieved through compensation schemes (FIAES) as there was no operational PA revenue system by project's end

Under the second Component (reduction of threats), the results are mixed. The project did create considerable awareness on the threats impacting the wetlands but did not succeed in changing behaviour within municipalities; remaining lukewarm for cooperation with final beneficiaries very enthusiastic but tied to market conditions that do not allow for much change of their current production model.

There were 4 outcomes:

(i) *Presence of key indicator species in four PAs in the Jiquilisco Bay Complex and Jocotal Lagoon PWIIs in the lower watershed of the San Miguel Río Grande: i) Normandía and Chaguantique PA: Amazona auropalliata, Ateles geoffroyi; ii) El Tercio PA: Crocodylus acutus; iii) Jiquilisco Bay Area (includes San Sebastián Island): Andara grandis, Amazona auropalliata, Eretmochelys imbricata and Crocodylus acutus; and iv) Jocotal Lagoon Area: Amazona auropalliata, Crocodylus acutus:* a monitoring system is being put in place but was not operational by projects' end.

(ii) *Pollution derived from agrochemicals, livestock wastes, and household and urban solid wastes reduced by 50% in three PWIIs by the end of the project*: the project did succeed in setting up a collection system for crop protection/pesticides containers that are no longer emptied in the wetlands; solid waste removal has been successful in selected municipalities but despite the drafting of solid waste removal management plans for the Jiquilisco Bay, municipalities were reluctant to meeting the project's target

as they did not have the funding capacity for it. This resulted in a variety of municipality responses ranging from some support in downstream areas to no support at all for upstream municipalities.

(iii) *Reduced presence of two invasive species (water hyacinth [Eichornia crassipes] and the Neotropic cormorant [Phalacrocorax brasilianus]) in the Olomega Lake, the Jocotal Lagoon, and the Jiquilisco Bay PWIIs: i) 2,000 tons/year per wetland of water hyacinth (Eichornia crassipes) removed from the Olomega Lake and Jocotal Lagoon PWIIs; and ii) Abundance (number of individuals) of the cormorant duck (Phalacrocorax brasilianus) in the Olomega Lake, the Jocotal Lagoon, and the Jiquilisco Bay PWIIs*: for the removal of invasive species, although there is no economical method, MARN has been tooled with monitoring instruments that should enable it to better target in time and place eradication campaigns.

(iv) *Sustainable use and extraction of resources contribute to the conservation of 18,720 ha of mangroves in the Jiquilisco Bay PWII and associated freshwater lagoons*: a number of plans were produced to better control the extraction of wetland natural resources from buffer zones populations; l local dry forests were rehabilitated with reforestation and improved management (fencing, firebreaks and others) ...

The sustainability and potential impact of the project are highest for most outputs that directly benefit MARN, such as environmental monitoring systems, capacity building material, enhanced capacity of staff to perform its duties including park rangers. However, this is not the case for all the other outputs, in particular, the support provided to farmers to adopt BPA, municipalities' commitments on solid waste removal monitoring and removal campaigns organisation.

These results advocate strongly for a multi-sectoral approach in dealing with wetland biodiversity degradation.

Evaluation rating table

1. Monitoring & Evaluation (M&E)	Rating
M&E design at entry	MS
M&E Plan Implementation	S
Overall Quality of M&E	S
2. Implementing Agency (IA) Implementation & Executing Agency (EA) Execution	**Rating**
Quality of UNDP Implementation/Oversight	MU
Quality of Implementing Partner Execution	MU
Overall quality of Implementation/Execution	S
3. Assessment of Outcomes	**Rating**
Relevance	HS
Effectiveness	MS
Efficiency	S
Overall Project Outcome Rating	MS
4. Sustainability	**Rating**
Financial sustainability	ML
Socio-political sustainability	U
Institutional framework and governance sustainability	L
Environmental sustainability	L
Overall Likelihood of Sustainability	ML

Ratings for Outcomes, Effectiveness, Efficiency, M&E, Implementation/Oversight, Execution, Relevance	Sustainability ratings:
6 = Highly Satisfactory (HS): exceeds expectations and/or no shortcomings 5 = Satisfactory (S): meets expectations and/or no or minor shortcomings 4 = Moderately Satisfactory (MS): more or less meets expectations and/or some shortcomings 3 = Moderately Unsatisfactory (MU): somewhat below expectations and/or significant shortcomings 2 = Unsatisfactory (U): substantially below expectations and/or major shortcomings 1 = Highly Unsatisfactory (HU): severe shortcomings Unable to Assess (U/A): available information does not allow an assessment	4 = Likely (L): negligible risks to sustainability 3 = Moderately Likely (ML): moderate risks to sustainability 2 = Moderately Unlikely (MU): significant risks to sustainability 1 = Unlikely (U): severe risks to sustainability Unable to Assess (U/A): Unable to assess the expected incidence and magnitude of risks to sustainability

Summary of conclusions, recommendations and lessons learned

Conclusions:

The project has made significant strides in improving the management of wetland PAs. It has enhanced the capacity of MARN with both an increase in area and the number of protected areas. MARN is now more prepared to manage protected wetlands as a result of extensive capacity-building efforts both at central and local levels with better equipped and more knowledgeable park rangers. Despite implementation constraints from an ill-adapted PCU to COVID 19, the PCU managed to deliver.

However, several outputs related to legalisation and agreements were not finalised reflecting an insufficient relationship between MARN and the PCU – in particular MARN's ability to walk the last mile to finalise an activity.

One of the key issues of the project despite all achievements made so far has been the inability of the project to significantly alter the corporate behaviour of both municipalities and final beneficiaries (e.g., little evidence of commitment of municipalities beyond the project's end and of BPA adoption by farmers due to an unconducive economic environment) alike, although it has created considerable awareness. This may be partly due to the fact that a whole set of preconditions and subsequent actions were to be met/implemented before this could happen but were not reflected in the original scope of the project.

Finally, the project struggled unsuccessfully to establish inter-institutional linkages to both improve its delivery or seek collaboration. There was little evidence that either GEF or UNDP attempted to facilitate this dialogue.

As wetlands in El Salvador remain increasingly important for its population through providing fish and wildlife habitats, storing floodwaters and maintaining surface water flow during dry periods but are under an increasing and wide variety of threats, future interventions need to address the complexity of these threats. There is a need for a more holistic approach in development, adopting a multi-sectorial approach and designing a project implementation structure that can tap into multiple resources from sectoral counterparts.

Recommendations:

The following is recommended:

Rec #	TE Recommendation	Entity Responsible	Time frame
A	Category 1: Project closure		
A.1	Organise a project closure workshop that ensures that knowledge and training material has been passed on to relevant people and allows for MARN to present how it plans to institutionalise project results	Project team	08-09 2021
B	Category 2: Follow-up		
B.1	Ensure the following-up of both BPA beneficiaries and municipality initiatives by allowing MARN staff to collect information for the next 12-24 months	MARN	09/2021 09/2023
B.2	Operationalise and finetune the wetland monitoring system so as to plan hyacinth eradication campaigns at the right moment and place	MARN	09/2021 onwards
C	Category 3: Consolidation		
C.1	Concentrate support to the most proactive municipalities including linking with FIAES	MARN	09/2021 onwards
D	Category 4: Expansion		
D.1	Review its priorities on education and awareness, and allocate more financial resources for environmental education campaigns targeting preferentially children and adolescents starting with buffer zones and expanding	MARN	Next fiscal year

Lessons learned:

Several lessons learned should be considered for future interventions:

Less lear #	TE Lessons learned
A	Category 1: Project closure
A.1	Municipality ownership and empowerment have been very weak – even for the most proactive ones -; funding should be decentralised allowing more financial leeway of municipalities when defining environmental priorities and actions in/around buffer zones
A.2	The project's total budget has been very low in relation to the area and themes that were covered. The number of outputs and spreading of beneficiaries over a wide area resulted in thinning out resources with limited beneficiary participation. There is a need to balance budget amount for impact with area and number of inputs for effectiveness
A.3	Mobility means for PCU has been limited despite the availability of transport from MARN. When limited transport of staff is sufficient – vehicle purchase not necessary -, project design must accommodate a transport budget allowing car rental
B	Category 2: Follow-up of results
B.1	Wetland land degradation is too complex to be addressed by a single sector; a wetland strategy for El Salvador should be devised to consider all relevant stakeholders through a Wetland Round Table, so as to orient better Government action and donor support; this should result in (ideally) programmatic support instead of project support
C	Category 3: Budget
C.1	Budget allocations over the entire project timeframe are unrealistic and result in unnecessary difficulties for project management units; they should be tailored to consider a much longer inception period after the project signature
D	Category 4: Governance
D.1	The lack of interinstitutional dialogue in this project has probably resulted in lost opportunities that could have enhanced its effectiveness and sustainability. UNDP could have played a role in facilitating this dialogue; hence UNDP should review its approach when overseeing project implementation at steering committee level
E	Category 5: Implementation
E.1	The project governance system has been weak with insufficient representativity at steering committee level; future projects must be more inclusive (relevant sectors, civil society and/or representatives of beneficiaries) both for transparency and efficiency

List of Acronyms and Abbreviations

ACUDESBAL	*Asociación Intercomunal de Comunidades Unidas para el Desarrollo Económico y Social del Bajo Lempa* – Intercommunal Association of United Communities for the Social and Economic Development of Bajo Lempa
ADESCO	*Asociación de Desarrollo Comunitario* - Community Development Association
APUM	*Área Protegida de Uso Multiple* – Multi-purpose Protected Area
AWP	Annual Work Plan
CDR	Combined Delivery Report
CBA	Cost-Benefit Analysis
CEL	*Comisión Ejecutiva Hidroeléctrica del Río Lempa* - Executive Hydroelectric Commission of the Lempa River
CENDEPESCA	*Centro de Desarrollo de Pesca y Acuicultura* – Aquaculture and Fisheries Development Centre
CNR	*Centro Nacional de Registros* – National Centre of Registry
CO	Country Office (of UNDP)
COAS	*COmité Asesor Local* – Local Advisory Committee
CPAP	Country Programme Action Plan
CSO	Civil Society Organisation
DAC	Development Assistance Committee
DGEVS	*Directorio General de Ecosistemas y Vida Silvestre* – General Directorate for Ecosystems and Wildlife
EA	Executing Agency
EUD	European Union Delegation
FAO	Food and Agriculture Organisation
FIAES	*Fondo de Inversión Ambiental de El Salvador* - Environmental Investment Fund for El Salvador
GEF	Global Environment Facility
GIZ	*Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH* - German Society for International Cooperation, Ltd.
HPII	*Humedales Protegidos de Importancia Internacional* - Protected Wetlands of International Importance
HQ	Headquarters
HR	Human Resources
IA	Implementing Agency
ID	Identification
IS	Information System
ISCOS	*Istituto Sindacale per la Cooperazione allo Sviluppo* - Trade Union Institute for Development Cooperation
ISTA	*Instituto Salvadoreño de Transformación Agraria* – Salvadorian Institute for Agricultural Change
JIT	Just-In-Time
MAG	*Ministerio de Agricultura y Ganaderia* – Ministry of Agriculture and Livestock
MARN	*Ministerio de Medio Ambiente y Recursos Naturales* - Ministry of Environment and Natural Resources
MITUR	*Ministerio del Turismo* - Ministry of Tourism
MOPT	*Ministerio de Obras Publicas y Transporte* - Ministry of Transport and Public Works
MoU	Memorandum of Understanding
MTR	Mid-Term Review
MUPA	Multiple-Use Protected Area
NEX	National Execution (modality of UNDP)
NGO	Non-Government Organization
NIM	National Implementation Modality

NPC	National Project Coordinator
NPO	National Project Officer
NRM	Natural Resource Management
PCU	Project Coordination Unit
PDLS	*Plan de Desarrollo Local Sostenible* – Local Sustainable Development Plan
PIF	Project Identification Form (of the GEF)
PIMS	Project Information Management System (of UNDP)
PIR	Project Implementation Review
PLAS	*Planes Locales de Aprovechamiento Sostenible* – Sustainable Use Local Plans
PMU	Project Management Unit
PNA	Protected Natural Area
PPG	Project Preparation Grant
PREP	*Programa Nacional de Restauración de Ecosistemas y Paisajes* – National Landscape and Ecosystem Restoration Programme
PRODOC	Project Document
PWII	Protected Wetlands of International Importance
ROLA	*Red de Observación Local Ambiental* – Environmental Local Observation Network
SESP	Social and Environmental Screening Template
STAP	Scientific and Technical Advisory Panel
SWOT	Strengths, Weaknesses, Opportunities and Threats
TT	Tracking Tool
UAM	*Unidad Ambiental Municipal* – Municipality Environmental Unit
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme

1. Introduction

This report presents the findings of the Terminal Review (TE) of the full-sized project entitled "Conservation, Sustainable Use of Biodiversity and the Maintenance of the Ecosystem Services in Protected Wetlands of International Importance". The terminal review was carried out by an Independent Consultant, on behalf of UNDP.

1.1 Purpose of the evaluation

Pursuing the UNDP and GEF monitoring and evaluation (M&E) policies and procedures, all UNDP-implemented and GEF-funded projects are required to undergo a terminal evaluation upon completion of implementation. Towards this end, UNDP has commissioned the terminal evaluation by contracting an independent evaluator. It was carried out per UNDP-GEF Monitoring and Evaluation Policy and facilitated by the UNDP Country Office in San Salvador.

The purpose of the terminal evaluation as per TORs (see Annexe 1) was to assess the achievement of project results and to draw lessons that can both improve the sustainability of the benefits from this project, and aid in the overall enhancement of UNDP and Government programming.

A systematic and comprehensive evaluation of the performance of the project using the five DAC criteria assessing its design, processes of implementation, and achievements relative to project objectives, was carried out. It was aimed at obtaining and providing timely, precise and reliable information on how well the project was designed, implemented, progress towards project objectives achieved and how resources were used cost-effectively. The evaluation looked as well at the project's impact and its sustainability through ownership and empowerment.

The specific objectives of the terminal evaluation are to:

- Assess the design, implementation and, monitoring and evaluation processes;
- Assess the project's achievements in relation to its goals, objectives, and planned outcomes.
- Assess the management and potential for project results in terms of ownership, sustainability and future programme design.
- Determine whether the project contributed towards GEF's strategic objectives and global environmental benefits;
- Provide specific and practical recommendations, and document lessons learned that can be utilized for improving future projects.

1.2 Scope and methodology

1.2.1 Scope

The evaluation focused primarily on assessing the performance of the project in light of the accomplished outcomes, objectives and effects using the evaluation criteria of relevance, effectiveness, efficiency, sustainability, and impact, as defined and explained in the UNDP Guidance for Conducting Terminal Evaluations of UNDP-supported and GEF-financed Projects.

Relevance assesses how the project relates to the development priorities at the local, regional and national levels for climate change and is coherent with the main objectives of GEF focal areas. It also assesses whether the project addressed the needs of targeted beneficiaries at the local, regional and national levels.

Effectiveness measures the extent to which the project achieved the expected outcomes and objectives, how risks and risk mitigation were being managed, and what lessons can be drawn for other similar projects in the future.

Efficiency is the measure of how economically resources (funds, expertise, time, etc.) are converted to results. It also examines how efficient were partnership arrangements (linkages between institutions/ organizations) for the project.

Impact examines the positive and negative, primary and secondary long-term effects produced by the development intervention, directly or indirectly, intended or unintended. It looks at whether the project achieved the intended changes or improvements (technical, economic, social, cultural, political, and ecological). In GEF terms, impact/results include direct project outputs, short to medium-term outcomes, and longer-term impact including global environmental benefits, replication effects and other local effects including on communities.

Sustainability is the ability of the project interventions to continue delivering benefits for an extended time after completion; it examines the project's sustainability in financial, institutional, social and environmental terms.

Employing the above-explained evaluation criteria, the terminal evaluation covered all activities supported by UNDP and completed by the project team and Government agencies as well as activities that other collaborating partners including beneficiaries, participated in.

In relation to timing, the evaluation covered all activities of the project from project document signature in May 2016 to the evaluation in June 2021 (3 months before project closure).

The evaluation has been conducted in a way that it provides evidence-based information that is credible, reliable and useful.

1.2.2 Methodology

The Evaluator adopted a participatory and consultative approach ensuring close engagement with government counterparts, UNDP Office, the project team, and key stakeholders based at the local level (municipalities, local communities, NGOs).

Several basic principles used to conduct the evaluation include:

- **Effective participation** of all stakeholders (government, agencies, donors, final beneficiaries)
- **Crosschecking** of gathered information
- Emphasis on **consensus and agreement** on the recommendations by the stakeholders.
- **Transparency** of debriefing

Overall, the evaluation tools used during the evaluation were the following: a review of key documents and literature, consultation an interview of stakeholders. No project site visits were conducted due to the COVID19 pandemic. All evaluation activities were carried out from home. The data collection tools included semi-structured questionnaires for key informants (checklists) and interview guides for discussions with beneficiaries. The tools were developed by the evaluator focusing on the evaluation criteria and major outcomes planned and agreed upon with UNDP at the inception stage before the actual in-country evaluation took place.

The adopted methodology is detailed in Annexe 2.

Gender was considered through participation and inclusion: it incorporated gender and women's rights dimensions into the evaluation approach, method and analysed how the project affected men and women differently – in particular following the recommendations of the MTR. As per the 2020 GEF Terminal Evaluation guidelines, specific Evaluation Rating Criteria were used in combination with the 5 DAC evaluation criteria: these are outcomes, quality of monitoring and evaluation (M&E), quality of implementation and execution, and sustainability (environmental, social, financial and institutional).

Project performance was evaluated and rated using the criteria of relevance, effectiveness, efficiency and impact using the standard rating scales (see Table 1 for a summary). The primary reference points for assessing the performance were the indicators and targets set in the Strategic Results Framework, with consideration given to contextual factors.

Ratings for Outcomes, Effectiveness, Efficiency, M&E, Implementation/Oversight, Execution, Relevance	Sustainability ratings:
6 = Highly Satisfactory (HS): exceeds expectations and/or no shortcomings 5 = Satisfactory (S): meets expectations and/or no or minor shortcomings 4 = Moderately Satisfactory (MS): more or less meets expectations and/or some shortcomings 3 = Moderately Unsatisfactory (MU): somewhat below expectations and/or significant shortcomings 2 = Unsatisfactory (U): substantially below expectations and/or major shortcomings 1 = Highly Unsatisfactory (HU): severe shortcomings Unable to Assess (U/A): available information does not allow an assessment	4 = Likely (L): negligible risks to sustainability 3 = Moderately Likely (ML): moderate risks to sustainability 2 = Moderately Unlikely (MU): significant risks to sustainability 1 = Unlikely (U): severe risks to sustainability Unable to Assess (U/A): Unable to assess the expected incidence and magnitude of risks to sustainability

Table 1: TE Rating Scales

1.2.3 Data Collection and Analysis

As the evaluation was conducted entirely remotely, only two sources of information were available: (i) documents and (ii) interviews although plenty of information could be crosschecked with different stakeholders.

The data collection tools included semi-structured questionnaires for key informants (checklists) and interview guides for discussions with beneficiaries. The tools were developed by the evaluator focusing on the evaluation criteria and major outcomes planned. The interview guides and semi-structured questionnaires are presented in Annexe 3.

Considering the need to crosscheck data (2-3 sources of information), quite a lot of information was not included in the report as it came from just one source of information (e.g., one informant only). This has reduced the depth of analysis of the assessment.

1.2.4 Limitations

Due to the global pandemic of COVID19, the evaluation was entirely conducted from home. While it is not an issue as such for interviews as international phone and internet communications were of reasonably good quality, the absence of in-country visits has been a significant constraint for appraising actual on-the-ground results like the adoption of new techniques and use of acquired knowledge, the review of new infrastructures, the status of micro-projects and all results that can be observed on-site.

As data and information need to be cross-checked using different sources of information (reports, interviews but also *de visu* assessments), the analysis cannot be as detailed as information from one source could not be cross-checked. Hence, conclusions and recommendations were drawn based on a much more

limited set of data and information than for a conventional TE with an in-country mission.

1.2.5 Ethics

The evaluation was conducted following the UNEG Ethical Guidelines for Evaluators (Evaluation Consultant Code of Conduct Agreement attached in Annexe 11).

The rights and dignity of all stakeholders were respected, including interviewees, project participants (project, UNDP, Government staff), beneficiaries (beneficiary institutions and communities) and other evaluation stakeholders including co-financing partners. The evaluator explained and preserved the confidentiality and anonymity of the participants so that those who participate in the evaluation are free from external pressure and that their involvement in no way disadvantages them.

The final report of the evaluation does not indicate a specific source of citations or qualitative data to preserve this confidentiality.

The confidentiality of stakeholders was ensured and consultation processes were appropriately contextualised and culturally sensitive, with attention given to issues such as gender empowerment and fair representation for vulnerable groups, wherever possible.

Whilst every effort was made to reflect the inputs of stakeholders fairly and accurately in the report, the evaluation ratings, conclusions and key recommendations are those of the sole evaluator, not binding on any individual or institutional stakeholder.

1.3 Structure of the evaluation report

The terminal evaluation report is presented in five sections. It initially presents an *executive summary* of the terminal evaluation, giving a brief background of the project and its design, a summary of its findings related to the activities, management, and important aspects such as partnership and sustainability, conclusions and recommendations for future action and programming.

It is followed by an *introduction*, which describes the context and background of the evaluation and gives a brief description of the purpose, scope and focus of the evaluation, the methodology used, and the structure of the report. The next section presents information on the project, including project description, development context, and strategy.

The *findings* section is dedicated to the results achieved towards the outcomes of the project, which is the core of the report, presented under three subheadings related to programme design, implementation, and evaluation criteria. The final section considers the *conclusions* of the evaluation and *recommendations* for future action.

2. Project description and development context

2.1 Project start and duration

The project "Conservation, Sustainable Use of Biodiversity and the Maintenance of the Ecosystem Services in Protected Wetlands of International Importance" was initially designed by the Government of El Salvador with the support of UNDP and submitted to GEF for review in May 2014.

It was the culmination of a consultation process (i) within MARN, (ii) with other relevant ministries (e.g., MAG) and (iii) with relevant local stakeholders – mainly municipalities and local organisations – that resulted in the formulation of the project.

The PPG was granted in April 2014 with funds available in November 2014. The full-size project was submitted to GEF for review in Mid-2015 and approved in December 2015.

The PRODOC was signed in July 2016 between UNDP and the Government which was the official project start-up date.

The project had an estimated end date by July 2020 (four years). However, 2 no-cost extensions were granted with a due closure date by September 2021.

2.2 Development context

With a population of over 6.5 million people – mostly urban -, El Salvador is the most densely populated Central-American country at 300+ inhabitants per km².

The country has lost over 85% of its native forest since 1960 with currently around 45% of the territory covered with mostly secondary forest[1]. Two thirds of the country are under agricultural use[2], mostly under intensive use with chemical crop protection and fertilisation. The fragmentation of its forest cover combined with intense agricultural use has severely strained underground water resources. With less land cover resulting in accelerated runoff, these recharge at a slower rate. Wells are drying up faster, and rivers flows are more erratic. In rural villages, more than 600,000 people have no access to drinking water, and hundreds of thousands more experience limited or intermittent access putting its decreasing annual water supply per capita dangerously close to falling short of demand[3].

Around 9% of El Salvador's landmass (1.850 km²) is under protection status and barely 200+ km² of marine areas are being protected. While over 120 wetlands cover around 6% of the country, less than 1% is under protection. Still, many of them are of international importance as they are transiting points for a wide range of migratory birds but also constitute a unique reserve of biodiversity for Central America which is why several of them have been designated RAMSAR sites.

[1] source: Global Forest Watch El Salvador
[2] https://estadisticas.cepal.org/cepalstat/Perfil_Nacional_Ambiental.html?pais=SLV&idioma=spanish
[3] https://www.nationalgeographic.com/environment/article/el-salvador-water-crisis-drought-climate-change

The country's mangroves are a continuation of those in Nicaragua with several sites part of the extensive mangrove complex in the Fonseca Gulf. Both coastal areas and inland lakes, as well as mangroves, serve different eco-systemic services, but often suffer overuse. Some wetlands are part of the SNAP with many portions remaining unprotected.

Virtually all wetlands in El Salvador are at risk of biodiversity loss because of both natural and anthropic pressures. These include climate change with coastal erosion, more unpredictable weather patterns such as increased intensity and/or a number of hurricanes, droughts or flooding. Human pressures have accelerated over the past 50 years resulting in ecological imbalances in most wetlands through a combination of a growing population with rapid urban expansion associated with solid waste generation, urban/industrial effluent discharges, increased agricultural intensity and agrochemical seepages in wetlands or an expansion of invasive species in key wetlands.

While the country has a somewhat conducive political and legislative context regarding wetlands with specific mentions in the constitution, a SNAP and a whole range of environment-friendly sectoral policies and legislative measures, actual enforcement remains weak with continued mangrove deforestation, land fragmentation due to land-use changes for agricultural and livestock development and insufficient financing to tackle direct threats such as eutrophication, invasive species development acceleration and overexploitation of natural resources (fishing). In that context, wetland protection though protection remains a top priority for the Government together with accompanying measures for neighbouring communities.

Before the project, many initiatives with significant financing, resulting from established policy priorities have been undertaken but with limited success due to their uncoordinated approach. Wetlands threats are numerous, different in nature, cause and consequences, and efficient tackling of these requires a multi-pronged approach, as proposed in the project.

2.3 Problems that the project sought to address

Focussing on wetlands preservation and/or restoration – this is the first full-scale GEF project addressing this thematic -, the issues taken into consideration in the project include:

- Fragmentation and habitat loss: this is the result of shortcomings in the regulatory framework to ensure adequate protection of wetlands, inadequate policies from other sectors not in line with wetland protection
- Mangrove deforestation: it is participating in biodiversity loss; deforestation combined with urban and agricultural encroachment are depriving wetlands of their buffer function for keeping land humid over large areas
- Invasive species: there is neither monitoring nor coordinated control of invasive species such as the cormorant bird[4] and water hyacinth[5] that respectively strain fisheries stocks and degrade substantially biodiversity

[4] Phalacrocorax brasilianus

[5] Eichhornia crassipes

- Water bodies contamination: wetland have seen their water quality degrade steadily over the years with direct discharges of untreated industrial, rural and urban effluent as well agrochemical pollution through underground seepage or direct dumping of agrochemical containers in rivers or the open
- Unsustainable use of resources: local stakeholders still view wetlands as inexhaustible resources to be tapped in at will, not justifying protection, resulting in dangerously decreasing stocks of virtually all wetland resources
- Climate change: the effects can already be felt with higher variations of water level for inland water bodies, a general increase of rainfall with increased mean temperature and a much faster than modelled sea-level increase over the past 50 years while at the same time, protection area personnel is not trained on this issue nor the institutions equipped with early warning systems able to detect extreme events

Out of more than a hundred listed wetlands, the project set its priorities on three wetlands of international importance (PWII) located in the eastern part of El Salvador: Olomega Lagoon, El Jocotal Lagoon and Jiquilisco Bay as well as more specific interventions in the protected wetlands of Jaltepeque Complex, the Gulf of Fonseca and also the Cerrón Grande Reservoir.

2.4 Theory of Change

The GEF IEO (2017) Guidelines for conducting terminal evaluations require that the project's Theory of Change (ToC) should be described as part of the analysis of project design; where a project did not have an explicit ToC, the evaluator should develop one based on information provided during the evaluation.

At the time of project design in 2014-2015, the TOC approach was not yet a requirement for UNDP/GEF's project formulation. Hence, the usual approach in project formulation was used based on the logical framework methodology.

The logical framework analysis is an objective-oriented tool to project planning. The analysis identifies a problem then develops a "temporal logic model" that runs through a pathway to achieve an objective from inputs, activities, results in outcomes that ultimately contribute to a development objective. It also identifies risks and assumptions and indicators and targets to assess the project's performance.

A theory of change is a method[6] that explains how a given intervention is expected to lead to specific development change, drawing on a causal analysis based on available evidence. It helps identify the many underlying and root causes of development issues so as to determine what priorities should be addressed to maximise a project's contribution to achieving development change. By articulating the causes of a development issue, making assumptions explicit on how the proposed strategy is expected to yield results, and testing these assumptions against evidence, the theory of change helps ensure a sound logic for achieving project change.

At the core of the Theory of Change is the understanding of how the activities of the intervention are expected to lead to the desired results through identifying (i) the causal pathway from activities to outputs to a sequence of outcomes to impacts and (ii) the causal assumptions showing why and under what conditions the various links in the causal pathway are expected to work.

[6] https://undg.org/wp-content/uploads/2017/06/UNDG-UNDAF-Companion-Pieces-7-Theory-of-Change.pdf

As the logical framework was clear, reconstructing a simplified ToC was somewhat straightforward. Still, this does not hide the fact that the logical framework has been drastically simplified and that the issues to tackle as well as their relationships are very complex and in truth cannot be comprehensively addressed through a project approach and run from a single ministry as in this case but better through a multi-sectoral approach.

Moreover, the scale of most identified issues (chemicals, waste, invasive species, BD) at watershed or even at local level is so high that results' achievement through project approach may be dwarfed by the issues at stake, making it hard to monitor and evaluate cause and effect relationships or attribute change to project interventions.

The ToC of the project is located under Annex 8.

2.5 Immediate and development objectives of the project

The project's objectives were to (i) enhance the conservation and sustainable use of biodiversity and (ii) maintain ecosystem services in protected wetlands of international importance.

It had two components and several outcomes under each component (excluding activities on project management); the project details are in Box 2:

(i) Component 1: expanding the coverage of protected wetlands of international importance (PWII) and building institutional and individual capacity for their effective management.

(ii) Component 2: addressing threats to biodiversity including the presence of invasive species and reducing solid and agrochemical waste originating in buffer areas of wetlands of international importance.

Global (GEF) benefits included (i) the protection of vulnerable and endangered species at global, regional and national levels and (ii) the protection of various habitats including mangroves, seasonally inundated floodplains and wetlands for species of international importance.

Objectives: Enhancing the conservation & sustainable use of biodiversity & maintaining ecosystem services in protected wetlands of international importance	**Indicators:** - Coverage (ha) of the SNAP resulting from the creation of 3 new MUPA - Presence of key indicator species in 4 PAs in the Jiquilisco Bay & Jocotal Lagoon HPII Complex in the lower watershed of San Miguel Río Grande - Change in the management effectiveness of 3 PWIIs measured through the METT scorecard - Change in the financial sustainability of 3 PWIIs according to that established through the total average score in the UNDP/GEF Financial

	Sustainability Scorecard
Component 1: Expanding the coverage of protected wetlands of international importance (PWII) & building institutional & individual capacity for their effective management Outcomes: *Three newly established MUPAs increase the coverage of the NPAS by 37,709.46 ha.* *The management effectiveness of three (3) PWIIs increases by 10 percent as measured by the Management Effectiveness Tracking Tool (METT).* *Increased annual revenue by $160,00 USD contributes to the financial sustainability of three PWIIs*	**Indicators:** - Representativeness (%) of the wetland ecosystems in the National System of Natural Protected Areas by wetland type - Number of new wetland PAs that form part of the National System of Natural Protected Areas - Change in the capacity development indicators for the sustainable management of PWIIs according to the total score of the UNDP-GEF Capacity Development Scorecard - Number of staff from the MARN, municipalities, the MAG, & local organizations, incl. women, trained in the sustainable management of PWIIs - Change in the financial gap (USD) to cover the basic management costs of 3 PWIIs - Number of environmental. compensation agreements established - Total annual revenue generation for 3 PWIIs
Outputs: - Three new multiple-use protected areas covering the Jiquilisco Bay, the Islands of the Gulf of Fonseca & the Olomega Complex - Management Plans for up to three wetlands of international importance updated or developed. - Updated inventory of EI Salvador wetlands. - Institutional & individual capacities strengthened in MARN & other relevant institutions. - Equipped wetland staff & volunteers enable timely detection & reporting of floods & landslides. - Local governance programme empowering local communities & municipal authorities. - Environmental economic compensation for local development projects altering wetlands. - Business plans developed for new & existing wetland PAs. - On-site validated financial mechanisms that serve to increase the level of funding for 3 wetlands - Visitor entrance fee scheme & revenue channelled to PAs from existing wetlands. - Increased revenue from tourism in wetland PAs. Local-level land use plans developed for pilot areas to support sustainable utilization of range resources	
Component 2: Addressing threats to biodiversity incl. the presence of invasive species & reducing solid & agrochemical waste originating in buffer areas of wetlands of international importance. Outcomes: *Pollution derived from agrochemicals, livestock wastes, and household and urban solid wastes reduced by 50% in three PWIIs by the end of the project.* *Reduced presence of two invasive species (water hyacinth [Eichornia crassipes] and the Neotropic cormorant [Phalacrocorax brasilianus]) in the Olomega Lake, the Jocotal Lagoon, and the Jiquilisco Bay PWIIs: i) 2,000 tons/year per wetland of water hyacinth (Eichornia crassipes) removed from the Olomega Lake and Jocotal Lagoon PWIIs; and ii) Abundance (number of individuals) of the cormorant duck (Phalacrocorax brasilianus) in the Olomega Lake, the Jocotal Lagoon, and the Jiquilisco Bay PWIIs (baseline and target will be established during the first year of the project).* *Sustainable use and extraction of resources contribute to the conservation of 18,720 ha of mangroves in the Jiquilisco Bay PWII and associated freshwater lagoons.* _	**Indicators:** - Number of inter-institutional cooperation agreements established & operating for PWIIs management. - Number of farms implementing best practices for cattle ranching wastes management in 3 PWIIs, incl. farms run by women. - Solid waste accumulated (kg/ha) in the Jiquilisco Bay PWII - Volume (tons/year) of water hyacinth removed from Olomega Lagoon & Jocotal Lagoon PWIIs - Abundance (nr of individuals) of the cormorant duck in Olomega Lagoon, Jocotal Lagoon, & Jiquilisco Bay PWIIs - Coverage of mangroves in Jiquilisco Bay PWII & associated freshwater lagoons
Outputs: - Six inter-institutional cooperation agreements established in at least three wetland PAs. - Programme for the prevention, reduction & control of pollution derived from agricultural activities & human settlements in two wetlands & their buffer zones. - Incentive programme incl. green certification for the reduction of the use of agrochemicals in the cultivation of sugar cane & sustainable management of livestock in buffer zones of five wetlands. - Rules to regulate human activities that affect wetlands of international importance. - Monitoring IS to facilitate decision making to reduce threats for 3 wetlands. - Protocol developed to reduce threats to biodiversity in wetlands. - Strategies for the control of invasive species piloted in three wetland PAs & their buffer areas. - Participatory plans developed for the conservation & sustainable use of mangroves & flooded forests.	

- Participatory rehabilitation of at least 500 hectares of dry forest associated with mangroves	

Box 2: Summary of project components, outcomes, output & indicators

2.6 Outcome indicators established

The project document included a list of indicators for the goals and both components, referring broadly to the outputs. These indicators were used all along during project implementation but with adaptations as required.

These included at the target level the following indicators:

- To increase the coverage of the protected areas up to 37,710 ha, including marine waters adjacent to the coastal wetlands.
- To increase management effectiveness by 10 per cent in the PWII of Jocotal, Jiquilisco and Olomega, according to the METT scorecard.
- To achieve sustainable populations of four threatened species and one of economic relevance.
- To achieve a 100% (20 to 40%) improvement in the financial sustainability score of the PWII of El Jocotal, Jiquilisco and Olomega.

The following comments are worth mentioning:

- Several indicators had no baseline, the project failed to determine their baseline during the PPG phase and later during the first few months of project implementation
- Some indicators were based on the GEF financial and capacity development scorecard system and METT as a way to measure wetland status improvement of protected wetlands over time
- Some indicators were formulated to integrate gender into the results framework, therefore taking into account the GEF Policy on Gender Mainstreaming (2012)
- Some indicators may have been problematic (under both Components 1 and 2) because they relied on actions out of the project's scope or external factors, conditions or stakeholders for their achievement.
  Interviews showed this issue was a constant constraint for the project's team (see more detailed analysis under Table 3).

2.7 Main stakeholders

The Ministry of Agriculture and Natural Resources (MARN) was the key stakeholder in the project, with the General Directorate for Ecosystems and Biodiversity (DGEB) responsible for leading the project execution. UNDP provided oversight and had a supervisory and facilitating role in project execution (National Implementation Modality – NIM).

As per PRODOC, the project had sought collaborations with the following stakeholders:

- Ministry of Agriculture (MAG), in particular, the Fisheries Administration (CENDEPESCA)
- Ministry of Transport and Public Works (MOPT)
- The Executive Hydroelectric Commission of the Lempa River (CEL)
- The Ministry of Tourism (MITUR)

- Selected municipalities and municipal organizations – particularly the UAM under the municipality –
- Producers' organizations and Community-Based Organisations (CBO)
- Civil Society Organisations (CSO)
- Academic organizations and research centres
- The Environmental Investment Fund for El Salvador (FIAES)
- Bilateral cooperation agencies and international NGOs: (i) Japan International Cooperation Agency (JICA), (ii) *Gesellschaft für Internationale Zusammenarbeit* (GIZ) from Germany and (iii) *Istituto Sindacale per la Cooperazione allo Sviluppo* (ISCOS) from Italy (Trade Union Institute for Development Cooperation) with existing interventions at the time of formulation.

A comprehensive analysis of potential stakeholders was provided in the PRODOC. It included for each stakeholder their level of interest in biodiversity and their potential role in project implementation either as active implementers and/or as beneficiaries.

2.8 Preparation and implementation timeline

The timeline for project preparation and implementation is presented in Table 2.

Preparation	
GEF project concept approval	February 2013
CEO approval of PIF submission (revised)	March 2014
STAP review	April 2014
Full-size project approval (council letter)	December 2015
Implementation	
PRODOC signature & official start-up	July 2016
Inception workshop	October 2016
Appointment of National Project Manager	November 2016
1st meeting of project board	December 2016
Planned MTR	November 2018
Actual Mid-term Review	March 2019
16 months extension approval (reverted later)	September 2019
Planned Terminal Review	March 2020
COVID pandemic lockdown	March-August 2020
Planned project end	April 2020
12 months no-cost extension granted	July 2020
1st revision of project end	August 2020
COVID 3 months project extension granted	September 2020
COVID pandemic slowdown	August 2020 - now
2nd revision of project end	June 2021
Actual Terminal Review	June-July 2021

Table 2: Project preparation and implementation timeline

It took more than 2 years from PIF to actual PRODOC signature and another 6 months with the arrival of the national Project Manager to effectively start the implementation of the project.

Due to implementation delays (slow rolling-out of activities with the consultancy modality, changes of project leadership under MARN, successive national and local elections), a first request of a no-cost extension of 16 months was granted at project board. This was however reverted later to a 12-month no-

cost extension. Following the COVID pandemic, the project was granted another 3-months extension.

3. Findings

3.1 Project design / Formulation

The project's objective was to enhance the maintenance and conservation of wetlands-related ecosystems as well as reduce their threats – with a focus on the Eastern part of El Salvador -.

The logic behind the project design was that (i) many wetlands including mangroves are of international importance with remarkable endemic, regional and migratory species, (ii) few of them benefit from any protection and (iii) most of them are experiencing accelerated degradation through a wide variety of threats.

The project is part of a broader environmental strategy[7] aiming at reducing biodiversity degradation and reclaiming healthy ecosystems and has been built taking within the framework of a series of legislative acts targeting (in)directly environment and biodiversity. These may include the 1983 constitution, laws, treaties, and international agreements on biodiversity[8], various national laws on the environment[9] and other legal instruments taking into account the environment[10].

During the project formulation process, a number of threats and issues were identified from anthropic degradation to insufficient Government presence through PA declaration and insufficient stakeholders' knowledge on wetlands' role in providing eco-systemic services.

While some issues are clearly within the mandate of MARN, it appears early on that, other issues fall beyond the institutional scope of MARN's core activities and mandate/agenda (e.g., support to farmers and livestock rangers). However, in this project, resources split between key sectoral stakeholders was not chosen as the main implementation approach. Rather, a strategy of coordination from other sectors than MARN was settled on at the project formulation stage between *inter alia*, the Ministry of Agriculture and Livestock, the Ministry of Transport, municipalities and several autonomous authorities (electricity among others).

This may be a lesson learned from previous projects due to the difficulty to enable effective multisectoral project implementation because public institutions have a "silo business" culture that renders interagency collaboration and financial resources sharing all the more difficult.

[7] http://centa.gob.sv/docs/unidad%20ambiental/POLITICA%20NACIONAL%20MEDIO%20AMBIENTE.pdf
[8] For example: International Convention of Biological Biodiversity
[9] For example: Ley de Medio Ambiente y Reglamento (1998), Fondo Ambiental El Salvador (FONAES - FIAES), Ley de Conservación Visa Silvestre, Ley Forestal…
[10] Política Nacional de Turismo, Ley de Igualdad, equidad y Erradicación de la Discriminación contra Mujeres de El Salvador…

With that in mind, the project adopted in its design a holistic approach taking into consideration a whole range of threats. This can be considered as necessary (but not sufficient) when tackling complex situations such as wetland ecosystems degradation.

Although a decentralised approach was not strictly adopted, the project design emphasized local stakeholders' participation with a strong reliance on municipal environmental units (UAM). As for participation in the project design, wide consultations were carried out with a focus on MARN staff, but the most important stakeholders mentioned in the PRODOC were also consulted; interviews showed that they were not heavily involved in the project design itself that remained a MARN in-house process.

With regards to the project design itself (strategy of intervention, definition of components among others), it is important to note that it was heavily inspired by a very similar GEF-5 project[11] in Costa Rica designed a couple of years before. Component 1 was nearly identical in its design. While this is not an issue in itself as new innovative project designs are often encouraged by GEF regional offices and/or emulated by formulation specialists, the evaluator comments that project design has to (i) reflect issues as viewed/identified by local stakeholders and (ii) take into account local contexts that can be significantly different from country to country.

All this, points towards a very conventional project formulation stage with a lot of guidance from GEF, safety in using similar project designs, simplicity in implementation through a single institution but, with possibly too much confidence about the ability of a single ministry to address the socio-economic and ecological complexity of wetlands-related issues.

The project was implemented through UNDP's National Implementation Modality (NIM), with the MARN serving as the designated national implementing agent.

3.1.1 Analysis of the Results Framework

- Project objectives, components and outcomes (see Box 1):

The overall objectives are well defined with biodiversity conservation and use through quality ecosystem services in wetlands. These are well within the framework of GEF's global benefits on biodiversity that include[12]:

- Conservation of globally significant biodiversity.
- Sustainable use of the components of globally significant biodiversity

Under the two components, a clear separation was made between wetlands expansion, management and protection under Component 1 and addressing threats to wetlands under Component 2.

[11] Conservation, Sustainable Use of Biodiversity, and Maintenance of Ecosystem Services of Internationally Important Protected Wetlands, Costa Rica – PIMS 4966

[12] https://www.thegef.org/documents/global-environmental-benefits

It is worth mentioning that most changes of design from PIF to full-scale project remarkably resulted in an increase of outputs and results (instead of usually a decrease of objectives due to GEF budget scrutiny) which is always a risk for implementation.

- Indicators and targets:

The analysis of the log frame and it's set of indicators show that many are not SMART with issues in their definition, although some adaptations were made during the implementation – especially after the MTR -
.

The MTR had flagged a number of issues with indicators including redundancies and issues of relevance (all marked under red "R" in Table 3).

Additional issues (in yellow) that came out during the interviews and the analysis of documents include the following:

- Some indicators do not fall within the timeframe of the project (SMART "T"); there is a systematic tendency to measure BD improvement through charismatic endangered species (for which often recovery ranges above 5 -10 years, way above the project timeframe); this was considered during implementation
- Additional indicators are not relevant (SMART "R") because their achievement depends on external factors, outside the influence of MARN and the project itself, and should have been spelt out differently (e.g., actual PA coverage is definitive after review by the *Centro Nacional de Registros*, actual increase of income for MARN is not project-dependent as it only contributed to improving basic conditions [infrastructures] and was not tasked to resolve legal, administrative, technical issues related to setting up a financial and management system for tourism-related revenue).
- Some indicators that became irrelevant because of output formulation issues and changed contexts were not amended (e.g., issue of inappropriate Water Hyacinth removal vessel's transfer to Cerrón Grande[13]), evidencing a lack of flexibility in log framework adjustments.

It is also worth mentioning that some targets are very small and lack utility, given the project area; this is the case for funded microprojects. These outputs are therefore more of a pilot nature than an objective measure of project impact (e.g., number of farms).

A detailed indicator/target analysis is under Table 3

[13] It appeared that (i) the hyacinth issue was not serious in the project area and (ii) the hyacinth removal boat purchased under another project but to be run by this one was not adapted to the low depth project wetlands; this resulted in opening up a new project area with the boat transfer to Cerrón Grande due to the maintaining of the hyacinth removal tonnage quota

Description	Description of Indicator	Target Level at end of the project	Specific	Measurable	Achievable	Relevant	Time-bound
Objective Promote the conservation and sustainable use of biodiversity and the maintenance of ecosystem services through the creation of new protected wetlands of international importance (PWII) and the improved management of existing protected wetlands.	Coverage (ha) of the National System of Protected Areas resulting from the creation of three (3) new multiple-use protected areas (MUPAs)	133,495.07 ha (37,709.46 ha additional)	Y	Y	Y	N[14]	Y
	Presence of key indicator species in four (4) PAs in the Jiquilisco Bay and Jocotal Lagoon HPII Complex in the lower watershed of the San Miguel Río Grande	- PA Normandy and Chaguantique: Amazon auropalliata, Ateles geoffroyi - PA El Tercio: Crocodylus acutus - Jiquilisco bay area: Andara grandis, Amazona auropalliata, Eretmochelys imbricata and Crocodylus acutus - El Jocotal lagoon area: Amazona auropalliata, Crocodylus acutus	Y	Y	Y	Y	N[15]
	Change in the management effectiveness of three (3) PWIIs measured through the METT scorecard	- HPII of Jiquilisco bay: 59% - HPII of Olomega lagoon: 43% - HPII of the El Jocotal lagoon: 41%	Y	Y	Y	Y	Y
	Change in the financial sustainability of three (3) PWIIs according to that established through the total average score in the UNDP/GEF Financial Sustainability Scorecard	- Legal, regulatory and institutional: 46% - Business planning and tools for profitability management: 42% - Tools for income generation and allocation: 34% - Total: 41%	Y	Y	Y	Y	Y
Component 1 Expanded protected wetland coverage and capacities institutional and individual institutions strengthened for the effective management of HPII.	Representativeness (%) of the wetland ecosystems in the National System of Natural Protected Areas by wetland type	- Baseline + X%	Y	N[16]	Y	Y	Y
	Number of new PAs of wetlands that are part of the National System of Natural areas Protected	Three (3): 1. Islands in the Bay of Jiquilisco: 40 islands and the body of water that surrounds them; 2. Olomega Complex: Island Olomeguita, Tierra Blanca, and La Chiricana or the San Antonio Silva area; 3. Gulf Islands Fonseca: Four (4) island Martín Pérez, Pirigallo or Meanguerita, Ilca. and Periquito Island, and areas around Meanguera Island	Y	Y	Y	N[17]	Y
	Change in the capacity development indicators for the sustainable management of the PWIIs according to the total score of the UNDP-GEF Capacity Development Scorecard	- MARN: 66.67% MAG: 66.67% Local government: - Jiquilisco UAM: 57.14%; San Dionisio UAM: 57.14% Concepción Batres UAM: 54.76% Jucuarán UAM: 57.14% The UAM Transit: 59.52% ASIBAHIA: 54.76% Multi-partner platforms: Action Group Territorial Bay of Jiquilisco: (GAT-CBJ): 57.14%	Y	Y	Y	Y	Y
	Number of staff from the MARN, municipalities, the MAG, and local organizations, including women, trained in the sustainable management of the PWIIs	MARN: 20; MAG: 6	Y	Y	Y	N[18]	Y

[14] The effective formalisation of PAs requires the approval of an institution not tied/external to the project (CNR); it should have been formulated differently

[15] Some species rebounds are likely too slow to be evidenced by project's end; shorter life cycle species could have been selected

[16] There was no baseline at the start of the project ; it came very late during implementation, adjusting to actual results

[17] Some areas to be declared PA are not wetlands ; moreover, it is repeated from an indicator at objective level

[18] This is an indicator for an activity ; what is actually relevant is whether people work differently because of the trainings (e.g. new workplans, knowledge integrated into services/Dpt, new mechanisms and procedures to implement activities …)

		Local government: UAMs Jiquilisco, Puerto El Triunfo, San Dionisio, Concepción, Jucuarán, El Tránsito, San Miguel, Chirilagua, El Carmen: 2 each; Local Environmental Police: 10 & Navy: 4; ASIBAHIA: 2					
	Change in the financial gap (USD) to cover the basic management costs of the three (3) PWIIs	- HPII Jiquilisco Bay HPII: $ 166,620; - HPII Laguna El Jocotal: $ 129,899; - HPII Laguna Olomega: $ 183,508 (25% reduction in each of the three cases)	Y	Y	Y	N[19]	Y
	Number of environmental compensation agreements established	5	Y	Y	Y	N[20]	Y
	Total annual revenue generation for three (3) PWIIs disaggregated by source	- Environmental economic compensation: $ 100,000 - Entrance fees for visitors: $ 30,000 - APP: $ 30,000	Y	Y	Y	N[21]	Y
Component 2 Addressing threats to biodiversity, including the presence of invasive species and solid waste and agrochemicals originating in the buffer areas of the PWIIs.	Number of inter-institutional cooperation agreements established and operating for the management of the PWIIs.	Three (3) municipal agreements for the management of invasive species and solid waste; Three (3) new agreements with MAG, MOPT and CEL	Y	Y	Y	Y	Y
	Number of farms implementing best practices for the management of cattle ranching wastes in three (3) PWIIs, including farms run by women.	20	Y	Y	Y	N[22]	Y
	Number of farms implementing best practices for the management of agricultural wastes in three (3) PWIIs, including farms run by women	60 Why?	Y	Y	Y	N[23]	Y
	Solid waste accumulated (kg/ha) in the Jiquilisco Bay PWII	Baseline - X (a reduction of 50% is estimated). Why?	Y	Y	N[24]	Y	Y
	Volume (tons/year) of water hyacinth (Eichornia crassipes) removed from the Olomega Lagoon and Jocotal Lagoon PWIIs	2,000 tons/year per wetland	Y	Y	N[25]	Y	Y
	Abundance (number of individuals) of the cormorant duck (Phalacrocorax brasilianus) in the Olomega Lagoon, the Jocotal Lagoon, and the Jiquilisco Bay PWIIs	HPIIs laguna El Jocotal, bahía de Jiquilisco, laguna Olomega: Baseline – X each	Y	Y	Y	N[26]	Y

[19] This would have been relevant if the project was supporting the setting-up of a financial mechanism; instead, it provided support only in infrastructures

[20] Explanation below

[21] Compensation agreements are subject to private enterprises that require an environmental assessment. There are not relevant to the project actions

[22] Flagged by MTR as not relevant because few women are active in the sector; still, the indicator is about any farm including those run by women; see below as well

[23] Working at the producer level cannot have much impact as buyers (sugar mills) determine the practices and inputs. Only some mills have access to specialized markets (through certification), but they were not encompassed in the project

[24] The effective removal of waste is subject to access ; (i) the spread and the volume of the quantity of waste and its dispersal are key constraints ; (ii) the dubious effectiveness of the method, since the timely collection is insufficient to stop the flow of solid waste in the San Miguel River basin.
hence, a great quantity was not removed because out of reach

[25] Water hyacinth proliferation is subject to climatic conditions that vary yearly; indeed, during the project timeframe, proliferation was minimal in wetlands and the target was achieved only by accounting removal from Cerrón Grande ; a % should have been more relevant or a qualitative target (e.g. safe passage of vessels)

[26] The cormoran is not an invasive species ; it can however proliferate in unbalanced ecosystems (e.g. with artificial fish releases for fishermen) ; this indicator was eventually removed from the project

	Coverage of mangroves in the Jiquilisco Bay PWII and associated freshwater lagoons	18.720ha	Y	Y	Y	Y	Y

Table 3: SMART analysis of the logical framework

- Components/outcomes and outputs:

Component 1, its outcomes and outputs are defined around enhancing the protection status of wetland through better management and enhanced capacity building, and increasing the surface of protected areas; its target was the protected area *per se*.

Component 2 focuses on wetlands threats but the outputs are more of a list of (very) relevant activities and are not very well structured around key results (that could have been reduced threats, improved ecosystem status improvement, enhanced collaboration between stakeholders).

The three component 1 outcomes are clear; however, the use of METT as an outcome limits its outreach to only highly specialised BD staff well-versed into protected areas – basically only the department for protected areas -; it de facto excludes people not exposed to the METT methodology (most MARN staff and nearly all other stakeholders) and limits ownership and project understanding.

Under component 2, there is clearly an issue with the scope of the outcome on pollution as a 50% reduction is by no means achievable as the project did not tackle waste generation at its source (in urban environments) as it would have required a much more substantial financial effort.

Some outputs were ill-defined: this is the case for those related to inter-institutional agreements signed between MARN and other stakeholders. Although indicators are SMART, the very nature and engagement conditions of partners are critical to reaching a successful agreement; this was not necessarily the case (see Results); hence most of these outputs were formally not achieved (e.g., remaining at draft stage because the other parties were unwilling to sign them).

Eventually, following the MTR, one single output (cormorant eradication) was removed from the log frame.

Therefore, it is reasonable to conclude that, following up on the MTR, there was a missed opportunity to overhaul the log frame, review too ambitious outputs, delete duplicating indicators and adjusting all this to the field reality. GEF's flexibility to enable a smooth project implementation experience – adaptive management - as per real-life conditions still seems somewhat limited.

Cross-cutting issues include:

- Gender responsiveness of project design: the project design took into consideration gender with the mention of women as potential beneficiaries; it came short of directly targeting women specifically, possibly because overall wetland biodiversity degradation is coming from and impacting both genders although there are gender disparities for conservation[27] (and degradation…)
- poverty reduction & sustainable livelihoods: there is no direct reference to it in the log frame; there is no doubt that improved biodiversity conservation, increased tourism, sustained use of wetland

[27] Evaluación Especialista en Géreno.pdf

resources can have a direct effect on poverty reduction; however, it is unlikely that the project can make any (in) direct correlation during the lifetime of the project
- preparation to cope with disasters or mitigate risk, climate change mitigation and adaptation: there is a specific output for the provision of training and setting up a basic system to assess climate change effects on wetlands
- capacity development activities: several if not most outputs are based on capacity building in this project, evidencing a lack of understanding of and expertise shortcomings in wetland ecosystems by stakeholders ranging from final beneficiaries to highly trained MARN staff

3.1.2 Assumptions and risks

An analysis of the risks and their mitigation measures is presented in Table 4 with minor comments as the risks identified in the PRODOC are most relevant. There are, however, some overlooked assumptions that significantly affected the project delivery (i) partly because they were not addressed in the project design and (ii) some assumptions were too optimistic and affected at least partially the results and above all their lack of sustainability. The PRODOC lacked somewhat a finer analysis that could have evidenced that a series of assumptions were weak by nature.

The problematic assumptions include the following:

- "Effective measures of protection and control": vague assumption
- "Demo efforts are optimal": vague assumption
- "Interest on the part of the Government of El Salvador is maintained": this is obviously the case for all activities falling under MARN core activities but not necessarily for activities that do not (e.g., agriculture); as this was overlooked at the project formulation stage, went off radar during implementation and was not sorted out under an exit strategy, interviews showed that many stakeholders (beneficiaries and municipalities alike) are disappointed with the lack of perspectives to follow-up on project results
- "Stable national and international economic conditions": vague assumption as it does not explain how this could affect project results (e.g., poor economic conditions could result in lesser use of agrochemicals and/or in more encroachment on PAs, hence, with opposite implications for the project)
- "Decision makers' will to declare new wetland PAs": this could be seen as a peculiar assumption, implying that decision-makers are not overseeing the project but actually takes all its sense with Government and policy changes in the El Salvador political context
- "Effective capture and channelling of new resources to finance HPII management, including an agreement by MARN that the new income generated by gate fees and PPPs can be fully retained by the individual PAs in which they are generated": as the project did not account for supporting the – at the time of formulation - revenue reinvestment/management/control scheme (FAE from the Treasury General Directorate), the result on PAs' income increase became de facto no longer project-dependant
- "There is a willingness between the parties for inter-institutional cooperation (signing of agreements and implementation) for the management of HPII" and "Changes in the municipal

administrations involved do not affect the established agreements": these assumptions were not entirely sound and proved (at least partly) fatal for a number of outputs; this is a lesson learned for new projects; it is necessary to bypassing these political and institutional bottlenecks through more innovative project design

- Effective monitoring, control and surveillance: community leaders, NGOs. private sector and municipalities provide support for the control of invasive species): this is a weak assumption especially for the private sector and municipalities as it requires additional funding.

Risk	Rating	Mitigation measures	TE comments
Sustainable use of biodiversity in wetlands is not a priority for new environmental authorities	L	The project staff will inform the new environmental officials about the project, its objective, progress and achievements, as well as the benefits of the project in terms of the sustainable use of HPII and contributions of the country to achieve the national and global environmental goals. For this, different platforms will be used, such as the project steering committee and the learning and knowledge exchange processes that will be part of the project's monitoring and evaluation plan, field visits to the prioritized HPII, among others.	While this was not an issue within MARN, it proved much more problematic for several UAM for which wetland protection was not on top of their agenda; especially when their involvement in the project implied additional internal resources mobilisation
A weak organization and cohesion between public actors and private control for the management of invasive species	M	With the support of MARN, the project will define the consultation mechanisms between sectors and actors responsible for the management of invasive species, as well as between those who perceive an impact (for example, fishermen), to together define the strategies to control and reducer invasive species that affect wetlands. This participatory process will facilitate joint decision-making to reduce the presence of invasive species in priority wetlands and PAs. Initiatives will be implemented to promote greater local participation in the use and recycling of invasive species, such as handicrafts (for example, baskets and furniture), paper made from water hyacinth fibre and the plant used as food for the livestock. Finally, the project will build on successful past initiatives for the control, management and use of this invasive alien species in the project's HPI I as a way to build trust among stakeholders by involving them in activities with which they already are familiar.	Interviews showed that this was to be expected and somehow it should have been addressed better in the PRODOC through additional funding to reduce this risk (which the project did eventually within its actual envelope)
Limited interest by the agricultural sector to adopt BMP for the prevention, reduction and control of pollution (and with it the reduction of the use of agrochemicals)	M	To encourage the adoption of BMPs by the agricultural sector to reduce the use of agrochemicals, the project will launch an incentive programme consisting of a green seal for small and medium-scale agricultural producers and ranchers and certification of friendly sugarcane cultivation. The green seal certification of sustainable production processes will differentiate products and influence consumer purchasing decisions with potential economic benefits for producers who adopt the 13 MPs. In the case of sugar cane, the project will establish synergies with CASSA, which offers loans to producers to invest in farm-level improvements. The round tables will be established with the participation of producers, producer associations and representatives of relevant institutions, including MARN, MAG, municipal authorities and community representatives to discuss issues related to pollution control and agree on the technical assistance necessary for the execution of the BMP. Finally, environmental awareness/education activities will further contribute to further enlighten farmers about the environmental and economic benefits of implementing BMPs to reduce contamination from project HPII.	As mentioned during the MTR, any adoption of BMP is demand-driven and unlikely to be widely successful if there is no economic incentive and support to the meat and sugar cane industry, support that was not included in the project (as out of project's scope); this is further evidence that the project was very ambitious in its objectives to the sectors involved

[28] L low, M medium, H high risks

The limited participation of local communities and municipalities in the prevention, reduction and control of solid waste	M	The basis for mitigating this risk will be the implementation of a local environmental governance and an awareness programme for the sustainable management of biodiversity in HPII, including the reduction of threats (prevention, reduction and control of solid waste). More specifically, the project will strengthen the capacity and competencies of local communities and municipalities to participate and have more control over decision-making processes in relation to the conservation and use of natural resources. In addition, the Project will establish and implement three (3) agreements of interinstitutional cooperation with the municipalities of the Jiquilisco Bay area to face the threats of HPII, including solid waste management. Traditionally, in the Jiquilisco Bay area, local communities have had limited participation in solid waste management. To reverse this, the project will focus on areas within Jiquilisco Bay that cannot access by land and have limited solid waste collection systems. Solid waste collection centres (organic and inorganic) will be established, composting activities will be carried out as part of organic waste management, with the equal participation of men and women. Finally, an environmental education/awareness programme will help reduce the inappropriate treatment of solid waste that ends up in the Bay Area	This should not be a risk as such as it is already addressed under the project
Effects of climate change	M	Through the establishment of three new PAs and improved and effective management of three (3) HPII and their buffer zones, the project will increase the protected habitat, providing additional areas of refuge for numerous species facing potential events associated with climate change. The protection of mangroves and the development of sustainable use plans will contribute to mitigating the impacts of hydrometeorological event extremes associated with climate change, reducing its intensity, and preventing erosion with benefits for wetlands, PAs, the associated biodiversity and neighbouring human settlements. The project will establish a climate change monitoring team for the HPII, they will develop early warning actions to mitigate the impacts of floods and landslides on wetlands and local populations.	This has been a very real risk with stronger droughts and inundations affecting the eastern part of the country

Table 4: Risk analysis review

Finally…, a global pandemic – COVID19 - was unheard of and never posed a risk for project implementation.

At the time that the project was designed, the use of the Social and Environmental Screening Template (SESP) was relatively new for GEF projects and it is likely that the attention given to screening was less detailed than it ought to have been and what it might be expected to be today. All risks (gender, human rights, environment, social and indigenous people rights) were rated as low at the time. There are 7 ethnic groups in El Salvador. Whereas the United Nations Universal Declaration on Human Rights and the United Nations Declaration on the Rights of Indigenous Peoples[29] are applicable and El Salvador is a signatory to both, the PRODOC recognised that there are indigenous people in the project area but was not very specific (the 'Lenca'[30] are located mainly around the Fonseca Gulf). It stated that there was a Low Risk resulting from the project and did not recognise the inherent risks to livelihoods (of both [non-]indigenous people living in buffer zones) with the reorganisation of land use in wetlands and mangroves (in particular the drafting of regulations and norms for the sustainable use of these). One risk that was omitted is the one linked with insecurity: interviews have shown there is an overall insecure situation in and around wetlands – possibly linked with narcotraffic – that is impeding park rangers in the project to patrol in certain areas but also conditions project's support to some areas instead of others.

[29] United Nations (1948) The Universal Declaration of Human Rights. New York: United Nations. United Nations (2007) United Nations Declaration on the Rights of Indigenous Peoples. New York: United Nations.

[30] https://storymaps.arcgis.com/stories/f6ca335bacd6464d86861811340b5998

3.1.3 Lessons learned from other projects incorporated into project design

Very little information is available in the PRODOC on lessons learned from other projects feeding into the intervention's design.

Still, project design took into consideration existing interventions such as the JICA funded project 'Integrated Wetland Management in Olomega and El Jocotal Lagoons' or ISCOS's project 'Humedales Vivos' in Cerrón Grande mainly from a geographical perspective although some collaborations took place at some point during implementation (see partnerships arrangements pg.29)

The project implementation approach - MARN sole executing agency – despite the project's multisectoral nature, was chosen based on the previous bad experience of inter-agency project implementation.

3.1.4 Planned stakeholders' participation

The core stakeholders of the project in addition to the final beneficiaries (farmers, communities and livestock rangers) were MARN, MAG, MITUR, MOPT, CEL, local Civil Society Organisations (CSO), Academic organizations and research centres, FIAES.

Several donors were also linked to the project from exchanges of experience/information to coordinated actions: GIZ, ISCOS, JICA.

All the relevant internal MARN stakeholders were involved in project implementation (including rangers).

Overall, it is surprising to see so few external stakeholders under either the advisory panel or the steering committee: while this may reflect a serious project design flaw, it is just as surprising that this was not flagged out at the inception workshop or even by UNDP or GEF itself.

Most development projects include, at least as observers (but most often as well as decision-makers), representatives of the beneficiaries, peripherical ministries (such as it was with MAG in the project) and sometimes other donors.

As mentioned at the MTR stage, the project had a 'low political profile' and despite a lot of attention at the highest level (e.g., Minister), it seems that the project suffered from a silo implementation that may have resulted in a governance issue (e.g., MAG never participated in any Steering Committee, involvement of MITUR was minimal if any). This may also have been reflected in the field by a lack of proactivity / lukewarm interest from several key stakeholders (e.g., municipalities, sugar factories).

The planned stakeholders and an appreciation of their actual contribution are presented in Table 5.

Key institutions/stakeholders (as per PRODOC)	Project participation ✓ as planned 0 not planned or no evidence					
	Project delivery/participation		Advisory Board		Executive Board	
	Planned	actual	planned	actual	planned	actual
Small-scale farmers	✓	✓	0	0	0	0
Sugar cane farmers	✓	✓	0	0	0	0
Sugar cane estates	✓	0	0	0	0	0
Fishermen (fish, molluscs…)	✓	✓	0	0	0	0
MAG	✓	0	✓	0	✓	0
MARN	✓	✓	0	0	✓	✓
UNDP	0	0	0	0	✓	✓
FIAES	✓	✓	✓	0	0	0
CEL	✓	✓	0	0	0	0
MITUR	✓	0	✓	0	0	0
Associations and cooperatives (OSC)	✓	✓	0	0	0	0
Municipalities (UAM)	✓	✓ (partly)	0	0	0	0
FGR / CNC	✓	✓ (partly)	0	0	0	0
CNR	✓	✓	0	0	0	0

Table 5: Planned/actual stakeholders' participation

3.1.5 Replication approach

The project intended to beef up MARN capacity to deal with an expanded SNAP with more numerous, larger-sized and better managed protected wetlands.

Under the PRODOC, it was assumed that the project would generate both at national and municipal levels knowledge and lessons learned on wetland planning and management, invasive species regulation, pollution reduction… (re. agrochemicals, livestock waste, solid household, urban waste), that in turn could be utilised for other HPPII, other municipalities as well as support the development of enhanced norms and regulations to ensure better biodiversity conservation of wetlands.

In this sense, the project should be viewed more as a pilot intervention. However, for replication to occur, it would be necessary to institutionalise acquired knowledge, lessons learned, best practices both within MARN and municipalities as well as to ensure a wide divulgation of these. That should constitute the framework for an exit strategy. A budget (5,000US$) was allocated for that purpose but only small enough for publication and documentation reproduction, not enough for organising divulgation events.

Interviews showed that it may well be the case already for some other stakeholders (e.g., FUNDAZUCAR regularly using an updated BPA manual, CEL purchasing and using a hyacinth removal barge).

3.1.6 UNDP comparative advantage

UNDP has been committed to building up the capacity of the country through mainstreaming environmental (and climate change) related considerations in the development processes at national and community levels.

The main advantage of UNDP is its capacity to mobilise financial resources on behalf of El Salvador's Government to prepare with it, project proposals that are endorsed and implemented.

UNDP's comparative advantage is several-fold: (i) UNDP is a neutral platform for development and has been able to build a trustful relationship with Government; (ii) UNDP is seen by Government as a multipurpose agency that favours a sector-wide approach to development while other (non-)UN agencies/donors are more sector-based (UNDP is active in many sectors like agriculture, forestry, governance, water & sanitation, energy and climate change among others); (iii) UNDP's strategy favours a pro-poor/participatory approach focussing on engaging with and empowering the most vulnerable – a focus on the population living under the poverty level - while many other donors will support large-scale interventions that may benefit large swaths of the population but are based more on economic cost/benefit ratios; (iv) UNDP will support preferably soft development processes benefitting primarily more vulnerable people instead of large-scale nation-wide infrastructure programs; (v) UNDP has the ability to capture large scale funding as compared with international NGOs, hence (potentially) resulting in more impactful interventions.

Under the El Salvador context, UNDP has acquired an extensive experience with GEF through implementing 30+ GEF-funded national & regional interventions with most of them (>50%) under the Biodiversity focal area. These included the interventions "Mainstreaming Biodiversity Management into Fisheries and Tourism Activities carried out in Coastal/Marine Ecosystems" as well as "Formulation of the National Biodiversity Strategy, action plan and Report to the CBD" that helped support the formulation of this particular project.

UNDP has had a coordinating role in the MARN-headed National Council for Environmental Sustainability and Vulnerability (CONASAV), which presented the "Plan El Salvador Sustentable" in 2018. And it is currently contributing to the updating of the NDCs with the leadership of MARN and managing the participation of other public institutions and sectors of society.

Therefore, UNDP can bring valuable expertise – including directly through its country office HR – in environment including biodiversity and in identifying relevant RH to support interventions' implementation as a means to optimise implementation efficiency and effectiveness.

Finally, UNDP's support is valuable for revising projects' planning exercises during Board meetings and, due to its proximity with executing agencies, for additional advice to GEF to resolve outstanding issues (e.g., amend log frame and/or indicators/targets and speed up recruitment processes among others).

3.1.7 Linkages between the project and interventions within the sector

As per PRODOC, the project initially had planned to seek, if not a partnership, coordination with a project funded by JICA ('Project for Integrated Wetland Management in Olomega and El Jocotal Lagoons). The logic was to avoid duplication while both projects are focussing on HDII in the South-Eastern part of the country.

In particular, the GEF project avoided repeating similar activities in the same wetlands as it covered as well Olomega and El Jocotal, hence similar JICA activities (e.g., PAs' management plans) were not carried out and more efforts were planned for the Jaltepeque complex.

Other interventions and/or lessons learned from these were taken into consideration as well:

- 'Life Wetland project' of Cerrón Grande reservoir funded by ISCOS with support to communities and RAMSAR committees
- Green Development Fund/REDD+ Landscape funded by EUD/GIZ with activities around Cerrón Grande reservoir and Jaltepeque complex and in particular support to one RAMSAR committee (PDLS formulation)

3.1.8 Management arrangements

The 4-year project (May 2016 – April 2020) has been implemented under UNDP's NIM modality, following up specific procedures.

The executing agency (or Implementing Partner) was the Ministry of Environment and Natural Resources (MARN), with the General Directorate for Ecosystems and wildlife carrying responsibility for day-to-day implementation.

The planned management arrangements as per PRODOC are illustrated in the organisational chart shown in Figure 1.

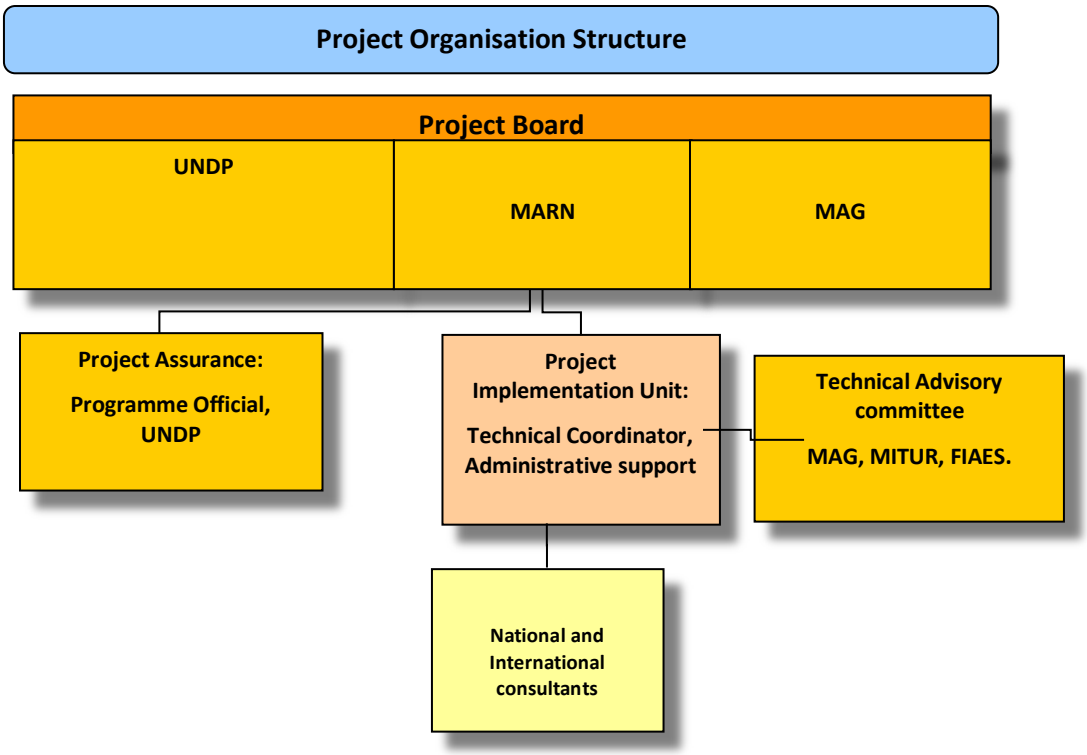


Figure 1: Planned project organisational structure 'PCU'

The management and governance arrangements for the project included the following structures:

(i) Project Steering Committee Chaired by a senior MARN official (Ministry, deputy or Dpt. Director) with representatives from UNDP and MAG, in charge of reviewing and approving narrative and financial reports as well as annual planning or any project revision before submission to GEF

(ii) An Advisory Committee headed by the project coordinator with representatives of MAG, MITUR and FIAES without any decision-making authority

(iii) Project Management Unit housed in MARN and comprising a National Project Coordinator and a Finance & Administrative Officer and a MARN Director with oversight

Additionally, the project was to rely on a number of consultancies to move on with activities[31].

The adopted approach was to have a skeleton management unit and rely on external expertise (consultants) to deliver most products and organise activities and on MARN for transport. This was at the time seen as an efficient strategy avoiding using (overwhelmed) MARN staff and taking advantage of highly skilled experts.

[31] These consultants were to be contracted on an ad-hoc basis as per needs' identification by the project's core team and should not be considered as part of the project team

As the project was using the NIM approach , using consultants would have proved to be too time-consuming (consultants recruiting, monitoring, products assessment…) and another approach would eventually be adopted (see Adaptive management pg. 28). This resulted in a new arrangement as presented under Figure 2 with the recruitment of five specialists (Environmental Education, Sustainable Local Development, Sustainable Agriculture, M&E and Legal) in 2018.

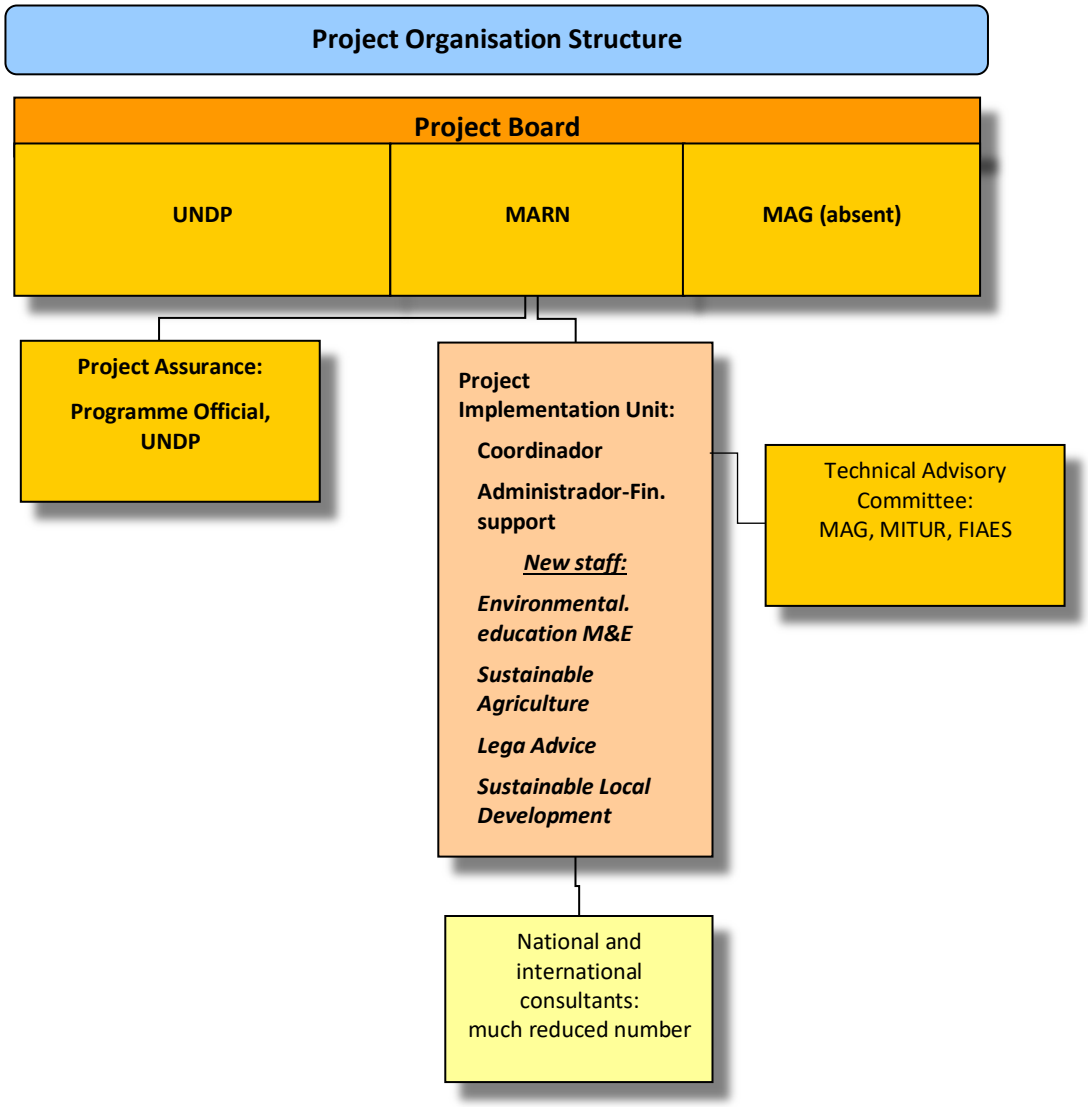


Figure 2: Actual project organisational structure 'PMU'

3.2 Project implementation

3.2.1 Adaptive management

The project under the NIM modality was due to be implemented from May 2016 to April 2020: while the initial PMU recruitment (2 staff) was swift (around 6 months), numerous implementation issues came out with a corresponding solution in most (but not all) cases. Feedbacks from regular monitoring and evaluation of the project and the level of adaptative management show that the Steering Committee was fully functional in this project and the M&E system was effective for highlighting implementing issues.

These include at least the following at implementation level:

(i) Irregular procurement procedures by the Finance & Administrative Officer (with resulting implementation delays); it resulted in his replacement and close oversight (if not micro-management) by the Minister of Environment until Government change; this somehow side-lined the role of the Project Director during that period

(ii) Project unit with no own transport and relying on MARN: this proved to be a constant constraint sometimes with delayed and/or rescheduling activities

(iii) The initial recruitment delay (6 months) combined with the initial very slow pace of implementation resulted in the 16 months extension request, agreed to 12 months to June 2021

(iv) COVID19 by March 2020 resulted in project shutdown for nearly 6 months; by August 2020, it was relaunched with some remote monitoring and support activities to beneficiaries whenever possible; in operational terms, most activities were rescheduled for late 2020 and 2021. An additional 3-months extension until September 2021 was granted

(v) Relying exclusively on consultants for project implementation, combined with a small project team that had to procure, monitor and assess consultant's products, activity delivery became much delayed by 2018; this resulted in turning consultants' budget into five positions under the PCU; the effects were clear with delivery acceleration by 2019

(vi) The M&E system evidenced several limits as to what could be achieved in terms of targets (e.g., hyacinth tonnage removal) and PCU pressed for target/output changes - corroborated by the MTR. The MTR proposed a wide range of improvements from deleting outputs that were not likely sustainable to reducing targets. Several recommendations were implemented although it would have been a good opportunity to review the log frame and adjust it better to the reality

This resulted in very effective project delivery with over 90% delivery rate by Terminal Evaluation (May-June 2021).

At output level:

(i) The output on cormorant eradication was deemed not relevant by the project team and

also mentioned in the MTR as the species is not considered invasive[32] (but only breeding out of control in specific environmental conditions): this activity was cancelled in the management response to the MTR

(ii) Abandoning the efforts to declare PA in the golf of Fonseca because of legal issues as large swaths of land were military grounds; the project reidentified nearby mangroves resulting in added acreage exceeding the project's objective

(iii) The existing hyacinth removal barge on lagoon Olomega (operated by MARN with previous support of AECID) proved not to be adapted to the water low level of the lagoon; it was transferred to Cerrón Grande (not in the project area) that suffers on a regular basis from hyacinth proliferation; the requests to lower accordingly the target on hyacinth removal was not accepted by GEF and the project expanded to Cerrón Grande for that activity, a move that further enlarged the project geographical scope

The overall focus of the project (project goal, objective, and outcomes) remained unchanged over the whole project period but the adjustments resulted in several output location changes, mainly because of insufficient analysis at the formulation stage.

3.2.2 Communication

Communication activities took various forms with (i) project folders, (ii) awareness-raising events, (iii) events to launch activities including with media involvement (e.g., media campaigns for wetland conservation, programme 'SOS Ríos Limpios' among others).

Whatever communication was done to target institutions, it did not result however in added interest by institutional stakeholders (e.g., municipalities, other ministries).

The project took advantage of social media – Facebook, YouTube, Twitter -: ex. https://www.facebook.com/MedioAmbienteSLV/videos/421535528520741)

It produced testimonies (at the insistence of the previous Environment Minister) ex. https://www.marn.gob.sv/ganaderos-implementan-buenas-practicas-ambientales-para-reducir-la-contaminacion-de-la-laguna-de-olomega).

Overall, there was widespread divulgation of the project's objectives with numerous articles in the press.

The documentary review showed that relevant information on the project had been put on MARN's website but by TE time, the website links were no longer operational.

3.2.3 Actual stakeholders' participation and partnership arrangements

The evaluation showed a great divide between what the stakeholders could bring to the project at PRODOC stage and their actual participation.

[32] A condition for GEF support is to control invasive species only

At the central government level, it has been shown that ministries work in a silo approach, minimising interactions; at municipal level where political lines are more clear-cut in daily municipality management, interest is as much dependent on the character of the mayor as of the political group's priorities on environment. Beneficiaries are *a priori* more open to project activities with gender disparities, although this is much dependent on awareness activities beforehand:

- Ministry of Agriculture (MAG), in particular, the Fisheries Administration (CENDEPESCA) PCU had no (official) contact at all with MAG during the entire project; this is very troubling as key activities involve farmers. MAG never showed up at a steering committee despite several of its officers trained under the capacity building output of the project
- Ministry of Transport and Public Works (MOPT): contacts were successfully made to obtain the ministry's support in rehabilitating small access tracks to river mouths that are clogged with solid waste as part of waste removal campaigns to ensure dumping truck movement. MOPT although feeder road maintenance is a municipality responsibility, MOPT is active in supporting them on an ad-hoc basis as part of an accessory budget line. Still, with limited budgets, MOPT prioritises civil works with its own criteria. The contacts made did not result in MOPT providing support. Hence, this did not facilitate waste removal campaigns, possibly making them more labour intensive and more costly/less impactful
- The Executive Hydroelectric Commission of the Lempa River (CEL): the negotiations to secure an interinstitutional agreement failed but an informal agreement was reached with regards to water hyacinth removal in Cerrón Grande reservoir: CEL purchased a hyacinth removal barge covering the area near the dam and MARN covered the opposite area of the reservoir with most fishing communities; hence a division of labour was successful
- The Ministry of Tourism (MITUR): there is no information as to how the ministry might have contributed to the project; it was supposed to provide technical advice but the group was never operational
- Municipalities - in particular, the UAM -: while most did sign collaboration agreements[33] with MARN, resulting in co-financing solid waste campaigns (e.g., municipality providing dump truck and paying the waste deposit in landfills), they were mostly project-reactive although a couple of municipalities did not participate at all in the project. If the project did create awareness at municipal level, local budgets remained prioritised to urban activities
- Producers' organizations and Community-Based Organisations (CBO) and Civil Society Organisations (CSO): these were probably the most proactive stakeholders of the project; project activities generated a lot of interest, participation and some organisations went further with analysis and designed proposals to submit to MARN and municipalities (e.g., RAMSAR Committee, local NGO)
- Academic organizations and research centres: agreements were made resulting in project support
- The Environmental Investment Fund for El Salvador (FIAES): the agreement with AMRN resulted in several local compensation project proposals being funded (>600,000US$ in total); PCU had no

[33] These are very loosely-tied Memorandum of Understanding

access to actual implementation; hence, it was not possible to assess their impact; FIAES contributed as well in hyacinth removal campaigns

- Bilateral cooperation agencies and international NGOs
    - JICA project on wetlands: MARN made sure that there was no project overlap although there was no formal agreement between the 2 projects
    - As for GIZ and ISCOS, contacts were regularly made through visits to exchange ideas and share experiences as both projects funded by GIZ and ISCOS were not in the same area as the project

Over time, other partnerships grew, only to mention:

- Fundazucar was contracted to provide support for the adoption of BPA in the sugar cane sector.
- The '*Asociación Intercomunal de Comunidades Unidas para el Desarrollo Económico y Social del Bajo Lempa*' (ACUDESBAL) provided support for the rehabilitation of 500 ha in Nancuchiname PNA and waste removal was carried out in the Jiquilisco Bay with the help of the Cincahuite association

3.2.4 Project finance and co-finance

As per CDRs's estimates, the total cost of the project (including Q1 2019) from 2016 to 2021 is explained under Table 9 and Table 8 with an explanation of budget variations. The co-financing evidenced an approximate 400% co-financing ratio as per Table 6 and Table 7.

Co-financing [34] (type/source)	UNDP financing (US$m)		Government (US$m)		Partner Agency[35] (US$m)		Total (US$m)	
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
Grants	0.010	0.010			2.850	3.637	2.851	3.637
Loans/Concessions								
In-kind			2.954	3.067			2.954	2.107
Other					3.100	0.439	3.100	1.287
Totals	0.010	0.010	2.954	3.067	5.950	4.076	8.915	7.153

Table 6: Co-financing level (planned / actual)

[34] Source: Project team
[35] ISCOS, FIAES, GIZ

Sources of Co-Financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount (US$)
Civil Society Organization	ISCOS	In-kind	Recurrent expenditure	0.376
Private Sector	FIAES	Equity investment	Investment mobilised	3.637
Donor Agency	GIZ	Other	Recurrent expenditure	0.063
Total Co-financing				4.076

Table 7: Confirmed Sources of Co-Financing at TE Stage

The co-financing gives a rough idea about the level of funding in the project area (factor of 4-5 GEF's amount as planned); absolute number cannot be compared as each stakeholder provided a different estimate of its contribution (e.g., FIAES per relevant project; ISCOS, per activity).

Table 8 shows that AWP in the early years has been very optimistic, possibly to try to cover lost grounds for 2016 but resulted in a learning curve only to be broken in 2020 by the COVID19 pandemic.

Budget/expenditure / Year	PRODOC Work plan (US$m)	AWP (US$m)	Actual expenditure (US$m)	% Spent (actual / AWP)
2016	0.736	NO INFO	0.004	<1%
2017	0.620	1.356	0.286	21%
2018	0.430	0.922	0.463	50%
2019	0.405	0.755	0.556	74%
2020		0.777	0.438	56%
2021[36]		444[37]	0.188	42%
Total	2.191	--------	1.935	

Table 8: Annual Work Plan budget and actual expenditures (GEF)

In US$m	2016	2017	2018	2019	2020	2021	Total
Total planned (PRODOC)	0.736	0.620	0.430	0.405	-	-	2.192
Total actual	0.04	0.286	0.463	0.556	0.438	0.188	1.935
Result 1 (actual)		0.145	0.179	0.242	0.088		0.653
Result 2 (actual)		0.090	0.215	0.296	0.350	0.188	1.140
Result 3[38] (actual)	0.04	0.051	0.069	0.018			0.142

Table 9: Planned vs actual project expenditures per result

The analysis of the cumulative delivery rate (see Figure 3) shows an S-shaped curve ('effective') against nearly a straight line ('planned') for the cumulative spending as anticipated at the formulation stage; this is evidence for the need to take into account an extended inception phase to resolve operationalization

[36] As of May 2021
[37] Estimate
[38] Project management costs as per CDR

difficulties like recruitment and initial involvement of all stakeholders and to lengthen substantially the project cycle to ensure a smoother implementation (that was eventually achieved through requests of extension in any case).

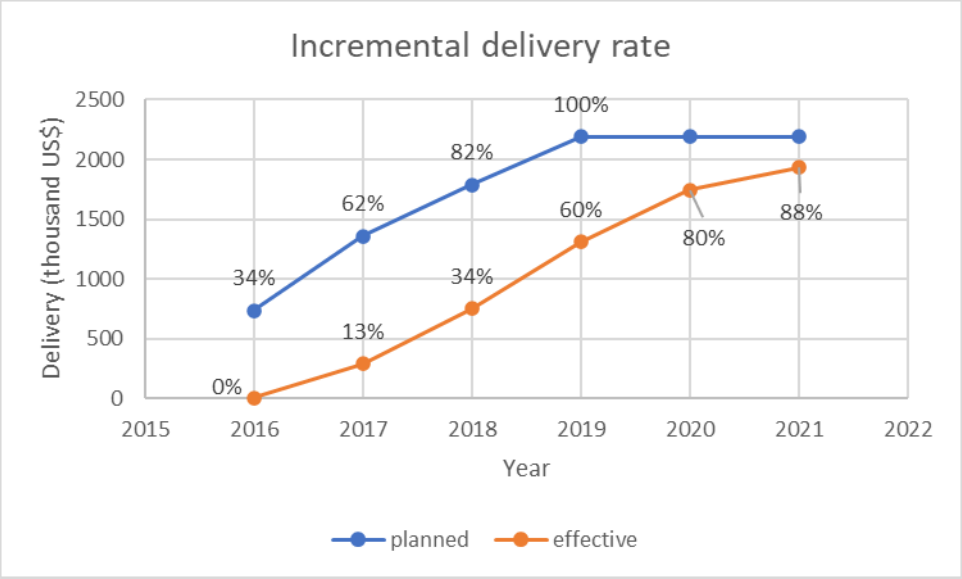


Figure 3: Cumulative planned and actual delivery rate

The project was audited four times without any major issue.

3.2.5 Monitoring and evaluation: design at entry and implementation

The Project's Monitoring and Evaluation system included the inception workshop report, standard reports and evaluations, and oversight by the Project Steering Committee.

Project M&E was carried out using the following tools:

- Inception workshop and initial AWP
- Quarterly progress reports
- Periodic Monitoring through site visits: UNDP / MARN conducting monitoring visits[39]
- One audit per year (2017, 2018, 2019, 2020) as per UNDP Financial Regulations and Rules
- Annual PIRs and GEF TT
- Independent mid-term and final project evaluations
- Learning and knowledge sharing

One common issue for GEF projects is that the definition of several indicators requires their assessment. Ideally, baselines studies should be carried out at the formulation stage but it is often planned at project start-up and in practice much later during implementation

This was the case for the following:

[39] Most beneficiaries emphasized the need for closer monitoring to correct activities and to ensure higher adoption though

Component 1:

- Representativeness (%) of wetland ecosystems in the National System of Natural Protected Areas by type of wetland

Component 2:

- Solid waste accumulated (kg/ha) in the HPII of Jiquilisco bay
- Abundance (number of individuals) of the cormorant duck (Phalacrocorax brasilianus) in the Olomega Lagoon, the Jocotal Lagoon, and the Jiquilisco Bay PWIIs

This makes the project's steering difficult for the related outputs as most often, few or no activities are carried out during the 1st year. This was the case as well for this project with baselines established later and eventually of limited use. Their late estimate did not however significantly affect the projects 'results (ex1: cormorant activity was cancelled; ex2: solid waste removal is more about demonstration as no long-term solution was incorporated in the project design [e.g., collaboration with large urban centres]) because of limited funding capacity of municipalities and despite the drafting of an action plan for solid waste removal.

Monitoring & Evaluation (M&E)	Rating
M&E design at entry	MS
M&E at implementation	S
Overall quality of M&E	S

Table 10: Monitoring & Evaluation Ratings Scale

3.2.6 UNDP implementation/oversight and Implementing Partner implementation/execution coordination and operational issues

Implementing Partner execution:

The project was supervised by the General Directorate for Ecosystems and Wildlife of MARN through a Project Coordination Unit established on a contractual basis.

The historical account of this PCU during implementation may vary a bit according to the actor's viewpoints but overall, MARN played a markedly different supporting role for its PCU before and after the 2019 Government change. Until 2019, due to the replacement of the initial project Administrative and Financial Officer following irregular procurement activities, the Minister for Environment invested herself a lot in the project; this facilitated swift support of the PCU when needed but resulted in slowing down further project implementation; it may also have side-lined some National Project Directors (three directors in three years). With the new Government and a newly appointed (4th) National Director earlier in 2019, the project was definitively on track with a full PMU from 2018 onwards.

Still, interviews have shown that this PMU, by 2019, was very much autonomous in day-to-day activities with limited oversight and support of/from MARN staff. This had both positive and negative effects.

On the one hand, implementation accelerated with increasing delivery as PMU specialists were not technically tied with counterparts.

On the other hand,

- It resulted in 'mechanical' output delivery as per PRODOC with limited technical dialogue on how best to respond to MARN and beneficiaries' considerations (within the project output envelope), and COVID19 did not help either in 2020 and 2021
- It did not facilitate project results institutionalisation
- It limited follow-up of existing results on the field (e.g., dialogue with producers, municipalities, associations and cooperatives) as no assigned counterpart can take over when the PMU is disbanded

MARN did not manage to include MAG in the Steering Committee despite activities that are very relevant for MAG as they are implemented on a regular basis by the Ministry (e.g., support to farmers and livestock rangers, divulgation of BPA, access to fishermen through CENDEPESCA).

Finally, the PCU/PMU together with relevant institutional counterparts prepared various draft agreements (e.g., interinstitutional). Many (but not all) remained at draft level. Neither the PCU nor the Ministry itself was able to throw its weight to finalise these agreements that, by the project's end will likely remain only as good intentions. The situation is similar with a number of documents (draft protocol to reduce threats, draft regulations and norms to operationalise the environment law).

Despite all these issues, PCU restructured itself as a PMU to accelerate implementation and despite COVID19 eventually managed to engage all funds; worth mentioning is that PCU did not experience staff rotation.

UNDP implementation/oversight

The added value of the implementing agency (UNDP) is oversight and its ability to provide regular support to the project team, facilitating PRODOC changes as required or solve problematic issues.

Interviews have shown this support to be insufficient. Still, UNDP was always present at Steering Committees; support consisted mainly of advice on operationalizing activities. There was no evidence that it supported MARN / the PCU on the above-mentioned issues such as inter-institutional dialogue and collaboration. One reason may be the succession of over four appointed project officers to monitor this project. If there was no time gap in follow-up, (most of) these officers did not have actual time to build up a wide network of contacts within a variety of institutions so as to build inter-institutional trust and facilitate this dialogue.

UNDP Implementation/Oversight & Implementing Partner Execution	Rating
Quality of UNDP Implementation/Oversight	MU
Quality of Implementing Partner Execution	MU
Overall quality of Implementation/Oversight and Execution	S

Table 11: Implementation/Oversight and Execution Ratings Scale

3.2.7 Risk Management, including Social and Environmental Standards

If there were any risks in the project, these were identified as low both in the PRODOC and the SESP assessment.

The situation would evolve during implementation for the following:

- Organisational risks: the initial implementation mechanism (PCU) with 2 staff proved ill-adapted to NIM as it relied extensively on consultancies for results delivery. Combined with close oversight by the minister, the project steadily drifted off-course with unrecoverable delays that ultimately would result in requests for extension. This was corrected by 2018 with the setting-up of a project management unit with the recruitment of five additional staff. Thereafter, the gap between planned and actual expenses reduced each year (see Table 15).
- Operational risks: not assessed at the time of design become a major constraint of project implementation with the COVID19 pandemic. Many activities were cancelled from March to August 2020 and the pandemic remained disrupted afterwards until today. The PCU adjusted with remote interactions whenever possible but obviously, a lot of activities required on-site presence. A consequence of this may be the insufficient follow-up of beneficiaries (as confirmed through the interviews); GEF granted a 6-months co-cost 'COVID extension' to mitigate the issue. Another unexpected operational issue has been the insufficient support provided by MARN to ensure the endorsement of a series of project results (documents and agreements that remained at draft stage until the end of the project).

There was no update of the SESP during implementation.

3.3 Project results

3.3.1 Progress towards objective and expected outcomes

A brief assessment with comments of the project overall results (as per PIR), is presented in the following paragraphs.

Project Objectives: enhance the conservation and sustainable use of biodiversity and maintain ecosystem services in protected wetlands of international importance.
Progress at project's end: the objective is somewhat achieved if one takes into consideration component 1: the SNAP has been extended beyond expectations with the declaration of critical wetlands as protected areas, staff has been trained and, for on-site staff, equipped as well, a number of capacity building products has been produced that will support MARN in the coming years.

It is much less clear for the range of activities related to component 2, in particular, activities that do not fall under the core business of MARN (solid waste, pollution, support to farmers and out-growers, livestock managers). The various sources of information including interviews show this to be doubtful as there is little evidence that MARN is primed and ready to follow-up project's results under these thematic.

Overall, the review of the outputs shows that the project was way too ambitious (if not out of touch) in relation to the budget and issues at stake (especially for component 2) and that a more inclusive development strategy would have been necessary to ensure stakeholders adhesion and any substantial and longer-term positive effect on wetland status (see as well 3.3.9 on impact).

Finally, limited or no assessment at all could be made for a number of outputs as the evaluation mission was entirely home-driven with neither actual site visits nor face-to-face interviews (due to COVID19 restrictions).

As for indicators and targets at objective level, the results vary:

Full name of the indicator	End of project target	Level of progress by end of the project
Coverage (ha) of the National System of Protected Areas resulting from the creation of three (3) new multiple-use protected areas (MUPAs)	133,495.07 ha 37,709.46 new ha	39.016 ha were added to the SNAP as planned including critical mangroves (around 2.000ha)
Presence of key indicator species in four (4) PAs in the Jiquilisco Bay and Jocotal Lagoon HPII Complex in the lower watershed of the San Miguel Río Grande	- Normandía and Chaguantique PA: Amazona auropalliata, Ateles geoffroyi - El Tercio PA: Crocodylus acutus - Jiquilisco Bay Area (includes San Sebastián Island): Andara grandis, Amazona auropalliata, Eretmochelys imbricata and Crocodylus acutus - Jocotal Lagoon Area: Amazona auropalliata, Crocodylus acutus	A monitoring system was put in place but information was not yet produced by the final evaluation; it may however take years before any meaningful information is produced re. species populations trends, especially when PAs does not overlap with wetland systems
Change in the management effectiveness of three (3) PWIIs measured through the METT scorecard	- Jiquilisco Bay PWII: 59% - Olomega Lake PWII: 43% - Jocotal Lagoon PWII: 41%	- Jiquilisco Bay PWII: 60% - Olomega Lake PWII: 60% - Jocotal Lagoon PWII: 70% This is consistent with project results as per interviews with staff better equipped and prepared to manage PWII

Change in the financial sustainability of three (3) PWIIs according to that established through the total average score in the UNDP/GEF Financial Sustainability Scorecard	- Legal, regulatory, and institutional framework: 46% - Business planning and tools for managing cost-effectiveness: 42% - Tools for income generation and allocation: 34% - Total: 41%	- Legal, regulatory, and institutional framework: 53% - Business planning and tools for managing cost-effectiveness: 47% - Tools for income generation and allocation: 41% - Total: 48% As per METT TT, the financial sustainability achieved the target but this is surprising in view of the lack of progress for added income or even any operational income generation mechanism yet

Table 12: Achievement of targets against indicators at objective level

3.3.1.1 Component 1: Expanded protected wetland coverage and strengthened institutional and individual capacities for the effective management of protected wetlands of international importance (PWII)

Progress at project's end: mostly if not entirely achieved. There is overall increased awareness about wetlands importance as ecosystem services providers, MARN's capacity has been strengthened and the area of protected wetlands has significantly increased thanks to the project.

Output 1.1*: Three (3) newly published/disclosed multiple-use PAs: a) Jiquilisco Bahia Wetland (40 islands and surrounding waters); b) Islands of the Gulf of Fonseca (Martin Perez Island, Pirigallo or Meanguerita Island, Ilca Island, Periquito Island and part of the surrounding area of Meanguera Island); c) Olomega Complex (Olomeguita Island, Tierra Blanca and sectors of La Chiricana or San Antonio Silva).*

Over time, a wide reshuffling of the planned areas was done but eventually, three PAs covering wetlands (Jiquilisco Bay Complex, Olomega Complex and La Union Bay) were declared covering 21.500 ha by 2020, after extensive topographic and delimitation work. Critical mangroves were added to the SNAP.

Output 1.2: *Management Plans for up to three (3) HPII updated or developed.*

Plans were formulated to manage existing PAs (e.g., Jaltepeque complex, Jiquilisco bay) consisting of a range of activities to implement. These are considered more as guides for MARN action in these PAs.

It remains to be seen (as per interviews) how these will be implemented as the on-site staff is very limited in number and has a wide range of activities to implement in addition to these management plans (e.g., patrolling and surveillance, anti-poaching, communication and reporting). Nonetheless, MARN plans to contract up to 50 additional park rangers in the next 2 years.

Output 1.3: *Updated inventory of El Salvador wetlands*

It was finalised by 2018 through a consultancy. It is a sort of baseline for wetlands location and status, providing a snapshot of their situation and aiding MARN in prioritization of action.

Interviews have shown that it is to be utilised (i) as an aid in decision making – prioritization of would-be PAs and interventions in buffer areas) and (ii) in conjunction with an online platform that monitors through satellite imagery wetland status.

Output 1.4: *Institutional and individual capacities strengthened in MARN and in other relevant institutions within SIMANA (municipalities and MAG), contributing to the sustainable management of HPII*

A whole set of training and capacity building events was delivered throughout the project as well as the provision of equipment (for park rangers); a wide range of technical staff was trained including from external institutions (e.g., municipalities, other ministries…). These included a course in 'Sustainable Management of Wetlands', training modules in CC adaptation and landscape/ecosystem restoration, wetland-related fisheries, governance, invasive species, eco-systemic services.

As per interviews, most effective have been:

(i) the support provided to park rangers (clothes, communication equipment, computer equipment, wetland specific training…). Interviews showed that they were the most likely to adopt behaviour change in the way they carry out their duties (e.g., more systematic reporting to central MARN, enhanced patrolling, engaging with population environmental education…).

(ii) The course in 'Sustainable Management of Wetlands' as it has enhanced greatly their knowledge

There are signs that several training modules – those directly related to wetland management - are likely to be institutionalised within MARN although there is information as to how yet these would be financed.

Output 1.5*: Properly equipped wetland staff and volunteers enable timely detection and notification of floods and landslides associated with climate change in three (3) HPII.*

The project provided support to ROLA members through the provision of equipment (phones, binoculars, identification vests) so as to facilitate their work. The network was established in 2009 to support MARN in monitoring environmental situations that can affect ecosystems, report these to MARN and have active participation to solve environment-related issues such as combatting periodic wildfires, controlling invasive species and participate in reforestation.

There was no opportunity to discuss project results with ROLA members during the evaluation

Output 1.6*: Local governance programme empowers local communities and municipal authorities for the sustainable management of HPII.*

El Salvador currently has 8 sites registered on the List of Wetlands of International Importance (Ramsar Sites), with a total area of 228,699 hectares. RAMSAR committees were created by the Government (8 locals + 1 national). These have members from local institutions (e.g., municipalities), NGOs, communities and ADESCOs, academia and relevant private sector. The project provided support in the creation of 2 committees in 2017: Jiquilisco bay and Jaltepeque complex.

The committees covering the project area were not operationalised until they received support by both the project for Jiquilisco bay and Jaltepeque complex and by JICA for the El Jocotal and Olomega lagoon (hence good coordination between the 2 projects), in the form of support in elaborating and using local governance programs by 2020 (for RAMSAR committees covered by the project).

Interviews have shown that while these committees can mobilise members and meet, as well as make proposals, they lack lobbying capacity to influence decision-makers that can allocate resources (MARN, private sector, municipalities). Hence their role remains (frustratingly, as per interviews) limited to making proposals and presenting their requests to relevant stakeholders.

Output 1.7*: Environmental economic compensation for local development projects that alter the surrounding environment supports the management of HPII.*

Between 2017 and 2020, the project facilitated agreements between MARN and FIAES and between FIAES and several local organisations for wetland improved management.

The funded initiatives (hyacinth removal, mangrove restoration, wetland management, divulgation of BPA, cleaning up of canals) amounted to over 650.000$ in the project area.

There is no information as to how successful these initiatives were as the PCU was not involved in monitoring – it had only a facilitating role to secure FIAES funding.]

Surprisingly, the project did not monitor these microproject's effects as they were directly contributing to the overall project objective.

Output 1.8*: Business plans developed for new and existing wetland PAs.*

Through consultancy, business plans (7) were drafted for several PAs including El Jocotal lagoon, Normandía, Conchagua and Fonseca Gulf islands, Jiquilisco bay, San Sebastian and Olomega lagoon.

These will serve output 1.9.

Output 1.9*: On-site validated financial mechanisms that serve to increase the level of funding for three (3) HPII.*

A fee collection system was due to be established with a subsequent increased level of financial resources as an indicator. Several assessments were made during the project including tourism potential analysis as well as capacity training for implementing a strategy in fee collection.

The MTR had already demonstrated that activities under this output would never bridge the financial gap, hence, another approach was devised: from the above-mentioned business plans, a series of infrastructures and activities were financed by the project (e.g., rehabilitation of trails, information booth, PA interpretation centre, bathrooms for park rangers, refreshment bars and souvenir shops… - still under construction at evaluation time -. These are to contribute to enhancing the visitor's experience in PAs.

A previous mechanism to manage PAs (concessions) was used until the new 2019 Government. It seems now that MARN plans to set up a new governance model (see as well 4.3 on recommendations on this) – possibly direct resource management –.

A study focusing on "Capacity building for the implementation of a financial sustainability strategy, estimation of costs and revenues through the establishment of collection fees in the protected areas" was produced to establish a diagnosis of the flow of monetary income and expenditures as well as the analysis of a financial sustainability strategy for the natural protected areas managed by MARN. The study was a necessary first step to setting up a fee collection system.

As for outcomes, indicators and targets under component 1, the results are the following:

Outcomes	Full name of the indicator	End of project target	Level of progress by end of the project
Three newly established MUPAs increase the coverage of	Representativeness (%) of the wetland ecosystems in the National System of Natural Protected Areas by wetland type	100%= 37,547.10 ha 48% terrestrial ecosystem (18,079.52 ha)	103%= 39,016 Results exceed the target: +27.016ha including 18.038ha terrestrial and 20.978ha marine ecosystems

the NPAS by 37,709.46 ha	Number of new wetland PAs that form part of the National System of Natural Protected Areas	Three (3): 1. Jiquilisco Bay Islands: 40 islands and the water body surrounding them; 2. Olomega Complex: Olomeguita Island, Tierra Blanca, and the La Chiricana or San Antonio Silva area; 3. Islas del Golfo de Fonseca Gulf Islands: Four (4) islands (Martín Pérez, Pirigallo or Meanguerita, Ilca, and Isla Periquito islands) and areas surrounding the Meanguera Island	Three (3) new wetland PAs, part of the SNAP: Jiquilisco Bay Islands: 43 mangrove islands with their estuarine and marine ecosystems, Olomega Complex (Olomeguita Island, Tierra Blanca, and Olomega Lagoon) and a mangrove forest in La Unión Bay with its marine portion in replacement of islands of the Fonseca Gulf
The management effectiveness of three (3) PWIIs increases by 10 percent as measured by the Management Effectiveness Tracking Tool (METT)	Change in the capacity development indicators for the sustainable management of the PWIIs according to the total score of the UNDP-GEF Capacity Development Scorecard	National Government: MARN: 66.67%, MAG: 66.67%; Local Government: Jiquilisco MEU: 57.14%, San Dionisio MEU: 57.14%, Concepción Batres MEU: 54.76%, Jucuarán MEU: 57.14%, El Tránsito MEU: 59.52%, ASIBAHIA: 54.76%; Multi-stakeholder platforms: Jiquilisco Bay Territorial Action Group (GAT-CBJ): 57.14%	The scores exceeded all the targets (National Government: MARN: 70%, MAG: 69%, Local Government: Jiquilisco MEU: 58%, San Dionisio MEU: 58%, Concepción Batres MEU: 55%, Jucuarán MEU: 62%, El Tránsito MEU: 60%, ASIBAHIA: 80%, Multi-stakeholder platforms: Jiquilisco Bay Territorial Action Group (GAT-CBJ): 73%. These scores are surprising for both MAG and the municipalities that did not show much proactivity during the project.
	Number of staff from the MARN, municipalities, the MAG, and local organizations, including women, trained in the sustainable management of the PWIIs	MARN: 20, MAG: 6, Local Government: Jiquilisco MEU: 2, Puerto El Triunfo MEU: 2, San Dionisio MEU: 2, Concepción Batres MEU: 2, Jucuarán MEU: 2, El Tránsito MEU: 2, San Miguel MEU: 2, Chirilagua MEU: 2, El Carmen MEU: 2, Local Environmental Police: 10, Navy: 4, ASIBAHIA: 2	The target was achieved as planned: MARN: 20 staff trained, MAG: 6, Local Government: Jiquilisco MEU: 2, Puerto El Triunfo MEU: 2, San Dionisio MEU: 2, Concepción Batres MEU: 2, Jucuarán MEU: 2, El Tránsito MEU: 2, San Miguel MEU: 2, Chirilagua MEU: 2, El Carmen MEU: 2, Local Environmental Police: 10, Navy: 4, ASIBAHIA: 2
Increased annual revenue by $160,00 USD contributes to the financial sustainability of three PWIIs:	Change in the financial gap (USD) to cover the basic management costs of the three (3) PWIIs	Jiquilisco Bay PWII: $166,620; HPII Laguna El Jocotal: $129,899; Olomega Lagoon PWII: $183,508 (Reduction of 25% in each of the three cases)	There was no operational fee collection system by project's end. The target was not achieved (the actual indicator itself is problematic - see analysis of indicators that are not SMART)
	Number of environmental compensation agreements established	5	5 --- 2019: Cooperation agreement for the protection and conservation of ANPs through the equipping and strengthening of capacities of resource guards and protection of fauna species in danger of extension ($ 135,000.00). Cooperation agreement for the restoration of wetlands through the harvest of Eichhornia crassipes, in the lagoons of Metapan, El Jocotal and Olomega ($ 199,520.00).

			2018-2019: (i) Restoration of gallery forest and secondary forest in ANP and buffer zones, through enrichment and reforestation of 30 hectares in San Sebastián Island, Normandía, Chaguantique and Cantón Roquinte in the Xiriualtique-Jiqulisco biosphere reserve ($85,233.95). (ii) A total of 5000 hectares of mangrove forest in the process of restoration, based on the sustainable use of natural resources (PLAS) and rehabilitation of 7.5 km through the ecological restoration of mangroves (REM) in the Biosphere Reserve and Ramsar site Xiriualtique-jiquilisco (171,153.80). 2017-2018: Strengthening of sustainable management and restoration of dry and mangrove forest with the restoration of 60 hectares of forest cover in ANP and buffer zones in the Xiriualtique-Jiquilisco biosphere reserve ($99,096.50) Beware: the project did not monitor how these agreements actually contributed to the project's objective
	Total annual revenue generation for three (3) PWIIs disaggregated by source	Environmental economic compensation: $100,000; Entry fees for visitors: $30,000; PPP: $30,000	The result was Environmental economic compensation: $ 690,004.25 thanks to FIAES's support and none for the remaining

Table 13: Achievement of targets against indicators for outcome 1

3.3.1.2 Component 2: Addressing threats to biodiversity, including the presence of invasive species and solid waste and agrochemicals originating in the buffer areas of the PWIIs.

Progress by project's end: mostly achieved as per targets but the threats were by no way reduced as institutionalisation and inter-sectoral collaboration is missing to address these in the foreseeable future. In addition, there seems to have been insufficient if not little understanding of the magnitude of the problems within wetlands and the need to confront them with a multisectoral approach and not just through the environmental lens. This is clearly a shortcoming at the design stage as the indicators could not possibly have any significant impact on the outcome.

Output 2.1: *Six (6) inter-institutional cooperation agreements (MARN, MAG, CEL, MOPT and municipalities) established, including conservation and management committees to monitor the conservation and sustainable use of biodiversity in at least three (3) PA of the HPII from El Jocotal and Bahia of Jiquilisco.*

Three agreements were signed between MARN and municipalities (Usulután, Puerto Triunfo, Jiquilisco) to ensure collaboration and coordination of activities focussing on wetlands.

Other agreements (e.g., multisectoral, with MAG, MOPT, CEL and other municipalities) remained at draft level or may not even have been drafted for lack of interest if not lack of political will by the interested parties). This is evidence of still much insufficient understanding of wetland ecosystem services, given the

very loose terms that are actually within these agreements.

This is a very strong argument for MARN to increase substantially stakeholder's awareness of wetlands' value not just at the local level with municipalities and the population but also through targeting key decision-makers within other sectors.

Output 2.2: *Programme for the prevention, reduction and control of pollution derived from agricultural activities (for example, agrochemical products and fertilizers) and human settlements (solid waste) in two HPII (Bahia of Jiquilisco and Lagoon EI Jocotal) and their buffer zones defined jointly with the municipalities, Jocotal's communities and the private sector.*

The project supported MARN in drafting a programme of 'prevention, reduction and control of pollution that comes from agricultural and human activities in the HPII Bahía de Jiquilisco, Laguna de Olomega, Laguna El Jocotal and their buffer zones' for addressing solid waste and agriculture-related pollution.

Fundazucar was contracted as it already had substantial experience in divulging BPAs (in collaboration with MAG). The contract greatly extended Fundazucar's outreach within the project area. Interviews have shown a great interest in some techniques as they are nearly cost-free and /or enhance soil conditions. Others require investments and are not adopted as there is no premium guaranteed. The project did manage to organise (in some municipalities) a selective collection service for agro-chemical plastic containers.

One of the key achievements of this output has been the reduction of agrochemical use by farmers – in particular sugar cane growers – and changing the habit of emptying crop protection contains in the environment to selection collection points. There is however no information as to what impact it might have or how many people are actually (see Recommendation (ii) pg.65).

Pilot micro-projects (vermicomposting, biogas, composting, agropastoral systems through soil & water conservation methods, livestock water tanks) were tested with cattle breeders and farmers on a voluntary basis. Interviews have shown insufficient follow-up since 2020 (COVID19) and fear of being let down by the project's end. The likelihood of success and adoption is very much dependant on (i) farmer's available time in applying correctly knowledge gained, (ii) Just-In-Time delivery of material (e.g., fruit trees were handed over too late after the rainy season and most participants did not irrigate on a manual basis), (iii) follow-up (the more complex, the closer TA to farmers must be – e.g., biogas was quickly abandoned as not well managed -). Note that no fields visits were conducted to assess the project's achievements.

Both for sugar cane growers or livestock breeders, training was delayed by March 2020 and resumed at a slower pace around September through virtual means (COVID19 situation).

Overall, one can underline first the pilot nature of these activities (covering a very small fraction of potential users), second the absence of the State as a regular provider of advice if not technical assistance (that can be related to drug smuggling insecurity in some wetlands – e.g., Jiquilisco Bay). In that context, it is unlikely that these initiatives will grow and expand in a context of insufficient support by other members of the value chain (e.g., certifications in meat processing or sugar cane – see below).

As for solid waste, capacity building training was conducted with the development of manuals for use by UAM. A number of removal and awareness-raising campaigns were conducted including as recently as

February 2021 with impressive quantities of plastic that were retrieved from rivers, lakes and lagoons (target achieved). Despite a lot of media attention, there is little evidence that municipalities are fully committed to engaging in regular removal campaigns. The vast quantities of waste still show the very lack of awareness of urban centres populations in environmental degradation but also of the rural population that is not used to process waste, and of municipalities that do not make rural waste removal a municipal budget priority.

Output 2.3: *Incentive programme including green certification for the reduction of the use of agrochemicals in the cultivation of sugar cane and the sustainable management of livestock, promotes biodiversity-friendly agricultural practices and the use of water-related resources in the areas of damping of five (5) HPII protected areas of Laguna El Jocotal and Bahia de Jiquilisco.*

A programme of incentives was drafted reviewing options and methods in order to accelerate the adoption of BPAs in wetland buffer zones. This document could constitute in itself a draft project and therefore the initiative went no further.

As mentioned before, this kind of output reflects a silo approach with an insufficient understanding/ involvement of the meat and sugar cane value chains, both within the buffer zones but also those agro-industrial groups further down the value chain, that are key for adopting any new standard and finally the existing certification organisations that are essential for operationalising any certification scheme. Furthermore, it is highly unlikely that any certification scheme can be created from scratch by a national institution and any incentive programme be successful if it is not value chain-driven.

Finally, at some point during 2018, the project considered a travelling museum as a way to divulge information on wetlands. There is no information on whether it was eventually completed and operationalised.

Output 2.4: *Rules to regulate human activities that affect HPII.*

The law on PAs has not been applied as it had lacked the drafting of norms and regulations. This has been seen as critical: without these, there was little control by MARN of natural resources extraction (e.g., molluscs, shrimps and prawns…), no monitoring of concessions by park rangers as there was no guidance and insufficient information within MARN as to how to grant and revoke concessions.

As of May 2021, the proposals including those concerned to other governmental institutions were to be submitted to the Legislative Assembly for approval.

Output 2.5: *Monitoring information system to facilitate decision making to reduce threats to three (3) HPII and articulated with MARN's SIA.*

A two-pronged approach was adopted to steer better MARN action in and around wetlands:

(i) A programme to monitor selected species as well as wetland chemical and physical parameters has been developed and is currently being set up (hence supposedly not yet operational). It is part of the strategy developed by the Wildlife Department and is therefore very likely to be institutionalised within DGEVS; this system was due to feed in the main project indicators right from the start for assessing the project's impact but might only be ready by its end.

(ii) An online platform was designed with regularly updated satellite imagery analysis and reporting on land use and invasive species (e.g., hyacinth). It is used on a regular basis to steer interventions for hyacinth removal.

The system is not free of charge and it remains to be seen what is most cost-efficient/effective? MARN paying for a ready-to-use analysis or using the ministry's in-house expertise, possibly not as GIS-fluent as a private company, to analyse the satellite imagery and produce relevant reports. Hence its sustainability is at stake as per interviews, there was no evidence of financial commitment by MARN by the project's end to pursue the arrangement.

Output 2.6: *Protocol developed to reduce threats to biodiversity in HPII, including contamination by agrochemicals, livestock and household waste, and urban solid waste.*

A draft protocol was produced but not (yet?) endorsed by MARN. Unfortunately, it was an in-house exercise, addressed mainly for MARN staff. Other sectors were not consulted for its preparation (e.g., MAG).

Additional manuals and guides were also produced for (i) installing plastic waste floating traps (with AECID support) although there are known issues of health hazard if these are not cleaned on a regular basis and (ii) for setting up municipal management plans; interviews showed no recollection of these (possibly because of political rotation during the last elections).

Output 2.7: *Strategies for the control of invasive species (water hyacinth [Eichomia crassipes] and the cormorant duck [Phalacrocorax brasilianus]) piloted in three (3) HPII and their buffer areas: Complex Bahia of Jiquilisco, Lagoon Olomega and Lagoon El Jocotal.*

The MTR had flagged several issues with this output: (i) the cormorant is not an invasive species as mentioned in the PRODOC but can proliferate within unbalanced ecosystems (e.g., in Cerrón Grande with regular releases of carp and tilapia by CENDEPESCA for the fishing industry and large-scale untreated industrial effluents from urban centres). Monitoring showed it not to be an issue for the main project wetlands. In that context, with the GEF agreement, this activity was removed from the project.

As for the hyacinth, the activity was maintained but the MTR had warned already that there is no economic potential for removing and transforming hyacinth in any kind of by-product, all the more when analysis showed that it was (slightly?) contaminated with heavy metals (e.g., Cerrón Grande). MARN supported the transfer a pre-existing AECID-funded barge from Olomega to Cerrón Grande where it could be put to better use while containment booms were used successfully in the project area to allow fishing boats passage in lagoons. As there was no agreement with GEF to reduce the target for the hyacinth tonnage to be removed within the project's selected wetlands (El Jocotal and Olomega), As for El Jocotal and Olomega, a private company with shore-based excavators was hired.

Overall, hyacinth control can be successful when an infestation is below or around the yearly average through mechanical removal and can be controlled successfully with booms for enabling fluvial movement from the shore/harbour to open water. As long as eutrophication is not tackled at the source through urban effluent treatment and more responsible use of agrochemicals, the water hyacinth problem will remain in wetlands. The project addressed partially the issue but it was not possible to provide neither MARN not affected municipalities with any long-term economical solutions.

Output 2.8: *Participatory plans developed for the conservation and sustainable use of mangroves and*

flooded forests in the Bahia of Jiquilisco and related freshwater lagoons in the lower basin of the Rio Grande de San Miguel.

Between 2016 and 2019, several agreements were signed for the protection of mangroves through the development of PLAS and establishment of COAL and followed by participatory fora. These were to regulate natural resources extraction (e.g., molluscs, turtle eggs, timber…) on a more sustainable basis.

The development of PLAS fits within the strategy of the PREP and the strategy to increase PAs financial resources (through taxation). One such plan was developed for Jiquilisco bay in 2020. The Project supported the follow-up of diagnostics on the implementation of these instruments as well as the exchange of experiences among the communities.

Output 2.9: *Participatory rehabilitation of at least 500 hectares of dry forest associated with mangroves allows the protection of key habitats for migratory species.*

During 2020 and 2021, over 500ha of dry forest (3 PAs in the Nancuchiname area) were reforested and fenced, protected against fire with the establishment of firebreaks, controlled from weeds nearby the Jiquilisco bay as a strategy to maintain biodiversity (PREP strategy) The area that was at the centre of the civil conflict during the 80s and has ever since seen uncontrolled farming.

No field visit was done to assess replanting quality and mortality.

As for the outcomes, indicators and targets under component 2, the results are the following:

Outcomes	Full name of the indicator	End of project target	Level of progress by end of the project
Presence of key indicator species in four PAs in the Jiquilisco Bay Complex and Jocotal Lagoon PWIIs in the lower watershed of the San Miguel Río Grande: i) Normandía and Chaguantique PA: Amazona auropalliata, Ateles geoffroyi; ii) El Tercio PA: Crocodylus acutus; iii) Jiquilisco Bay Area (includes San Sebastián Island): Andara grandis, Amazona auropalliata, Eretmochelys imbricata and Crocodylus acutus; and iv) Jocotal Lagoon Area: Amazona auropalliata, Crocodylus acutus	Number of inter-institutional cooperation agreements established and operating for the management of the PWIIs.	Three (3) municipal agreements for managing invasive species and solid waste. Three (3) new agreements with MAG, MOP, and CEL	Municipal agreements were signed as planned between MARN and the Jiquilisco, Usulután and Puerto El Triunfo Municipalities
Pollution derived from agrochemicals, livestock wastes, and household and urban solid wastes reduced by 50% in three PWIIs by the end of the project	Number of farms implementing best practices for the management of cattle ranching wastes in three (3) PWIIs, including farms run by women.	20	20 farms were indeed selected and support provided for implementing BPAs; several of them, however, had already abandoned many practices as either not economical or feasible without additional project support by the time of final evaluation interviews
	Number of farms implementing best practices for the management of	60	2/3 of the target was reached by 2020 and was expected to be exceeded with another 40 farms, expected to be included by project's end, hence a total of 80 farms.

	agricultural wastes in three (3) PWIIs, including farms run by women.		
	Solid waste accumulated (kg/ha) in the Jiquilisco Bay PWII	32 ton (Reduction of 50%)	53.4 tons of solid waste were removed by 2020 and 43.4 tons removed in 2021; 97t were removed by project's end
Reduced presence of two invasive species (water hyacinth [Eichornia crassipes] and the Neotropic cormorant [Phalacrocorax brasilianus]) in the Olomega Lake, the Jocotal Lagoon, and the Jiquilisco Bay PWIIs: i) 2,000 tons/year per wetland of water hyacinth (Eichornia crassipes) removed from the Olomega Lake and Jocotal Lagoon PWIIs; and ii) Abundance (number of individuals) of the cormorant duck (Phalacrocorax brasilianus) in the Olomega Lake, the Jocotal Lagoon, and the Jiquilisco Bay PWIIs	Volume (tons/year) of water hyacinth (Eichornia crassipes) removed from the Olomega Lagoon and Jocotal Lagoon PWIIs	2,000 tons/year per wetland	2.300 tons removed from El Jocotal Lagoon and 2.000 tons removed from Olomega Lagoon by project's end. Note that the tonnage depends on the actual proliferation conditions that vary from year to year
	Abundance (number of individuals) of the cormorant duck (Phalacrocorax brasilianus) in the Olomega Lagoon, the Jocotal Lagoon, and the Jiquilisco Bay PWIIs	- Jocotal Lagoon PWII: Baseline – 113 individuals eliminated - Jiquilisco Bay PWII: Baseline – 107 individuals eliminated Olomega Lagoon: 2429 individuals eliminated	This indicator was removed following up on MTR's recommendations
Sustainable use and extraction of resources contribute to the conservation of 18,720 ha of mangroves in the Jiquilisco Bay PWII and associated freshwater lagoons	Coverage of mangroves in the Jiquilisco Bay PWII and associated freshwater lagoons	18,720 ha	18.720ha of mangroves in the Jiquilisco Bay PWII and associated freshwater lagoons were protected as planned including 500ha of dry forest associated with mangroves that were rehabilitated in the Nancuchiname NPA forest

Table 14: Achievement of targets against indicators for outcome 2

Overall Project Outcome RATING: *Moderately Satisfactory (MS)*

(Outcome 2 could be rated as Moderately Unsatisfactory as many products remained at draft level, were produced too late to be of use for the project and did not significantly contribute to wetland degradation reduction (too little impactful)

3.3.2 Relevance

The project is highly relevant to the main objectives of the national environmental and development priorities, UNDP priorities and global goals and GEF 5 Biodiversity Focal Area.

Relevance to national environment and development priorities: informants, as well as documentary sources, indicated that wetland biodiversity degradation is reaching a critical point due to agricultural activities, urban encroachment, urban centres effluent and solid waste discharges and extreme weather events. As for project integration within Government priorities, it was well in line with:

- The national environment policy[40] with priorities on restoration and inclusive conservation of ecosystems, comprehensive environmental sanitation, integrated management of water resources, the incorporation of the environmental dimension in land use planning and environmental responsibility and compliance
- The biodiversity strategy[41] focussing on mainstreaming biodiversity conservation in productive sectors such as agriculture, livestock, fisheries.

But took also into consideration a number of other documents such as the Gender policy under the CBD and the now relatively outdated 2002 Wetlands Regional Policy for Latin and Central America.

Relevance to UNDP priorities and strategic goals: under the 2016–2020 UNDAF[42], the project fits within the Cooperation Area 2 Resilience" mainly with a view to "increase the reliance of the most vulnerable and excluded population and people disasters, environmental degradation and the negative effects of climate change" – Target 7 is more specific even with "Solutions developed for the conservation and use of biodiversity and maintenance of ecosystem services, measured by the number of inter-institutional agreements with financing adopted for conservation, management and monitoring of biodiversity in protected areas and/or wetlands.

Relevance to GEF strategic focal area: the project was also aligned with the GEF-5 strategy on Biodiversity[43]: it was covering at least two objectives including:

(i) Improving the sustainability of protected area systems with the increasing of financing of PA systems, expanding ecosystem and threatened species representation within PA systems and improving the management effectiveness of existing PAs

(ii) Mainstreaming biodiversity conservation and sustainable use into production landscapes/ seascapes and sectors with strengthening the policy and regulatory framework for mainstreaming BD and implementing invasive species management frameworks.

That said, this project covered other sectors (see SDG analysis under Mainstreaming pg.53).

3.3.3 Effectiveness and efficiency

Effectiveness (contribution of the actual outcomes to the project objective):

The project objective was to enhance the conservation and sustainable use of biodiversity and maintain ecosystem services in protected wetlands of international importance. Two main outcomes (components) were formulated:

(i) Component 1: Expanding the coverage of protected wetlands of international importance (PWII) and building institutional and individual capacity for their effective management

(ii) Component 2: Addressing threats to biodiversity including the presence of invasive species and

[40] Política Nacional Medio Ambiente, 2012
[41] Estrategia Nacional de Biodiversidad, 2013
[42] https://elsalvador.un.org/sites/default/files/2019-08/UNDAF%202016-2020%20El%20Salvador.pdf
[43] Source : https://www.thegef.org/sites/default/files/documents/GEF-5_FOCAL_AREA_STRATEGIES.pdf pg 2-6

reducing solid and agrochemical waste originating in buffer areas of the PWII

Component 1 : Expanded protected wetland coverage and strengthened institutional and individual capacities for the effective management of PWIIs

There is a satisfactory contribution of achieved results in relation to the objectives. Many outputs contributed to creating awareness (but not necessarily behaviour change). With COVID19, it is however likely that capacity building outputs are presently little contributing to the objective as most institutions remaining largely impaired.

New PAs published: the efforts made by the project to add three new PAs under the SNAP were successful despite several issues with land use that required a change of priority away from the Fonseca Gulf. The total protected area is larger than the initial target and it included critical mangroves that were not considered initially.

Management plans: these were drafted and adopted but discussions with park rangers showed that they are unlikely to be implemented in the foreseeable future with the current HR on-site. To be effective, other conditions need to be met such as increased PA staff.

Wetland's inventory: little information was available through interviews as to whether it is contributing to the project objective; supposedly, this inventory has been providing a detailed assessment that could help design new policies and strategies as well as prioritize new project areas in the future.

Capacity building: it remains to be seen whether the numerous pieces of training were effective and resulting in behaviour change. Interviews did not capture that kind of information although there were indications that this may have been the case for park rangers but was little effective on municipalities / UAM staff with little visible change at how they manage issues related to wetlands (insufficient rural garbage collection, follow-up of beneficiaries, dialogue with civil society on environment-related project proposals).

As for individuals exposed to micro-projects on BPA, the pieces of training were very helpful, as per interviews, to ensure commitment as it was on ADESCOs and other civil society organisations. That does not mean that there was the adoption of the BPAs as other (technical or financial) constraints had to be taken into account as well by beneficiaries.

To assess the improvement of PA management, the project used the traditional METT scorecard for management effectiveness; however, it did not provide any clear trend with wide variations over the years. Notwithstanding, any improvement of the management of PAs will likely come in later years with (i) the operationalisation of a collection fee mechanism, following up on infrastructures (although tourism might only come back in a post-COVID environment and (ii) an improved monitoring capability through satellite imagery, chemical and physical parameters recording and better equipped and knowledgeable park rangers.

The support to RAMSAR committees is also quite effective in serving its purpose for providing advice although it lacks lobbying capacity to ensure that their points of view prevail.

Overall, the pieces of training increased awareness of local stakeholders on the precarious situation of wetlands but did not result in actual day-to-day changes related to their use. This would require a much longer timeframe of support and follow-up by MARN.

Financial mechanisms: this output is much contributing to the objective with the construction of infrastructures that will make PAs much more attractive to tourists. There is, however, still a lot of uncertainties as to how a fee collection system will be established. At this moment, there has been no substantial increase in income as the infrastructures are still under construction; overall the UNDP/GEF Financial Sustainability Scorecard has shown slight increases over time although this might have reversed with COVID19.

Component 2 results: Addressing threats to biodiversity, including the presence of invasive species and solid wastes and agrochemicals originating in the buffer areas of the PWIIs

Inter-institutional agreements: three agreements were signed with municipalities but overall, the project did not manage to mobilise external stakeholders. Interviews showed that there is a lot of reluctance by partners to commit themselves as some partners might view these agreements as an additional financial burden. Instead, they prefer to move forward by themselves (e.g., CEL with the purchase of hyacinth removal barde, MAG with their own activities in sustainable land management practices).

Obviously, there is a lot of room for inter-institutional collaborative work and this project shows that new approaches to ensure it are necessary for future interventions.

Solid waste and agrochemical pollution reduction in wetlands: with the promotion of BPA, the project has made some strides by creating awareness and it generated a lot of interest from producers with pilot micro-projects. That did not mean a high adoption rate as the project did not have resources under output 2.3 to influence market conditions with an improbable green certification scheme.

Solid waste removal has created awareness on this issue and the project invested heavily to ensure some kind of impact. Still, since the beginning of the project, the key issue in solid waste management has been the need for inter-municipal solidarity as these are either waste emitters (urban centres) and/or receivers (municipalities alongside wetlands). If interviews with various UAM did evidence a consensus for combined action, individual municipalities as inter-municipal associations seem powerless and would need to rise above traditional political divisions to tackle seriously this issue (see recommendations pg.65).

Green certification: this output did not contribute in any way as it missed the complexity of value chain mechanisms and was out of GEF's traditional areas of intervention. Only a draft document was produced.

Human activities regulations and participatory plans (PLAS): the draft proposals for regulations and norms of the Environment Law were drafted but still need endorsement. Participatory plans may be key to sustainable use of natural resources but are dependent on the approval of the above-mentioned regulations and norms to be effective. Both outputs are very likely to contribute to the project once approved and finalised.

Invasive species control: the project demonstrated that hyacinth control can be relatively effective if not too proliferating, through a variety of techniques including manual removal, boom control for maintaining

navigation or mechanical removal with excavators or barges. As studies have shown that proliferation is highly dependent on the combination of the right climatic conditions with regular agrochemical and urban effluent releases, MARN, with a satellite imagery monitoring system should be able to plan, if not predict, regular hyacinth removal campaigns, balancing the negative effects on wetland BD with the added costs.

Dry forest rehabilitation: this is a traditional activity of PA management with the setting-up of conditions for biodiversity recovery after several decades of use. The project was very effective in this with fencing, weeding, fire-break controlling and some provision for maintenance.

Efficiency (project costs):

The five-year-long project spent in total around 1.9M$ (over 90% of the budget 5 months before closure).

Despite an inception workshop somewhat shortly after project signature, the project team recruitment procedure took 6 months, and the implementation was at first inadequate resulting in the removal of the Administrative and Financial Officer that did not follow up strict NIM procedures. That had immediate consequences with the taking-over of the project management by the Minister to ensure full compliance, a situation that overall, did not facilitate swift delivery as planned[44] until the 2019 Government transition.

By 2018, the change of management from a 'skeleton PCU' to a 'fully-fledged PMU' with the recruitment of a project team accelerated further the project delivery. This acknowledged a situation of real difficulty in managing a high number of consultancy contracts with close supervision needed at each step of a contracting process (TOR definition, procurement procedures, contracting, quality assurance, payments[45]) by the Minister.

Looking at the financial numbers, there has been, over the years, a steadily increase in spending and a reduction of the gap between planned and spent budget, although this trend crashed against COVID19 in 2020 with the rescheduling of most 2020 activities for the end of the year and 2021.

Year	Unspent budget in % (As per AWP)
2016	99
2017	79
2018	50
2019	26
2020[46]	44
2021[47]	58

Table 15: Unspent budget ratios

Despite delivery improvement over time, no-cost extensions quickly became a necessity (the MTR had

[44] All transactions had to be controlled & signed by the Cabinet; this resulted in very extensive delays (up to several months) to initiate any activity

[45] There were several cases of inadequate TORs and budget estimates with too few bids or no response at all

[46] COVID19 by March

[47] As of May 2021

recommended a 9 to12 months extension in 2019). There was some confusion as to whether a 12 months or 9 months extension was to be granted (eventually 9 months) but this resulted in a lack of funding by the end of 2019 for several months with no cash to cover expenses. This was eventually resolved and the extensions enabled PCU to completely allocate the budget.

The MTR had made an interesting cost analysis - US$ spent per km² - evidencing that this project was investing substantially lower financial resources per area compared to other projects (10-20 times lower), in particular for outcome 2; this is often a sign that the project is too ambitious in geographical coverage and that can have a very negative effect on thinning resources per output, hence degrading the impact of the project. This may explain why nearly all on-site interviewees (beneficiaries) were insisting on expansion to make the project known to direct neighbours or neighbouring communities.

It is also surprising to see that some activity modifications resulted in even more geographical coverage (e.g., hyacinth removal accounted for in Cerrón Grande) instead of closing in on selected municipalities[48] to ensure impact and reducing targets to more realistic levels.

Finally, the interviews did not flag any issue with the allocated resources for on-site activities and the involvement of beneficiaries and communities.

Assessment of Outcomes	Rating
Relevance	HS
Effectiveness	MS
Efficiency	S
Overall Project Outcome Rating	MS

Table 16: Outcome Rating Scales - Relevance, Effectiveness, Efficiency

3.3.4 Country ownership

The interviews did not manage to provide a clear picture of country ownership; at the very best, it may be high for all results that fall within the organic law of the ministry and very low for all others. As at project sites level, beneficiary interviews have shown that most support to them came nearly entirely from the PCU itself with little involvement of MARN staff[49]. At the other end of the spectrum, park rangers were very quick to internalise all support (from equipment to training or even newly acquired knowledge with new ways to approach work in PAs and buffer zones).

Interviews of MARN staff did evidence a lot of interest in institutionalising several project results (e.g., training modules on wetlands, environmental monitoring systems, continued collaboration with FIAES and all results on improving PA management – fee collection system, business and development plans -). There was little if any evidence (as per interviews) that MARN was ready to follow up on several activities that do

[48] For example, the most proactive ones

[49] The silo approach, seen already at formulation stage despite the very multisectoral nature of the project, reproduced within MARN (PCU with a lot of autonomy and insufficient guidance and dialogue within the ministry), the lack of official counterparts, is very much impeding results ownership.

not fall exactly within its core business and overlap with other sectors; these include all agriculture-related activities as well as waste-related activities.

With the fact that State presence is very low in the project area (South-Eastern part of the country) for a variety of reasons[5051], it is very unlikely that other sectoral ministries will take over.

What came very clear with the interviews is the lack of ownership by municipalities. Even when there is a proactive UAM, increased/additional budget allocations for the environment are not necessarily released; in some cases, there was even a complete lack of interest.

The project did generate a lot of interest from several civil society organisations but also of individuals that show now greater mobilization in the project thematic: ADESCOs, RAMSAR Committees, local communities dialoguing with municipalities and ministries, individuals that share experiences of [successful] pilot micro-projects.

3.3.5 Gender equality and women's empowerment

Gender considerations were taken into account in the PRODOC but actual implementation showed that this distinction was not so relevant; while some activities may be gendered (e.g., home production more women-run and commercial agriculture more male-dominated, livestock breeding shared between men and women but sugar cane growing mostly men-dominated), responsibility is often shared amongst family members and a number of families are actually women-led (the consequence of the armed conflict). Over 20% of farm-sponsored activities were women-led.

Still, careful considerations were taken when selecting beneficiaries for pieces of training and pilot micro-projects. Women were encouraged in top positions (e.g., several women heads of local RAMSAR committees and heading either ADESCOS and other local associations).

There was no evidence that gender-specific resource allocation was made during the project.

3.3.6 Catalytic role and replication effect

Project linkages with other interventions

From the PRODOC, GIZ, ISCOS, JICA could have been potential partners of the project as they addressed partly several thematic.

Eventually, the actual linkages were with JICA project although there was no direct collaboration (e.g., planning or implementing). These were managed by MARN and both projects avoided duplication of efforts.

Project linkages to SDG targets:

[50] Unstable security atmosphere very high during the first 2-3 years of the project, combining drug trafficking activities, divisions along political lines and overall higher poverty and crime rate.

[51] https://es.insightcrime.org/investigaciones/como-clica-ms13-el-salvador-apodero-corredor-cocaina/

While the project did target vulnerable populations, poverty reduction and health condition improvement were not the first intent of the project; in any case, the effects can only be small given except maybe for farmer's health when manipulating now and disposing of agrochemicals more responsibly.

The project is likely contributing directly to several SDGs; this may particularly be the case for:

SDG 15 "Life on Land", Targets 1, 2, 7 to 9 and 15a:

- "Conserve and restore terrestrial and freshwater ecosystem": increasing SNAP with protected wetlands, reducing pollution and solid waste
- "End deforestation and restore degraded forests": restoring dry forest environment through reforestation and fire breaks
- "Protect biodiversity and natural habitats"
- "Eliminate poaching and trafficking of protected species": support to park rangers
- "Prevent invasive alien species on land and in water ecosystems": removal of water hyacinth,
- "Integrate ecosystem and biodiversity in governmental planning": most PA development and business plans
- "Increase financial resources to conserve and sustainably use ecosystem and biodiversity": compensation schemes with FIAES and fee collection mechanism being set-up

The project is also contributing to a lesser extend to SDG13 "Climate Action", SDG1 "No Poverty"" and SDG6 "Clean Water and Sanitation" with several activities on reforestation, promoting more sustainable food production systems and restoring water-related ecosystems.

Replication effect

The remote interviews did not manage to evidence any replication effect of the project; they did, however, show a strong interest of beneficiaries (mostly BPA recipients and neighbours) in expanding the project outreach.

While a lot of BPA techniques are difficult to adopt as they imply investment or a premium price, some of them can be implemented relatively easily. The interviews also showed that beneficiaries are very worried about health issues related to pollution (solid waste and chemicals) and the necessity to preserve their land more respectfully and sustainably. In that context, they are much interested in learning about good land husbandry techniques even if the market conditions do not allow them to implement them.

As for all the instruments and pieces of training that benefitted MARN, it is now in a better position to advance on its agenda to increase protected areas (procedure for declaration, improved management of actual PA with development and business plans). As above, there was no evidence through remote interviews that MARN had already used project results to expand the SNAP further.

3.3.7 GEF Additionality

GEF's global benefits for biodiversity are (i) Conservation of globally significant biodiversity and (ii) Sustainable use of the components of globally significant biodiversity. As for (i), the project has clearly contributed to it with the declaration of protected wetlands and the strengthening of MARN to manage them. This does not mean by any way that degradation has decreased but AMRN has now a wider variety

of tools to monitor protected wetland status and administer them. As for (ii), tools are also ready to be utilised (e.g., development & business planning, new regulations for wetland use licencing) to regulate natural resources extraction (e.g., fisheries, molluscs…). With regards to the threats, the project may have contributed to reducing agrochemical pollution with the setting-up of a container recycling mechanism but it may be too little in relation to the magnitude of the other issues that the project could not tackle effectively (or did not cover at all): solid waste, industrial and urban water effluents, water depletion with agricultural irrigation for sugar cane production, relative check of hyacinth growth…

Apparently, the project did not contribute significantly to livelihood improvements and social benefits: it is true at project scale but at community level, solid waste removal has been viewed locally as highly valuable. At individual level, several BPA techniques (but not all of them) were swiftly adopted as very cost-effective and potentially improving livelihoods (e.g., water tanks, composting, reforestation with fruit trees [agroforestry]), livestock rotation) through either added income or freed time.

As for innovation, most BPA techniques can be considered as innovations as farmers are (re-) discovering them. Still, many of them are ill-adapted to the current production model (lack of market conditions/value chain partners not adding value) as they require investments that are not followed up by premium prices.

3.3.8 Elements of Sustainability

Sustainability is the likelihood of continued benefits after the project ends.

Overall project sustainability RATING: *Moderately Likely (ML)*

3.3.8.1 Social & cultural risks to sustainability

Interviews with final beneficiaries – both livestock breeders and sugar cane farmers – have shown a high level of interest. Although it may have been difficult to mobilise volunteers for pilot microprojects, the farming communities are generally in need of technical support as sectoral support is very limited if not inexistent in the project areas.

Extensive efforts were undertaken to enhance the project's results ownership - especially at community level – through the participation of communities, ADESCOs and other civil society organisations -.

In general, the project has been very well received resulting in strong participation (although it may have faded a bit for successive solid waste removal campaigns – possibly a consequence as well of COVID -).

3.3.8.2 Technical risks to sustainability

If MARN decides to take over satellite imagery for wetland monitoring instead of acquiring the analysis from a commercial source, it will require a strong technical team able to provide regular assessments. During the project, the commercial option was chosen as most effective but might soon prove disadvantageous or even not feasible with current MARN budget envelopes. Therefore, it remains to be

seen whether MARN (i) has the technical capacity to make such technical analysis and (ii) can release structural funds for that purpose.

As for BPA pilot micro-projects, there are *a priori* few technical constraints with material available and farmers with enough technical knowledge. The issue lies elsewhere with financial sustainability that is key for adoption.

3.3.8.3 Institutional and organisational risks to sustainability

The risks for outputs that benefit MARN directly are very limited; quite several of them have been endorsed and/or are about to be institutionalised. This is the case for most capacity-building products (e.g., manuals and reports), monitoring systems (although there are doubts about financial viability). This is also the case for infrastructures that, combined with stronger and better equipped, more knowledgeable, and numerous park ranger units and a return of tourists, have a reasonable probability of operational life for the foreseeable future.

As for support to sugar cane farmers and livestock breeders through the promotion of BPA, there are no signs neither within MARN nor on-site that follow-up is likely to be continued.

Collaborations were sought with municipalities resulting in support for solid waste campaigns and participation in capacity building training. Interviews showed that support can vary widely – possibly along political lines – but, in any case, it remains below the support to be expected from such local institutions. This should be a strong signal for advocacy in municipality clustering for tackling common issues but also in decentralising resources from central to municipal levels.

3.3.8.4 Economic and financial risks to sustainability

As for the adoption of BPA, the economic and financial risks are very high: interviews have shown that the lack of an enabling value chain or market environment is the main issue for adoption: farmers will not adopt new techniques unless there is an economic incentive for it; that was not the case in this project and creating such an enabling environment (certification, value chain strengthening) was clearly beyond what a single ministry can achieve.

As for invasive species removal, it is simply not viable in economic terms. There is a financial analysis that should be made by valuing ecosystem services against invasive species costs if that hasn't been done already. It could become all the more pressing with the return of tourism – post-COVID -.

The financial sustainability of most internal MARN outputs is probably secured through either regular programming or future donors' support. PA financial sustainability is one step closer thanks to the support provided by the project with infrastructures and the drafting of development and business plans.

3.3.8.5 Environmental risks to sustainability

There are no obvious environmental risks to the project.

3.3.8.6 Socio-political risks to sustainability

The socio-political risks are high for the project, mainly because of the way it was formulated, in particular through seeking one-way collaborations from municipalities and ministries.

At the municipal level, leadership changes often result in strategy and priority changes, and this was all the easier for municipalities as there were no attached resources to their collaboration.

Interviews have shown that political divisions remain tense in municipalities and can result in strategic U-turns. As mentioned under Effectiveness – outcome 2, these divisions can only weaken project results.

At central level, the lack of collaboration with MAG may well seal the fate of BPA interventions as implemented by the project as there is little evidence that MARN is committed financially to pursue this kind of activity.

This systematic lack of collaboration may come from insufficient consultations at the formulation stage, in particular in finding out common grounds for action between sectors through collating or coordinating existing sectoral programs or strategies.

Assessment of Outcomes	Rating
Financial resources	ML
Socio-political	U
Institutional framework and governance	L (MARN) (ML for municipalities)
Environmental	L
Overall Likelihood of Sustainability	ML

Table 17: Sustainability Rating Scale

3.3.9 Progress to impact

In this terminal evaluation, the impact of the project has been assessed in terms of changes or benefits achieved in social, economic, institutional, environmental areas as well as the changes achieved for gender equality.

Impact RATING: *Not Significant (NS)*

3.3.9.1 Social Impact

The social impact of the project can be assessed through behavioural change: the key question is whether there was enough project time to initiate any behaviour change of final beneficiaries. This may not be the case for most activities on-site; there was no widespread adoption of BPA by farmers. However, interviews showed that now, there is an interest from farmers and livestock breeders to participate and benefit from the project – hence a clear demand for the divulgation of these tools -.

The effects of the project on civil society – communities, ADESCOS, RAMSAR Committees – have created awareness and resulted in mobilization albeit not necessarily supported by authorities, a situation that has somewhat dampened their initial enthusiasm.

Social impact RATING: *Minimal (M)*

3.3.9.2 Economic Impact

Any potential economic impact has been wiped out by the COVID crisis for the time being.

Notwithstanding the situation, the potential impact of the project remains high with regards to PAs as several conditions have been met through the project to finance protected areas (e.g., PA-related infrastructures, park rangers' equipment and knowledge, reforestation and protection of dry forests).

As for BPA micro-projects, there is no economic impact at all as testing remained confined to volunteers with little evidence of any multiplication effect.

Removing hyacinth regularly is having a positive impact on fisheries but also vessels movements used for fishing.

The potential impact of rehabilitating existing / building new infrastructures is very high as they will make PAs much more attractive, hence potentially increasing the influx of tourists and PA revenue.

Economic impact RATING: *Significant (S)*

3.3.9.3 Institutional Impact:

The impact of the project through capacity building has been positive on MARN and municipalities with much more awareness on how wetlands function, the (eco-)services they provide but also their vulnerability. Nonetheless, virtual interviews could not make out whether MARN departments and divisions or municipalities had operated major shifts in activity programming to accommodate project results. Indirectly, interviews with civil society representatives and beneficiaries showed this was not to be the case for municipalities.

Awareness has been created as well amongst producers.

Many products (manual, reports) have been institutionalised within MARN although that may be less the case of municipalities that mostly complain about the lack of solidarity and collaboration between them.

Finally, MARN is now one of the few central Government institutions with a strong presence in the project area.

Institutional impact RATING: *Significant (S) for MARN*

Minimal (M) for municipalities (and negligible for other sectors)

3.3.9.4 Environmental Impact:

The impact of the project, apart from the GEF objectives, is minimal except for (i) hyacinth removal as it restores open water and reduces eutrophication risks and (ii) maintenance of dry forests with the creation of firebreaks.

The impact of BPA training is probably negligible as too small-scale.

There may be a negative impact with PA constructions, should impact assessments be not necessary for small infrastructures.

Environmental impact RATING: *Significant (S)*

3.3.9.5 Impact on Gender:

The project did not address specifically gender in biodiversity conservation. That does not mean that women were not targeted as, numerically, there is a significant proportion of female household heads in the project area (the result of the armed conflict).

Overall, women were systematically more numerous in community associations and as project volunteers (e.g., solid waste campaigns in wetlands)

Impact RATING for gender: *Not Relevant (NR)*

3.3.9.1 COVID19 Impact:

As for any project on the planet, the pandemic has greatly disturbed development aid with extensive implementation delays, altogether shutdowns, objective changes to address the pandemic.

The situation was no different in this project with a complete shutdown for 6 months and a restart from August 2020 onwards. Although the project had already secured an extension to 2021 it resulted in moving most if not all 2020 activities towards 2021 and the end of the year 2020. Another 'COVID19' extension was eventually granted by UNDP.

As for adaptive management, the project started to use remote communication means for delivering training and for project monitoring although it might be more difficult if not impossible to adjust when training involves on-site demonstration. By 2021, some normality had returned with the restart of on-site activities (e.g., solid waste campaigns).

Overall, the interviews showed that the pandemic had a serious impact on on-site activities resulting in insufficient monitoring and follow-up of beneficiaries. This is one more reason to advocate for project follow-up by its closure.

4. Main findings, Conclusion, Recommendations, Lessons Learned

4.1 Main findings

Relevance and design: the project has been in line with both Government and donor's policies in including the national environment policy and biodiversity strategy, UNDAF's priorities on resilience and conservation, and GEF's strategy on biodiversity. It has responded to the pressing need to secure protection for vulnerable wetlands to ensure their conservation in face of a number of threats.

It has addressed two types of shortcomings:

(i) The lack of wetland protection by increasing in number and area the wetland protected areas and making sure that relevant stakeholders have the capacity to manage them – with success -

(ii) The threats of related to pollution, unsustainable use of wetland natural resources and invasive species proliferation - much less successful –

The theory of change reconstructed from the project showed it had captured all elements but there were excessive simplifications so as to accommodate outputs that eventually would have been very impactful.

Effectiveness and results: the project has been very effective in protecting wetlands

For the outcome on expanding the coverage of PWII and institutional capacity building, the result made an overall satisfactory contribution to the project objectives:

(i) PA Declarations were passed exceeding project target for areas under protection

(ii) MARN staff was trained with a number of training tools produced and local MARN staff (park rangers) are now better equipped and aware of wetland status and threats; capacity building covered as well other stakeholders (UAM, MAG and other ministries) and despite awareness-raising, there is little evidence that this resulted in a change of paradigm when dealing with wetland protection: several agreements, in particular with UAM, were signed but municipalities remained reactive to project activities and did not engage any significant resources beyond it

(iii) The support to RAMSAR committee was providential in operationalising the committees but these lack legitimacy and lobbying capacity to secure local initiatives/proposals

(iv) The project had planned to secure a financial mechanism for income increase for protected areas. The results fell short with just infrastructures construction/rehabilitation as a way to contribute to a future income generation mechanism – yet to operationalise -

Under the outcome on reducing threats, the project did not contribute much to the objectives although there are variations:

(i) The project was unsuccessful in reaching interinstitutional agreements with a number of central government organisations to ensure closer collaboration and create awareness when designing new sectoral strategies and policies

(ii) The activities on invasive species eradication took a turn by MTR with the removal of one output: cormorant eradication was no longer considered as the species is not invasive with proliferations resulting more from unbalanced ecosystems; water hyacinth removal strategy was changed as well with removal capacity problems and transfer of ill-adapted material from coastal wetland to Cerrón Grande (outside of project area for that particular activity). Output target was not reduced accordingly but the target was achieved considering the removal from Cerrón Grande. There was successful coordination of action with CEL on this activity.

(iii) Monitoring tools were designed to assess water quality (not yet operational) and monitor invasive species through remote sensing (operational but in question by project's end as operated by commercial firms). If operational they could help support MARN in reorienting its priorities

(iv) There were mixed results on the divulgation of BPA: on the one hand, the activity was too small-scale to be impactful and the economic conditions did not enable much adoption but on the other hand, it raised a lot of interest from beneficiaries in learning more about their production system and their impact on the environment.

(v) This was accompanied by an output on setting up a green certification scheme; this output was out of reality in terms of requirements to be achieved and only a study was drafted; it had little or no contribution to the project objective

The project contributed satisfactorily to GEF's Global Environmental Benefits on wetland protection and conservation but less so for its sustainable use.

Overall, the project has been very ambitious in relation to the problems at stake and lacked interinstitutional coordination if not close collaboration as the issues impacting wetlands cover different sectors. There is little evidence that the project produced negative effects and replication and scaling-up remained limited. The project did have a strong demo effect in the sense that many beneficiaries showed interest in newly introduced BPAs.

Efficiency and finance: the project was very efficient as it managed to exceed the original targets with PA acreage. There was a nearly four times ratio for co-financing.

Adaptive management should be highlighted in this project with a number of adaptative measures s to ensure implementation as smooth as possible: the original management structure did not function well enough with extensive delays that affected the project and resulted in co-cost extension requests; This management structure evolved from a small PCU supported by consultants to a 'PMU' with a contracted technical team that allowed delivery acceleration. This resulted in annual planned/actual budget gaps narrowing steadily over the years until the COVID pandemic. Other adaptations following up on the M&E system and MTR included removal of one activity (Cormoran eradication) and several adaptations for others (e.g., hyacinth removal machinery transferred to another area, fee collection system changed into support to PA infrastructures construction and rehabilitation). More changes had been required at MTR stage but were not implemented – possible as too disruptive for the project -.

Both UNDP and executing partner (MARN) underperformed concerning the support provided to the project: MARN support was insufficient with ad-hoc technical support – no assigned counterpart – and a difficulty to transform several draft outputs into final ones (e.g., inter-institutional agreements and reports/proposals remaining at draft stage). UNDP provided little steering in relation to its role as a facilitator at institutional level and custodian for transparency and openness (steering committees with under-representation of stakeholders).

COVID19 was disruptive with a complete halt of activities for 6 months but a one-year extension had already been approved. The project benefitted from another 3 months COVID extension that allowed for smooth project closure. While the implementation was adapted with as much as possible remote activities, it had a negative impact on actual follow-up may have contributed to less than anticipated ownership and empowerment at local level.

Sustainability and ownership:

At beneficiary level, there was overall good participation with, at first, a wait-and-see attitude for farmers and more difficult mobilisation for later solid waste campaigns. As minimalities were mostly reactive to the project, it remains to be seen whether more solid waste campaigns could be organised as the project did not fundamentally change municipality budget allocation for environment-related activities. As for BPAs, the results vary but there is some adoption of low-cost techniques and no adoption for techniques that require investment as there is no premium price for sustainable produce.

Most if not all activities that benefit and enhance MARN's capacity are likely to be sustained on a long-term basis (capacity training materiel, enhanced capacity to manage better PA, business and development plans, monitoring systems). As for invasive species, it is unlikely that MARN will provide continuous support for hyacinth removal but it has a monitoring system that could be finetuned to predict water hyacinth proliferation and implement eradication campaign's when and where required.

The financial and economic risks to sustainability are high with limited MARN funds for implementing management plans and organising invasive species eradication although this may change with subsequent donor fundings. Socio-political risks are also high with local government changes unpredictable and more focused on short-term population preoccupations (3-year terms) than on long-term actions required for environment-related issues. It is also unlikely that MARN will pursue support and follow-up of activities that are not necessarily within its core business (e.g., BPAs, solid waste).

Results ownership can be considered as high for all activities that fall within MARN regular set of activities and low for all others, in particular municipalities. Civil society organisations, nonetheless, have demonstrated a special interest in the project with good participation and even with initiatives of their own like project preparations, propositions of activities, that however found so far limited acceptance.

Contribution to impact:

The project impact on the protection status of wetlands has been great with the official declaration of several wetlands including critically endangered mangroves. Several activities are contributing to strengthening MARN's management of wetlands with capacity building, monitoring systems, upgrading and constructing relevant infrastructures to enable more tourism-related activities and financing PAs. The economic impact of the project so far is low because (i) COVID19 has dashed all hopes for a swift return of

tourists and (ii) BPA adoption remained limited as ill-adapted to the current agricultural production systems.

Gender Equality:

The initial gender analysis concluded that beneficiary activities were somewhat gendered (e.g., male-dominated sugar-cane growing) but not on an exclusive basis. The project took into consideration this and included as much women participation. It varied as per activities with most women representation in volunteer activities. The project took advantage, as well, of women leadership in civil society organisations and communities (e. g., several RAMSAR Committees headed by women and key women beneficiaries for some BPA micro-projects).

Other cross-cutting issues:

The project did not target poverty reduction and sustaining livelihoods; still, at individual level, the adoption of several BPAs techniques has enhanced the quality of life and solid waste removal, created a lot of satisfaction but this remained anecdotal with the project's scope.

As for climate change, extensive support was provided as part of the training material under wetlands for staff of central and local institutions. MARN should have by now been equipped with a water monitoring system that should enable it to assess water quality changes according to varying climate conditions.

Stakeholder engagement and partnership:

Participation has been difficult in this project because most stakeholders had a limited understanding of the role of wetlands. This was one of the reasons behind this whole project: create awareness on wetlands and develop a more positive and less exploitative behaviour towards wetlands. This was not entirely successful: most institutions at central level remained closed to the idea but, there was some support (including agreements and limited financial and logistical support) by several (but not all) municipalities. There is little evidence that further commitment should be kept running beyond the project timeframe. There was much more engagement from civil society organisations suggesting that there was a relevance and synergy of these issues at this level.

The project was run in parallel with a JICA-funded project covering wetlands as well in the southern-eastern part of the country. There was no significant activity overlap as MARN was overseeing both

4.2 Conclusion

The project's objectives have been key to enhancing the protection status of wetlands; the project made significant strides in improving the management of wetland PAs. It has enhanced the capacity of MARN with an increase both in area and of the number of protected areas.

As a result of Component 1 focusing on SNAP, MARN is now, institutionnally, more prepared to manage protected wetlands due to extensive capacity-building efforts both at central and local levels with better equipped, more knowledgeable park rangers.

Component 2 on threat reduction has contributed to the objective but its impact has been very small in relation to the magnitude of issues; hence, the problems remain. In operational terms and despite relative

isolation within MARN (no counterpart but technical support), the PCU has managed to deliver most if not all outputs. Several outputs related to legalisation and agreements were not finalised however; they were all drafted but their endorsement and/or approval was no longer the PCU's responsibility. These subsequently fell under MARN's and other ministries decision-makers and mayors. Therefore, it remains to be seen how effective, a number of these will actually be in the future, at the Terminal Evaluation they remain untested.

Although the project has raised awareness on the precarious status of El Salvador's wetlands, it did not go further with effecting significant behavioural change, most notably at the local level. The project did address several threats[52] through a mix of results focussing on both the causes (e.g., agrochemical pollution reduction) and the consequences (e.g., hyacinth removal). However, it did not produce a compelling reduction of these threats because they are complex, intertwined and several of them are out of the scope of GEF / MARN areas of interventions[53].

Finally, the lack of interagency collaboration (e.g., MAG & MARN, MARN& MOPT, MARN and municipalities[54]) should remind donors that, as multilateral organisations, they also have a role to play in bringing institutions togetherby utilising their "soft power". The collaboration – be it on an informal basis – between CEL and MARN for hyacinth removal is a sign that it can be possible as long as it is based on equal terms.

The complexity of the issues and lack of collaboration between institutions with widely different aims and agendas/mandates requires the creation of an 'enabling environment' if not a national wetlands strategy to facilitate interinstitutional collaboration.

In a conclusion, this project has been effective in increasing the area of wetlands under protection, increasing the capacity of MARN to manage these areas while at the same time It was also too ambitious with wetland threats; While it did identify many of these threats, it avoided some critical issues because of significant difficulty in addressing them and they did not fall within GEF's main activities for financing (e.g., treatment of industrial and urban effluent). As for other threats (e.g., agrochemical pollution and solid waste), the stakeholders at the formulation stage lacked an overall understanding of the problem – in particular, a value chain approach to raise stakeholders' awareness for tackling agricultural pollution and the need to tackle solid waste at its source, that is, in urban environments) once again underscoring the need for support of a different order of magnitude.

Any new programme focussing on wetland BD degradation reduction must address a series of issues (environment, sanitation, economic, tourism-related) differently as it was under this project:

[52] It could not address all of them (e.g., industrial waste, urban and industrial effluent spewed into the rivers upstream of wetlands)

[53] Example1: output on "reducing agrochemical pollution": the project divulged BPAs that did not encounter much success possibly because it did not address other issues in order to be effective: e.g., premium price for meat /sugar cane produced sustainably, reviewed commercialisation strategy for premium products, the need for a demand… Example2: support to enhancing UAM in addressing waste reduction: capacity trainings resulted in little behaviour change because the project's impacted municipalities bore the brunt of solid waste and effluent pollution originating from other municipalities outside the project's area

[54] Several agreements / MoUs were signed but remain anecdotical in nature as they did not result in changes of paradigms at municipal level

- The complexity of threats, hence the need for a holistic approach, not tackling each issue with a single solution but a package of responses
- The need for a (more horizontal) multi-sectorial approach both at ministerial level (collaborate) and municipal levels (cooperate), therefore considering the need for a full-scale programme or at least a convergence of existing sectoral interventions
- An agile project implementation structure (PCU/PMU) that can tap in multiple resources, hence not confined to a single sector or department within a ministry but with responsive sectoral counterparts

A summary of the evaluation ratings is provided in Table 18**.**

Evaluation Ratings			
1. Monitoring and Evaluation	**rating**	**2. IA& EA Execution**	**rating**
M&E design at entry	MS	Quality of UNDP Implementation/Oversight	MU
M&E Plan Implementation	S	Quality of Execution - Executing Agency	MU
Overall quality of M&E	S	Overall quality of Implementation / Execution	S
3. Assessment of Outcomes	**rating**	**4. Sustainability**	**rating**
Relevance	HS	Financial	ML
Effectiveness	MS	Socio-economic	U
Efficiency	S	Institutional framework and governance	L
Overall Project Outcome Rating	MS	Environmental	L
		Overall likelihood of sustainability:	ML

Table 18: Evaluation ratings

4.3 Recommendations

The recommendations for the remainder of the project are to ensure a compelling transfer of project information and knowledge to relevant stakeholder

(i) Project closure seminar

While there is no more time to devise an exit strategy, seminars are often organised to celebrate project closure but its primary function is to ensure that project information and knowledge is in the right hands. It is also a necessary exercise for MARN decision-makers to present/formalise how they are going to institutionalise project results (e.g., new budget lines for training, integration of some results in future donor-funded projects, plans to use project results for declaring new PAs).

(ii) Ensure follow-up of (BPA) micro-project initiatives and municipality initiatives

Given the absence of MAG in the Steering Committee, it is unlikely at this stage that it will take over even though they are well-tuned with training in good land husbandry techniques. That does not mean that MARN does not have the personnel. At the very least, one or two staff should be assigned part-time for the next 12-24 months to follow-up on beneficiaries and municipalities (e.g., monitoring habit of dropping empty containers to collection points and its follow-up by municipalities, assessing sugarcane growers and livestock breeders associations activities on BPA, assessing any multiplication effect for BPA that require little investment, checking Iberplastic collection centres operationality and whether dump trucks still

collect solid waste in rural communities for committed municipalities …). This could be done in a variety of forms: simple questionnaire and annual visit of all beneficiaries or free some time from park rangers to do such a survey quarterly with data transfer through newly equipped park rangers' premises as an addendum to their regular information reports.

(iii) JIT hyacinth eradication

Now that MARN is about to initiate a chemical and physical parameters' recording system and is already using a satellite imagery analysis system that monitors water bodies, it should develop it further and start planning removal campaigns that pinpoint when and where to remove most effectively and economically hyacinth. This should complement fish monitoring as to whether hyacinth removal is having an effect on fisheries recovery in El Jocotal / Olomega.

(iv) Support to municipalities

Solid waste removal campaigns are ineffective if there is no municipality commitment to set up a monitoring and enforcing system

- MARN should concentrate its efforts on the most proactive municipalities and reward them accordingly
- Contact should be made with municipality associations and propose institutional strengthening through FIAES as a strategy to create lobbying capacity to federate municipalities

(v) Capacity building

MARN must take advantage of environmental education material produced by the project and initiate/pursue large-scale environmental education campaigns in buffer zones. Interviews have shown that it is not on top of priorities (MARN and municipalities) and again a change of paradigm is necessary to ensure that financial resources are allocated for it on a more permanent basis.

Environmental education targeting children and adolescents through civil society organisations (RAMSAR Committee, ADESCOS, local NGOs) and schools, is one of the most effective activities (highest value for money) to create awareness and to achieve fundamental and sustained behaviour change.

4.4 Lessons learned

From both the design and actual implementation of the project, a series of lessons learned can be drawn and should be considered for future interventions:

(i) Project design and budget allocation:

The budget allocation at the project formulation stage (see Figure 3 - planned budget) was typically skewed as too optimistic without any period of low delivery corresponding to the project initial operationalization period (inception workshop, purchase of initial equipment - cars, recruitment of staff, baseline studies and consultants).

Most if not all projects experience an initial period of very low project activity that is not considered by project designers who plan for immediate delivery of activities; typically, the budget allocation will follow a linear or logarithmic spending curse (scenarios a. or b. in Figure 4); this is in contradiction with any real-world situation, which is why all projects experience major budget delays with reallocations during the second half of the project and need to accelerate delivery often at the expense of quality. This puts unnecessary pressure on project teams that are unable to follow up PRODOC results framework and work plans, inevitably leading to suboptimal delivery and systematic requests of project extensions. In a real situation, projects follow more of a sigmoid delivery curve (scenarios c. or d. in Figure 4) as for this project (see Figure 3 - actual budget).

It is, therefore, necessary at the formulation stage to ensure development project implementation in real conditions with the inclusion of an extensive inception period to allow for initial project operationalization. This can have significant positive consequences as it will allow the project team to follow better the PRODOC framework with more logical activity sequencing and allow progressive delivery more in tune with reality.

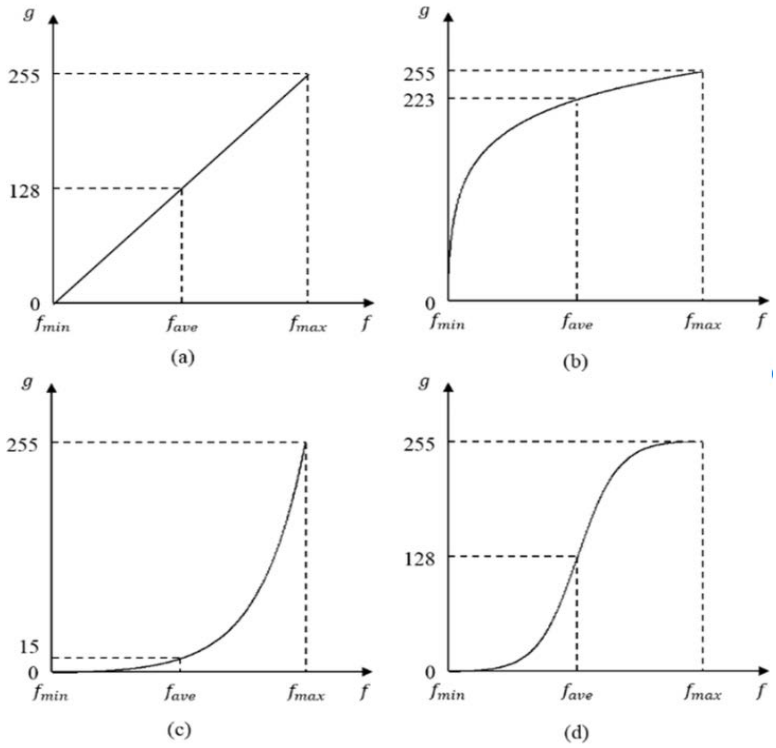


Figure 4: Four types of grey-level transformation. (a) Linear, (b) logarithmic, (c) exponential, and (d) sigmoid

(ii) Enhancing municipality ownership

Municipalities have shown little interest in wetlands and the environment in general, and focus their main resources on the urban environment, even for small urban centres. This is despite extensive efforts calling for their participation in most on-site project activities without much feedback afterwards. The reasons may be multiple (political lines, insufficient collaboration with the central Government, lack of solidarity

between municipalities) but financial resources remain key for mainstreaming any thematic – including environment -.

MARN (and other ministries) must operate a change of paradigm in its relationship with municipalities, by no longer viewing them as development aid recipients but as responsible partners that should be able to tap in resources (mechanisms can vary from direct funding to bidding as per common agreements). The appropriation will be all the easier if municipalities are at the forefront of local wetland environment strategies related to solid waste, and chemical container recycling among others.

(iii) Addressing wetland degradation complexity

The complexity of wetlands biodiversity loss requires a multipronged approach based on multisectoral interventions at central and local levels: a programme approach to wetland degradation (that can also be viewed as resource-intensive agriculture in buffer zones, a poverty issue, urban sanitation and industrial problem…) should be the result of an all-encompassing wetland strategy covering all productive and non-productive sectors, possibly the result of interinstitutional dialogue through a Wetland Round Table. This would clarify the need for action from relevant stakeholders (including ministries, municipalities, civil society, private sector) and orient donors accordingly.

(iv) Intervention management structure (PCU – PMU)

Considering what was indicated above, whether project or program, the implementing structure must be strategically located to tap in relevant HR and access counterparts easily. This would require in the case of a project locating it under the Minister or under the GEF focal point for a GEF-funded project or as an *ad-hoc* structure under the prime minister in the case of a multisectoral programme.

(v) Project governance:

The project governance mechanism through the Steering Committee was very much limited in terms of participation as it included most of the time only UNDP and MARN. These governance structures must be inclusive for the sake of transparency but also efficiency. Indeed, participating stakeholders are better aware of project status and more inclined to own results as they can provide an informed opinion on project conditions – on-site -.

It should have included at the very least (maybe as observers only) representatives of the civil society, several relevant Government sectors (including MAG but others as well), representatives of municipalities or municipal associations and relevant donors (e.g., JICA as a minimum).

Future project design must have more inclusive governance structures considering what was mentioned above.

(vi) Role of UNDP

While UNDP did provide project oversight at steering committee level, ensuring administrative and financial compliance, there has been little evidence that UNDP facilitated interagency dialogue in this project, e.g., bridging gaps between MARN and MAG (or even MOPT). Neither was the lack of participation in steering committees reversed or at least flagged out. Both the review of documents and interviews have shown that it remained narrowly project-focused and procedural. One of the reasons (although there might others internally) might be the rotation of UNDP staff (4 officers during the project lifetime) that did not allow them time to build up network relationships to facilitate that process.

UNDP, as a multilateral agency, has a role to play at that level as it can call out national institutions for dialogue and promote relevant representativity and participation. This is even more important as MARN does not have the budgetary clout to significantly bend government action.

(vii) Usefulness of baseline studies

Experience has shown that most baseline studies result in a long process often not finalised by MTR. Yet, these exercises have value only if integrated at project start-up.

UNDP needs to revisit the mechanism for initiating baseline studies, alternatively: (i) baseline studies should be integrated into PPG, with TRAC funds if necessary, meaning they would be ready at project signature, TORs drafted by the PPG team during formulation, (ii) baselines studies procurement should be initiated immediately after Government project signature through direct UNDP procurement (without project board approval / before PMU contracting), and be ready ideally 1 year after project signature, when the PMU is in place. This would require TORs integrated into the PRODOC beforehand.

(viii) Project outreach and outputs spreading

As per MTR estimate, the project investment has been particularly low (e.g., US$/km²) – at least 10 times lower than other similar environmental interventions. While this may be all arbitrary calculations, there is no doubt that the given budget in relation to the project area has resulted in thinning out beneficiary participation. This was obvious with the limited selection of BPA beneficiaries and lack of follow-up (heightened up by COVID though) and the actual number of farmers that did adopt some BPA measures. This resulted in a very limited impact. The project formulation stage must balance (i) budget with enough funding to ensure some impact (ii) the number of outputs to ensure an integrated approach, and (iii) geographical coverage optimisation to ensure resource consolidation and impact.

(ix) Project area and transport

The project at the formulation stage accounted for a reduced coordinating team. No specific transport was therefore included in the project. This is logical and most of the time, the implementing partner has all the logistics (often accounted for as co-financing) for the PCU. This project had a very reduced transport budget line and had to rely on MARN vehicles that are already under pressure for transport to project areas with issues of delayed or rescheduling of on-site meetings.

For projects requiring limited transport in isolated areas (making own personnel vehicle use, a delicate issue), the design stage of the project must accommodate enough funds for car rental.

(x) MTR recommendations

While donors avoid logframe changes as much as possible, the MTR produced a series of relevant recommendations such as removal of the output on cormorant eradication, the need to review targets. These resulted in several adaptations that should have led to a more comprehensive review of the project. Several recommendations were implemented although it would have been a good opportunity to review the log frame and adjust it better to the reality.

5. List of Tables

6. List of Boxes

7. List of Figures

8. Annexes

Annexe 1: Terms of Reference

Terminal Evaluation of the Project:

"Conservation, sustainable use of biodiversity, and maintenance of ecosystem services in protected wetlands of international importance"

I. INTRODUCTION

In accordance with UNDP and GEF M&E policies and procedures, all full- and medium-sized UNDP-supported GEF-financed projects are required to undergo a Terminal Evaluation (TE) at the end of the project. This Terms of Reference (ToR) sets out the expectations for the TE of the full-sized project titled "Conservation, sustainable use of biodiversity, and maintenance of ecosystem services in protected wetlands of international importance" (PIMS 5257) implemented through the Ministry of the Environment and Natural Resources (MARN). The project started on July 12th, 2016 and is in its 4th year of implementation. The TE process must follow the guidance outlined in the document 'Guidance For Conducting Terminal Evaluations of UNDP-Supported, GEF-Financed Projects'.

1. PROJECT BACKGROUND AND CONTEXT

The project, Conservation, Sustainable Use of Biodiversity and Maintenance of Ecosystem Services in Protected Wetlands of International Importance was developed to support the implementation of the national biodiversity strategy. It is funded with a Global Environment Facility (GEF) grant of US$2,191,781.00. The project responds to the GEF biodiversity strategy and the Convention on Biological Diversity (CBD) Conference of the Parties (COP) mandate, as well as the United Nations Development Assistance Fund (UNDAF) 2016-2021

The project is implemented in three wetlands of international importance located in the eastern part of El Salvador: Olomega Lagoon, El Jocotal Lagoon and Jiquilisco Bay, with specific interventions in the protected wetlands of international importance (PWII) Jaltepeque Complex, the Gulf of Fonseca and CerrOn Grande Reservoir.

The project strategy has two outcomes (components): the extension of the national system of protected areas in the wetlands; and the management and control of threats by pollution and invasive species. These two outcomes are to be achieved through 18 outputs leading to the achievement of the project's four main objectives:

> To increase the coverage of the protected areas to 37,710 ha, including the marine waters adjacent to the wetlands.
>
> To increase the management effectiveness score by 10 per cent in the wetlands of international importance of Jocotal and Olomega Lagoons and Jiquilisco Bay.
>
> To achieve stability of populations of four threatened species and one of economic relevance. To increase the financial sustainability score by 100 per cent for Jocotal, Jiquilisco and Olomega.

In March 2014, the GEF approved the project concept. The preparation phase was developed between May 2014 and December 2015, when the ProDoc was approved by the GEF Board. The implementation of the project began in 2016. The start-up workshop took place in November 2016. The mid term review (MTR) was conducted in March 2019. The project was originally scheduled to end between April and June of 2020. As recommended by the MTR an extension was granted to end between June and September 2021. The total budget amounts to US$ 11,106,447.55 (US$2,191,781.00 from GEF; and US$8,066,666.55 from co-financing)

The project is implemented under the national implementation modality (NIM) of the United Nations Development Programme (UNDP). The Ministry of Environment and Natural Resources (MARN[1]) is the implementing partner and is accountable for project's results. The Project Board is chaired by the MARN, with the participation of UNDP and the Ministry of Agriculture and Livestock (MAG), which includes the fisheries authority. The MAG had a key role in the project given its agricultural and fisheries components. In addition, an advisory body composed of the MAG, the Ministry of Tourism (MITUR) and the Environmental Investment Fund for El Salvador (FIAES), would have to be established.

The UNDP responsibilities include the disbursement and accountability of project funds (according to annual work plans) and quality control. UNDP carries out its responsibilities through its Country Office and its Regional Coordination Unit (RCU).

The project management structure is flexible to adapt to possible changes during the implementation of the project. The project coordinator, hired by MARN, manages the project on daily basis and to ensure the achievement of the expected products complying with the required quality standards and within the established time limitations.

The project coordinates activities with other initiatives related to wetlands, including: the *Call To Action of FIAES* in 2012 to finance activities to solve environmental issues in wetlands of international importance; the National Program for the Restoration of the Ecosystem and Landscapes of MARN, in particular for the management of micro-wetlands in the lower part of the *Rio Grande de San Miguel* basin; the Water Fund project (Spanish Agency for International Development Cooperation -AECID), for the restoration of mangroves, the management of micro-wetlands related to this hydrographic basin, and the acquisition of a barge to mechanically extract the Hyacinth from water from affected HPII; and with the initiative financed by JICA (2015) for the sustainable management of the Protected Wetlands of International Importance (PWII) *Laguna de Olomega* and *Laguna Ellocotal.*

The project was born as a solution to the multiple threats of the PWII of El Salvador and its biodiversity.

Despite of the limited territorial extension, the country has numerous wetlands of regional and global importance, including six marine-coastal and inland wetlands of international importance, or RAMSAR sites. El Salvador's wetlands provide numerous ecosystem services, such as habitat for biodiversity, carbon storage, provision of food, wood and firewood, recreation and scenic beauty, and flood control and storm protection. El Salvador's coastal-marine wetlands include important mangrove areas in northern Central America, as well as various types of inland lakes.

Since 1950, it is estimated that the mangrove forest area has decreased by 100,000 ha. in the 1950s to about 40,000 ha. at present, leading the loss of a significant amount of habitat for highly vulnerable species and a wide range of biodiversity.

The main threats to PWII and their biodiversity include: a) the expansion of agricultural and livestock activities, including logging and burning, as well as the contamination and eutrophication of water bodies; b) the illegal transformation of wetlands due to the demand for land for housing, agricultural crops and grazing areas for livestock; c) the uncontrolled use of agrochemicals that cause eutrophication and contamination of wetlands due to discharges that also promote the development of algae and invasive plants at levels that literally suffocate the wetlands, therefore, affecting biodiversity, traditional fishing and other activities; d) the accumulation of solid waste generated in urban areas, which represents a threat to wildlife when they ingest toxic particles from the waste; e) the presence of invasive species; f) unsustainable extraction of resources, including fishing with destructive methods such as the use of explosives; g) floods related to climate change that cause the loss of forest cover, reduction of populations of threatened or endangered species, as well as the loss of human life, infrastructure and crops; and h) salinization of surface water due to the alteration of the hydrographic basins and the influence of the Pacific Ocean.

[1] **As its acronym in Spanish**

Before the COVID-19 Pandemy, the country has undergone significant changes in the recent years. The Salvadoran has had a moderate growth that has not exceeded 2.6 per cent of annual GDP since 2013. The slow economic growth implies a slow reduction in the incidence of poverty. Although poverty incidence fell by 6 points between 2015 and 2017, from 34.9 per cent to 29.2 per cent, almost 40 per cent of the rural population are poor. Emigration, mainly to the United States, remains an attractive option for a large part of the rural population. Since the beginning of the 2000s, the population has grown at a rate of 0.5 per cent per year. In the project's wetlands, the populations are clearly concentrated in the urban centers.

The COVID-19 pandemic has hit and generated the entire world.

El Salvador, like many countries, established social distancing measures in March 2020, which lasted until August 2020. As in other places, the measures generated economic and social crises that have not yet been fully quantified. Although a slow and gradual recovery is expected between different sectors, at the macroeconomic level, possible transmission routes have already been indicated by which emerging economies may be affected.

Salvadoran society continues to be threatened by criminal violence. Although the incidence of the homicides has decreased significantly since 2015, when it reached 105 per 100,000 inhabitants. Despite the significant reduction in homicidal violence, it is important to remember that other unaddressed forms of violence persist in the context of the COVID-19 pandemic.

The MTR pointed out that the last municipal elections, held in March 2018, did not result in changes in the implementation of the project or in the work with the municipal environmental units, despite the victory of the opposing party. However, the presidential elections held in February 2019, disrupted the national political scene with the defeat of the two main national parties.

2. TE PURPOSE

Consistent with the UNDP Evaluation Guidelines, the evaluation is part of the UNDP Evaluation Plan for the period 2016-2021. As the project is entered in the final phase of implementation, the TE process is scheduled for the first semester of the year.

The TE report will assess the achievement of project results against what was expected to be achieved and draw lessons (lessons learned and successful practices) that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming. The TE report promotes accountability and transparency and assesses the extent of project accomplishments.

It is expected that the TE report will synthesize lessons that can help UNDP and its partners to improve the selection, design and implementation of future GEF-funded initiatives supported by UNDP.

3. TE APPROACH & METHODOLOGY

The TE report must provide evidence-based information that is credible, reliable, and useful.

The TE team will review all relevant sources of information including documents prepared during the preparation phase (i.e. PIF, UNDP Initiation Plan, UNDP Social and Environmental Screening Procedure/SESP) the Project Document, project reports including annual PIRs, project budget revisions, lesson learned reports, national strategic and legal documents, and any other materials that the team considers useful for this evidence-based evaluation. The TE team will review the baseline and midterm GEF focal area Core Indicators/Tracking Tools submitted to the GEF at the CEO endorsement and midterm stages and the terminal Core Indicators/Tracking Tools that must be completed before the TE field mission begins.

The TE approach will center on participatory and consultative process ensuring close engagement with the Project Team, government counterparts (the GEF Operational Focal Point), Implementing Partners, the UNDP Country Office(s), the Regional Technical Advisor, direct beneficiaries and other stakeholders

Engagement of stakeholders is vital to a successful TE. Stakeholder involvement should include interviews with stakeholders who have project responsibilities, including but not limited to executing agencies, senior officials and task team/component leaders, key experts and consultants in the subject area, Project Board, project beneficiaries, academia, local government and CSOs, etc. (See Annex C. Preliminary List of key stakeholders).

Additionally, the TE team is expected to conduct field missions, including the following project sites :

- Pvcrn Jiquilisco bay (Montecristo Island-La Pita), Usulutan
- Pvcrn Olomega Lagoon, El Carmen, San Miguel/La Union
- NPA La Union Bay, La Union.
- NPA Nancuchiname, Usulutan
- NPA El Jocotal Lagoon, El Transit°, San Miguel.

Data collection and analysis methods should be rigorously selected to produce reasonable empirical evidence to meet the evaluation criteria, answer the evaluation questions, and meet its purpose. It **is expected to include a mix of qualitative and quantitative methods to ensure gender responsive evaluation methodology and analysis, credibility, relevance, and validity of the evaluation results.**

The proposal should outline how various forms of evidence will be employed vis-a-vis each other to triangulate the information collected.

Methodologies for data collection may include:

Document review of all relevant sources of information. Semi-structured interviews with key stakeholders Surveys and questionnaires.

Field Visit and on-site

The Independent Evaluator is encouraged to employ innovative online data collection and analysis methods by taking advantage of diverse methods by which technology can be used to support the TE, such as on-line interviews and surveys, mobile **data collection, on-line panels.**

The specific design and methodology for the TE should emerge from consultations between the TE team and the above-mentioned parties regarding what is appropriate and feasible for meeting the TE purpose and objectives and answering the evaluation questions, given limitations of budget, time and data. The TE team must, however, use gender-responsive methodologies and tools and ensure that gender equality and women's empowerment, as well as other cross-cutting issues and SDGs are incorporated into the TE report.

The final methodological approach including the interview schedule, field visits and data to be used in the evaluation must be clearly outlined in the TE Inception Report and be fully discussed and agreed upon between UNDP, stakeholders and the TE team.

The final report must describe the full TE approach taken and the rationale for the approach making explicit the underlying assumptions, challenges, strengths and weaknesses about the methods and approach of the evaluation.

COVID19 MEASURES

As of 11 March 2020, the World Health Organization (WHO) declared COVID-19 a global pandemic as the new coronavirus rapidly spread to all regions of the world. Even though travel to the country is not restricted at this time, due to the spread of the virus, it may not be possible to travel to or within the country for the TE mission; the TE team should develop a methodology that takes into account conducting the TE virtually and remotely, including the use of remote interview methods and extended desk reviews, data analysis, surveys and evaluation questionnaires. This should be detailed in the TE Inception Report and agreed with the Commissioning Unit.

If all or part of the TE is to be carried out virtually then consideration should be taken for stakeholder availability, ability or willingness to be interviewed remotely. In addition, their accessibility to the internet/computer may be an issue as many government and national counterparts may be working from home. These limitations must be reflected in the final TE report.

If a data collection/field mission is not possible then remote interviews may be undertaken through telephone or online (skype, zoom etc.). International consultants can work remotely with national support personnel in the field if it is safe for them to operate and travel. No stakeholders, consultants or UNDP staff should be put in harm's way and safety is the key priority.

A short validation mission may be considered if it is confirmed to be safe for staff, consultants, stakeholders and if such a mission is possible within the TE schedule. Equally, qualified, and independent national consultants can be hired to undertake the TE and interviews in the country as long as it is safe to do so.

4. DETAILED SCOPE OF THE TE

The TE will assess project performance against expectations set out in the project's Logical Framework/Results Framework (see ToR Annex A). The TE will assess results according to the criteria outlined in the Guidance for TEs of UNDP-supported GEF-financed Projects.

The Evaluation will focus on expected and achieved accomplishments, critically examining the presumed causal chains, processes, and attainment of results, as well as the contextual factors that may enhance or impede the achievement of results. It will determine the relevance, impact, effectiveness, efficiency and sustainability of the project, its contribution to Gender equality and Human Rights realization. It will be assessed to additional criteria as per GEF guidelines, including poverty and environment nexus, climate change mitigation and adaptation, capacity development, the results framework, progress to impact, monitoring and evaluation; UNPD oversight, Implementing partner execution, GEF additionality, Adaptative management, stakeholder engagement, financing and co-financing, Social and Environmental Standards.

The evaluation should assess how the project adapted to the new normality COVID-19.

The temporal scope is from October 2016 to June 2021 and it will comprise all components and activities. The TE will examine each criteria at three levels of analysis: design, implementation and results.

The Findings section of the TE report will cover the topics listed below (A full outline of the TE report's content is provided in ToR Annex D. The asterisk "(*)" indicates criteria for which a rating is required).

Findings

i Project Design/Formulation

- National priorities and country driven needs
- Theory of Change
- Gender equality and women's empowerment
- Social and Environmental Safeguards
- Analysis of Results Framework: project logic and strategy, indicators
- Assumptions and Risks
- Lessons from other relevant projects (e.g. same focal area) incorporated into project design
- Planned stakeholder participation
- Linkages between project and other interventions within the sector
- Management arrangements

ii. Project Implementation

- Adaptive management (changes to the project design and project outputs during implementation)
- Actual stakeholder participation and partnership arrangements
- Project Finance and Co-finance
- Monitoring & Evaluation: design at entry (*), implementation (1, and overall assessment of M&E (*)
  - Implementing Agency (UNDP) (*) and Executing Agency (*), overall project oversight/implementation and execution (*)
  - Risk Management, including Social and Environmental Standards

iii. Project Results

- Assess the achievement of outcomes against indicators by reporting on the level of progress for each objective and outcome indicator at the time of the TE and noting final achievements
- Relevance (1, Effectiveness (1, Efficiency (*) and overall project outcome (*)
- Sustainability: financial (*), socio-political (*), institutional framework and governance (*), environmental (*), overall likelihood of sustainability (*)
- Country ownership
- Gender equality and women's empowerment
- Cross-cutting issues (poverty alleviation, climate change mitigation and adaptation, human rights, capacity development)
- GEF Additionality
- Catalytic Role / Replication Effect
- Progress to impact

Main Findings, Conclusions, Recommendations and Lessons Learned

- The TE team will include a summary of the main findings of the TE report. Findings should be presented as statements of fact that are based on analysis of the data.
- The section on conclusions will be written in light of the findings. Conclusions should be comprehensive and balanced statements that are well substantiated by evidence and logically connected to the TE findings. They should highlight the strengths, weaknesses and results of the project, respond to key evaluation questions and provide insights into the identification of and/or solutions to important problems or issues pertinent to project beneficiaries, UNDP and the GEF, including issues in relation to gender equality and women's empowerment.

- Recommendations should provide concrete, practical, feasible and targeted recommendations directed to the intended users of the evaluation about what actions to take and decisions to make. The recommendations should be specifically supported by the evidence and linked to the findings and conclusions around key questions addressed by the evaluation.
- The TE report should also include lessons that can be taken from the evaluation, including best and worst practices in addressing issues relating to relevance, performance and success that can provide knowledge gained from the particular circumstance (programmatic and evaluation methods used, partnerships, financial leveraging, etc.) that are applicable to other GEF and UNDP interventions. When possible, the TE team should include examples of good practices in project design and implementation.
- It is important for the conclusions, recommendations and lessons learned of the TE report to include results related to gender equality and empowerment of women.

The TE report will include an Evaluation Ratings Table, as shown below:

ToR Table 2: Evaluation Ratings Table for project *"Conservation, sustainable use of biodiversity, and maintenance of ecosystem services in protected wetlands of international importance"*

onitoring &Ly_aluation (M&E)	Rating[2]
M&E design at entry	
M&E Plan Implementation	
Overall Quality of M&E	
Implementation & Execution	Rating
Quality of UNDP Implementation/Oversight	
Quality of Implementing Partner Execution	
Overall quality of Implementation/Execution	
sessmer of Ou i	Rating
Relevance	
Effectiveness	
Efficiency	
Overall Project Outcome Rating Sustainability Financial resources	Rating
Socio-political/economic	
Institutional framework and governance	
Environmental	
Overall Likelihood of Sustainability	

5. EVALUATION QUESTIONS

[2] Outcomes, Effectiveness, Efficiency, M&E, I&E Execution, Relevance are rated on a 6-point rating scale: 6 = Highly Satisfactory (HS), 5 = Satisfactory (S), 4 = Moderately Satisfactory (MS), 3 = Moderately Unsatisfactory (MU), 2 = Unsatisfactory (U), 1 = Highly Unsatisfactory (HU). Sustainability is rated on a 4-point scale: 4 = Likely (L), 3 = Moderately Likely (ML), 2 = Moderately Unlikely (MU), 1 = Unlikely (U)

The evaluation questions to be answered are based on UNDP-Supported GEF financed projects criteria, and UN Assessment Group standards (including standards cross-cutting issues), which have been adapted to the context of the initiative to evaluate. The TE Independent Evaluator must adapt these questions and itemize them in their methodological proposal to gather evidence to address the topics required in the descriptive analysis (findings). The TE Independent Evaluator must complete the Evaluation matrix presented in Annex E. The TE Independent Evaluator must consider the three level of analysis (design, implementation, and results) as was described above).

Criteria	Main questions
Relevance	• To what extent are the project's objectives consistent with beneficiaries' requirements, country needs, national priorities and policies, global priorities and partners' and GEF policies and priorities?
Effectiveness	• To what extent have the expected outcomes and objectives of the project been achieved? • To what extent did the project contribute to the Country Programme outcomes and outputs, the SDGs, the UNDP Strategic Plan and Country Programme, GEF strategic priorities, and national development priorities? • What factors have contributed to the achieving or not achieving intended outcomes and outputs? Could the project include alternative strategies? • Has the project produced unintended results -positive or negative? If there are negative results, what mitigation activities are in place? • To what extent the project has demonstrated: a) scaling up, b) replication, c) demonstration, and/or d) production of public good?
Efficiency	• To what extend has the project completed the planned activities and met or exceeded the expected outcomes in terms of achievement of global environmental and development objectives according to schedule, and as cost-effective as initially planned? • To what extent were project funds and activities delivered in a timely manner?
Financing and co-financing	• Are there variances between planned and actual expenditures? What are the main reasons? • To what extend did financial controls allow the project management to make informed decisions regarding the budget? • How many resources have the project leveraged? How have they contributed to the project's ultimate objective?
Implementation, Oversightand execution	• To what extent has UNDP delivered effectively on activities related to project identification, concept preparation, appraisal, preparation of detailed proposal, approval and start-up, oversight, supervision, completion and evaluation? • To what extent has the Implementing Partner effectively managed and administered the project's day-to-day activities? How was UNDP's overall oversight and supervision?
Sustainability and ownership	• To what extent are there financial, institutional, socio-political, and/or environmental risks to sustaining long-term project results? • Have been the country representatives (e.g., governmental official, civil society, etc.) actively involved in project identification, planning and/or implementation? Do they maintain commitment to the project and its results?

Criteria	Main questions
	• How have the implementing partner and UNDP contributed to ensure national ownership?
Contribution to impact	• To what extent are there indications that the project has contributed to, or enabled progress toward reduced environmental stress and/or improved ecological status?
Gender Equality and human rights	• How were gender and human rights considerations integrated in the project's design, including analysis, implementation plan, indicators, targets, budget, timeframe and responsible party? • To what extent have the project contributed to gender equality, the empowerment of women and a human rights of disadvantaged or marginalized groups? • To what extent did women, poor, indigenous, persons with disabilities, and other disadvantaged or marginalized groups participate and benefit from the project? • Was the UNDP Gender Marker rating assigned to the project document realistic and backed by the findings of the gender analysis? • Is there any potential negative impact on gender equality, women's empowerment, disadvantaged or marginalized groups? If so, what can be done to mitigate this?
Other cross-cutting issues	• How have the project activities contributed to poverty reduction and sustaining livelihoods? • To what extend has the project contributed to better preparations to cope with disasters or mitigate risk, and/or addressed climate change mitigation and adaptation? • To what extend has the project incorporated capacity development activities? Were results achieved?
Stakeholder engagement and partnership	• To what extent do project stakeholders share a common understanding and are involved in the decision-making process of the project? • To what extent did stakeholder's participation mechanisms in place lead to empowerment and joint ownership of the project? What should be done better to increase their participation and engagement?
Results framework	• To what extent the project's objectives and components are clear, practicable and feasible within its time frame? • Was there a clearly defined and robust Theory of Change? • Were the indicators in the Results Framework SMART?
Monitoring and evaluation	• To what extent did the Monitoring systems allow the collection, analysis and use of information to track the project's progress, risks and opportunities toward reaching its objectives and to guide management decisions? • Were the budget and responsibilities clearly identified and distributed?
Risk Management, Social and Environment Standards and Adaptative management	• To what extent were risks (both threats and opportunities) properly identified and managed? • To what extent did the project maximized social and environmental opportunities and benefits and ensured that adverse social and environmental risks and impacts were avoided, minimized, mitigated, and managed? What "safeguards" did the project implement? • Were the project's changes based on evidence? Were they properly managed?

Criteria	Main questions
	• How did the project adapt to the new normality COVID-19? Did the project contribute to minimizing the socioeconomic effects of the Pandemic?
GEF additionality	• To what extent has the project lead to additional outcomes? o Global Environmental Benefits o Livelihood improvements and/or social benefits

6. TIMEFRAME

The total duration of the TE will be approximately35 working days over a time period of 17 weeks starting on Apr 26, 2021. The tentative TE timeframe is as follows:

March 31, 2021	Application closes
April 9, 2021	Selection of TE team
Apr 12 23, 2021	Preparation period for TE team (handover of documentation)
Apr 26 May 7, 2021 (10 days)	Document review and preparation of TE Inception Report
May 17, 2021	Finalization and Validation of TE Inception Report; the latest start of TE mission
May 1727 (10 days)	TE mission: stakeholder meetings, interviews, field visits, etc.
May 28, 2021	Mission wrap-up meeting & presentation of initial findings; earliest end of TE mission
May 31June 21 (15 days)	Preparation of draft TE report
June 21, 2021	Circulation of draft TE report for comments
June 2530,2021	Incorporation of comments on draft TE report into Audit Trail & finalization of TE report
July 7, 2021	Preparation and Issuance of Management Response
July 9, 2021	Expected date of full TE completion

Options for site visits should be provided in the TE Inception Report

7. DELIVERABLES

1	TE Inception Report	TE Team clarifies objectives, methodology and timing of the TE	No later than 1 week before the TE Mission: 17 May 2021	TE Independent Evaluator submits inception report in English to Commissioning Unit and project management
2	Presentation	Initial findings	End of mission May 28 2021	TE Independent Evaluator presents to Commissioning unit and project management. Discussion will be held in Spanish.

3	Draft TE Report	Full draft report *(using guidelines on report content in ToR Annex D)* with annexes	Within 3 weeks of end of TE mission: June 21, 2021	TE Independent Evaluator submits full draft report in English to Commissioning Unit; reviewed by BPPS- GEF RTA, Project Coordinating Unit, GEF OFP.
5	Final TE Report* + Audit Trail	Revised final report and TE Audit trail in which the TE details how all received comments have (and have not) been addressed in the final TE report *(See template in ToR Annex I*	Within 1 week of receiving comments on draft report: June 30, 2021	TE Independent Evaluator submits both documents in English to the Commissioning Unit

*All final TE reports will be quality assessed by the UNDP Independent Evaluation Office (1E0). Details of the 1E0's quality assessment of decentralized evaluations can be found in Section 6 of the UNDP Evaluation Guidelines.[3]

8. TE ARRANGEMENTS

The principal responsibility for managing the TE resides with the Commissioning Unit. The Commissioning Unit for this project's TE is UNDP Country Office in El Salvador.

The Commissioning Unit will contract the TE Independent Evaluator and ensure the timely provision of travel arrangements within the country for the Evaluator. The Project Team will be responsible for liaising with the TE Independent Evaluator to provide all relevant documents, set up stakeholder interviews, and arrange field visits. The Project Team will provide to the TE Independent Evaluator and updated stakeholder list with contact details (phone and email) in case the context does not allow to realize the field mission and/or remote/ virtual meetings are included in the technical proposal.

The TE Independent Evaluator is responsible to design, conduct and write the reports. All deliverables will be written in English. However, the field mission and interviews should be held in Spanish.

9. TE INDEPENDENT EVALUATOR

An *independent Evaluator* will conduct the TE. The TE Independent Evaluator has to have *experience and exposure to projects and evaluations in Latin America and/or other regions; He/she will be responsible for the overall design of the methodology and writing of the Inception and TE reports. He/she will assess emerging trends with respect to regulatory frameworks, budget allocations, capacity building, work with the Project Team in developing the TE itinerary, etc. The TE Independent Evaluator can be* **accompanied by a support team member(s) to perform interviews, financial analysis, editing or other administrative tasks. These members won't be assessed to meet the characteristics presented in the requirements below.**

[3] Access at: http://web.undp.org/evaluation/guideline/section-6.shtml

The TE Independent Evaluator(s) cannot have participated in the project preparation, formulation and/or implementation (including the writing of the project document), must not have conducted this project's Mid-Term Review and should not have a conflict of interest with the project's related activities.

The selection of the TE Independent Evaluator will be aimed at maximizing the overall "team" qualities in the following areas:

Requirements	***Points***
Recent experience with results-based management evaluation methodologies (at least five evaluations carried out in the last five years). Experience in project evaluation / review within the United Nations system will be additionally valued. (10 additional points for experience in project evaluation / review within the United Nations System)	*20 points*
Work experience in evaluation, or project design in Latin Americain at least two projects in areas of biodiversity, ecosystems, natural resources or similar (5 additional points for experience with remote evaluations)	*15 points*
Work experience with the GEF or with evaluations carried out by this entity;	*10 points*
Minimum of 10 years of professional experience in the relevant technical areas (environment, biodiversity, ecosystems, natural resources or similar);	*10 points*
Demonstrated knowledge of issues related to gender and biodiversity management; (Experience in gender-sensitive evaluations and analysis will be valued).	*10 points*
Excellent communication skills (two recent reports will be reviewed);	*10 points*
Demonstrable analytical skills (two recent reports will be reviewed);	*10 points*
Master's degree in Ecology, Biodiversity or another closely related field.	*5 points*
Fluency in written and spoken in English and Spanish	*10 points*
TOTAL	***100 points***

10. EVALUATOR ETHICS

The TE team will be held to the highest ethical standards and is required to sign a code of conduct upon acceptance of the assignment. This evaluation will be conducted in accordance with the principles outlined in the UNEG 'Ethical Guidelines for Evaluation'. The evaluator must safeguard the rights and confidentiality of information providers, interviewees and stakeholders through measures to ensure compliance with legal and other relevant codes governing the collection of data and reporting on data. The evaluator must also ensure the security of collected information before and after the evaluation and protocols to ensure anonymity and confidentiality of sources of information where that is expected. The information knowledge and data gathered in the evaluation process must also be solely used for the evaluation and not for other uses without the express authorization of UNDP and partners.

11.PAYMENT SCHEDULE

- 20% payment upon satisfactory delivery of the final TE Inception Report and approval by the Commissioning Unit
- 40% payment upon satisfactory delivery of the draft TE report to the Commissioning Unit
- 40% payment upon satisfactory delivery of the final TE report and approval by the Commissioning Unit and RTA (via signatures on the TE Report Clearance Form) and delivery of completed TE Audit Trail

Criteria for issuing the final payment of 40%:

- The final TE report includes all requirements outlined in the TE TOR and is in accordance with the TE guidance.
- The final TE report is clearly written, logically organized, and is specific for this project (i.e. text has not been cut & pasted from other TE reports).
- The Audit Trail includes responses to and justification for each comment listed.

In line with the UNDP's financial regulations, when determined by the Commissioning Unit and/or the consultant that a deliverable or service cannot be satisfactorily completed due to the impact of COVID-19 and limitations to the TE, that deliverable or service will not be paid.

Due to the current COVID-19 situation and its implications, a partial payment may be considered if the consultant invested time towards the deliverable but was unable to complete to circumstances beyond his/her control.

12. APPLICATION PROCESS[4]

Recommended Presentation of Proposal:

a) **Letter of Confirmation of Interest and Availability** using the template' provided by UNDP;

b) **CV** and a **Personal History Form** (P11 form[6]);

c) Brief description **of the approach to work/technical proposal** of why the individual considers him/herself as the most suitable for the assignment, and a proposed methodology on how they will approach and complete the assignment; (max 1 page)

d) **Financial Proposal** that indicates the all-inclusive fixed total contract price and all other travel related costs (such as flight ticket, per diem, etc), supported by a breakdown of costs, as per template attached to the Letter of Confirmation of Interest template. If an applicant is employed by an organization/company/institution, and he/she expects his/her employer to charge a management fee in the process of releasing him/her to UNDP under Reimbursable Loan Agreement (RLA), the applicant must indicate at this point and ensure that all such costs are duly incorporated in the financial proposal submitted to UNDP.

All application materials should be submitted to the address (insert mailing address) in a sealed envelope indicating the following reference "Consultant for Terminal Evaluation of the project **"Conservation, sustainable use of biodiversity, and maintenance of ecosystem services in protected wetlands of international importance)"** or by email at the following address ONLY: Adquisiciones.sv@undp.org by March 31th, 2021, at 5:00 p.m. CST. Incomplete applications will be excluded from further consideration.

Criteria for Evaluation of Proposal: Only those applications which are responsive and compliant will be evaluated. Offers will be evaluated according to the Combined Scoring method - where the educational background and experience on similar assignments will be weighted at 70% and the price proposal will weigh as 30% of the total scoring. The applicant receiving the Highest Combined Score that has also accepted UNDP's General Terms and Conditions will be awarded the contract.

[4] **Engagement of evaluators should be done in line with guidelines for hiring consultants in the POPP https://popp.undp.org/SitePages/POPPRoot.aspx**

[5] **https://intranet.undp.ordunithom/pso/Support%20documents%20on%201C%20Guidelines/Template%20for%20Confirmation%20of%20Interest%20and%20Submission%20of%20Financial%20Proposal.docx**

[6] **http://www.undp.ordcontent/dam/undp/library/corporate/Careers/P11 Personal history form.doc**

Annexe 2: Methodological Approach

As part of the evaluation, the consultant will examine presumed causal chains, processes, and attainment of results, as well as the contextual factors that may enhance or impede the achievement of results

From the ToR, the analysis will first concentrate on the reconstruction and correction of the Intervention Logic of the project. will result in a clear identification of the changes that the project is aiming to achieve. This will guide the methodology and the evaluation questions.

The multi-stakeholder nature of the programme will require the conducting of interviews for a wide range of stakeholders which will probably highlight a variety of perspectives.

The evaluation methodology will use a mixed approach, predominantly using secondary data analysis and primary qualitative data collection through interviews. Given the COVID pandemic, no on-site visits are to be conducted, hence, the need to crosscheck carefully information through multiple interviews.

Work approach:

The evaluator will use a consultative and participative approach allowing a real-time exchange of the information collected with the main partners of the project.

Basic principles during the evaluation:

- Effective participation of all stakeholders (central and local government, UNDP, civil society, private sector, final beneficiaries/communities);
- Cross-checking of collected data;
- Focus on consensus and approval of recommendations by stakeholders.
- Detailed analysis of project status / extent to which objectives are being achieved
- Transparency of the debriefing

The main modalities for the information and data collection and subsequent processing will be:

- meetings with the different stakeholders as identified in the Evaluation Terms of Reference / MTR / discussed with UNDP.
- collection of secondary data through the research of other sources available at country / international level.
- collection of primary data:
  - direct interviews with the main stakeholders (e.g., institutions)
  - focus group meetings (e.g., possibly final beneficiaries)
- processing / organization of the data / information on the basis of the evaluation questions.

The evaluator will conduct a:

- Summary review and evaluation of the project based on a set of criteria (and indicators) and evaluation questions - relevance, efficiency, effectiveness, impact and sustainability
- Detailed analysis of the project situation that will lead to conclusions and recommendations

The consultant is to develop a checklist of evaluation and thematic questions to be explored further during the interviews; the interview guides (checklists of questions/thematic to discuss) will be produced from these (see annex-4).

Stakeholder's review:

Identified stakeholders include the following:

- UNDP and steering committee members
- Central institutions: project staff, MARN representatives & other ministries, SNAP staff including local/on-site rangers, directors…
- Municipalities: Dpt of Waste, Environment
- Local action groups: community representatives and members, members of action/conservation committees…
- NGO representatives, donors active in similar environments/ co-financers (donors)
- Pilot-project / local action program managers / beneficiaries
- Agreement/protocol signatories
- Selection of consultants for specific project products (e.g., wetland regulatory framework, IS…)
- Project final beneficiaries: individual fishermen, ranchers, farmers, private sector companies, cooperatives

Evaluation operationalization in 4-steps:

(i) Documentary phase: evaluation matrix, checklist of topics and elaboration of questionnaires with national consultant
→ inception report

(ii) In-country mission (remotely):
- 1st round of interviews: UNDP, project team, relevant sectoral Government authorities, other stakeholders (contracted consultants, sub-contractors, other donors…)
- Direct on-site beneficiaries' interviews for selected project sites: municipalities, final beneficiaries…
- 2nd round of (institutional) interviews if necessary
- Debriefing preparation

→ PPT presentation of initial findings

(iii) Data aggregation / analysis / organization in information
→ draft reporting

(iv) Stakeholders & UNDPs' comments
→ final report & audit trail

Annexe 3: Interview Guides and Questionnaires

1. Project coordination team

Relevance:

• What are the main issues that need to be addressed in relation to BD/PA(s) and the productive sectors in wetlands? (in relation to policies)

• What needs were identified to achieve the results (components 1 and 2) (enabling environment and protected areas strengthening)? Which ones were taken into account in the project and why?

• Is there any relevant activity at the start of the project that is no longer relevant now? Is there any non-relevant /unverified activity at the beginning of the project that is relevant today?

• What is the relevance of the initial project assumptions and potential risks / what was done to mitigate these risks? Was a risk mitigation strategy implemented at the start of the project?

Efficiency:

• What are the main problems of project implementation? Internal/ external factors? What measures have been taken to reduce their impact?

• Opportunity to implement activities?

• How do funding gaps affect the overall implementation of the project?

• Availability of financial resources for implementation / timeliness?

• Clearly-defined roles and responsibilities of stakeholders in terms of planning, implementation, reporting (data collection and reporting), M&E? Improvements to consider?

• Are the indicators SMART (results / impact)?

• Is there a mechanism to coordinate project activities with other donor interventions (e.g., co-financing / parallel or competititve implementation)?

• What system of project governance and M&E has been established? How effective is it?

• Degree of contribution of national partners and efficiency to ensure proper implementation of the project / What were the main limiting factors?

• What was the impact on the implementation and achievement of project results if there were co-financing constraints?

• What kind of adaptation measures are being done to improve implementation? Any recommendations?

Effectiveness:

• What are the results (not) achieved? Why? Difficulties?

• Detailed review of each result / activity

• What are the main success factors/ failure of each outcome?

• What are the main constraints to project implementation?

• Is the implementation strategy flexible enough to adapt to changing conditions? Was it adjusted to maximize effectiveness?

• Did you implement the activities differently due to gender specificities?

Impact:

• Are there any (unintentional) positive or negative effects of the project on wetlands?

• Does the project contribute to empowerment / strengthening the responsibilities and capacities of the institutions / final beneficiaries? Through what results? For what purpose?

• Do you anticipate any multiplicative effects (for which activities / results)?

• Impact on gender?

• Are activities contributing to improving BD / the socio-economic conditions of the final beneficiaries / increasing government capacity? Why (not) or how?

• What behavior change have you observed?

Sustainability:

• What results/ achievements are more / less sustainable? How to strengthen them?

• What outcomes are most appropriate for beneficiaries (including institutions); probability of sustainability after project closure / what should we do to improve sustainability?

• Is there any interest and support to implement similar interventions / some project outcomes in the future / by whom / how?

• What is the exit strategy for the project? What mechanism will be (should be) put in place after the project?

2. Institutional Actors

Relevance:

• What are the responsibilities of your institution in relation to BD / linkage to BD and wetlands?

• What are your institution's needs to strengthen BD in your sector / improve the agro-ecological status of (protected) wetlands?

• Did the planned project activities fit the needs of the institution / sector?

• Is the project design based on (i) contextual analysis, (ii) participatory needs assessment?

• Are the selected areas the most vulnerable or strategic? Would you have chosen other areas instead and why?

Efficiency:

• Do activities effectively target stakeholders / respond to the needs of the sector?

• Are there activities that could be more effective in achieving the same results?

• What was your actual involvement (or involvement of your institution) in the project (as executing partner / beneficiary)?

Effectiveness:

• Are planned activities effective enough to achieve results?

• What support has benefited from the project?

• What could have been done to make the project more effective?

• Do you think the results to date reflect the amount of expenditure?

• Did the project take into account gender and vulnerable people? (differentiated activities, gender adaptations, equity in support...)?

Impact:

• What changes +/- has the project made to date in the sector / institution?

• What change in stakeholder behaviour has been observed?

• Have you integrated (or do you plan to integrate) any / project activity into the institution's routine activities (if so, need additional human resources, financial resources / state budget?)

Sustainability:

• Can induced changes be maintained over time?

• Are there mechanisms to adapt to change and maintain the benefits of results? Any suggestions on how to maintain the benefits of the project (fiscal/ financial mechanisms, additional activities...)

• How is your institution committed to achieving sustainable project results?

3. Partners / external actors / collaborating institutions and subcontractors-consultants (co-financing / local implementing partners)

Relevance:

• What is your role in the project?

• What was your contribution to the project to date?

• Have you supported the design / formulation (even indirectly) of the project / have you improved (in)directly to its implementation?

Efficiency:

• Have you received financial /technical /other resources to carry out your activities?

• What are the limits/ problems you faced when implementing planned activities?

Effectiveness:

• Do the implemented activities contribute to the overall project goal / the issues at stake in your area?

• Do you need additional support (from your /other institutions) to improve the effectiveness of the activities you have been implementing?

• Should the project focus more on specific topics / areas?

• What still needs to be addressed to make the project more effective?

• What are the main problems of the project in relation to the issues at stake?

• Integration of gender and vulnerable people into the project?

Impact:

• What changes are the result of the support you have provided regarding beneficiaries / biodiversity and wetlands / your activity

• Is more support needed? What for?

• What is different about the support the project provided?

Sustainability:

• What is the probability that beneficiaries will benefit from the changes induced by the project (with little or no additional activity) (need for follow-up, for other support to complement / consolidate results)?

4. Structures - local groups

Relevance:

• What needs do beneficiaries express in relation to wetland problems / what needs are not addressed by the project?

• What changes have been made in the implementation of the project according to changing needs in the target areas?

Efficiency:

• Opportunity to implement activities? Adaptation of calendars?

• Aligning your activities with project results?

• What are the barriers/ limitations? How are they overcome?

• Organization of team work in the field? (Division of team tasks, preparation / time management, execution)? Adequacy of equipment in relation to workload?

• Logistics? Facilities / Difficulties?

• Procurement of goods/ services versus field situation?

• Coordination mechanism / communication with actors / local stakeholders?

Effectiveness:

• Do project activities contribute to improving the ecological status of wetlands / strengthening PAs (e.g., stakeholder involvement ...)

• Does the project take into account gender? (differentiated activities, gender adaptations, equity in support...)

• Opinion on new fiscal/ financial mechanisms? Some suggestions

Impact:

• What change is the project bringing to the ecological status of wetlands / final beneficiaries? (Increased income, better working conditions, more leisure time, gender ...)

• Positive and / or negative changes? How have the effects of negative changes been limited?

Sustainability:

• Can the changes brought by the project be sustained on a long term basis? How to improve?

• Is additional support needed to sustain these changes on a long term basis?

5. Focus groups - final beneficiaries (fishermen, farmers, livestock farmers, representatives of community organisations)

Relevance:

• What type of problem/ practices lead to environmental degradation in wetlands? Do these problems affect their activities?

• What are the advantages / disadvantages of the project in relation to its work/activities and its involvement in wetlands?

• What benefits are still expected from project activities (explain)?

Efficiency:

• Support received

• Opportunity to implement activities

• What problems/ needs have not been addressed / satisfied by the project?

Effectiveness:

• Is the support received helping to resolve/ improve the environmental status of wetlands

• Do you think the project is addressing key (e.g., economic) issues of the final beneficiaries (including women and vulnerable people)? With what degree of success?

Impact:

• What changes did the Project bring to the final beneficiaries? (Increased income, better working conditions, additional leisure time ...) / What is done differently with the project

• Positive and/or negative changes? How to limit negative impacts?

Sustainability:

• Can long-term project activities or results be supported?

• Is additional support needed? Why?

• How will it contribute to sustainability?

Annexe 4: Mission Interviews – schedule

Date	Time	Name	Function	Organisation
26/4/21	00h00	Start of documentary review		
12/5/21	00h00	Submission of inception report		
21/5/21	16h30	Silvia Guzmán	Analista de Gestión	PNUD
24/5/21	11h00	Silvia Eunice Vides Canas	Ex Ponto Focal	PNUD
26/5/21	08h30	Silvia Eunice Vides Canas	Ex Ponto Focal	PNUD
27/5/21	11h00	Aberdalo Ramos	Especialista en Agricultura Sostenible del Proyecto	MARN
	14h00	Ronald González	Administrador Financiero del proyecto	MARN
	15h00	Karla Hernández	Especialista en Monitoreo del Proyecto	MARN
28/5/21	09h30	Julio Parada	Especialista en Desarrollo Local Sostenible del Proyecto	MARN
	11h00	Paola Parada	Especialista en Educación Ambiental del Proyecto	MARN
	13h00	Walter Zelaya	Especialista Legal del Proyecto	MARN
31/5/21	13h00	Santiago Carrizosa Fernando Pinel	Asesor Técnico Regional Asociado de Programa	PNUD-GEF Panamá GEF Panamá
	14h00	Luís Pineda	Responsable Controlo Pato Chancho	MARN
1/6/21	14h00	Arturo Romero	Ingeniero	Hacienda Concordia - Jiquilisco
	15h00	Don Misael Villafranco	Productor de Caña, Usulután	
2/6/21	09h00	Ariana Bazzaglia Badia	Coordinadora de Proyecto	MARN
	14h00	Don Manuel Marroquín	Productor de Caña, Jiquilisco	
	15h00	Ing. Oscar Vásquez	Productor de Caña	
3/6/21	11h00	Rosa Vilma Rodríguez de la Peña	Directora	Fondazucar
	15h00	Rafael Cerros	Técnico – Monitoria	Fondazucar
4/6/21	12h00	Ryna Ávila	Ponto Focal	PNUD
	14h00	Ariana Bazzaglia Badia	Coordinadora de Proyecto	MARN
	15h00	Cecilia Vides	Asesor técnico	GIZ
	16h00	Ing. Miguel Alberto Gallardo Meléndez	Director General de Ecosistemas Biodiversidad	MARN

7/6/21	15h00	Marcela María Angulo Velasco	Gerente Vida Silvestre	MARN
8/6/21	12h30	Evangelina Martínez	Guarda-Recursos Normandía	MARN
	14h00	Ramón Bernal	Coordinador UAM	Alcaldía Jiquilisco
9/6/21	08h00	Armando Cisneros	Coordinador UAM	Alcaldía El Tránsito
	09h00	Héctor Medardo Bonilla	Beneficiario acuerdos ambientales Isla San Sebastián	
	12h00	Earl Tansy Gómez	Técnico Dirección de Construcción y Mantenimiento de la Obra Pública - San Miguel	MOPT
	13h00	Verónica Liseth Vásquez	Beneficiaria Micro-proyecto Lombricultura Laguna de Olomega	
	14h00	Rene Flores	Guarda-Recursos Puerto Parada	MARN
	15h00	Edwin Guzmán Sorto	Coordinador UAM	Alcaldía Chirilagua
10/6/21	08h00	José María Pineda Díaz	Presidente	Comité Local Ramsar Laguna de Olomega
	09h00	Alessandro Del Forno Enrico Garbellini	Representante El Salvador Ex Coordinador de Proyecto	ISCOS ISCOS
	10h00	Maira Xiomara Guevara	Beneficiaria micro-proyecto Biodigestor - Bahía de Jiquilisco	
	11h00	Israel Ventura Rosa	Beneficiario micro-proyecto sistema agro-pastoril - Laguna de Olomega	
	14h00	Claudia Rodríguez	Técnica en Conservación Cerrón Grande	MARN
	15h00	José Arriaza	Coordinador UAM	Alcaldía Usulután
11/6/21	08h15	Pedro Funes	Beneficiario acuerdos ambientales Isla Chaguantique	
	15h00	Ing. Miguel Alberto Gallardo Meléndez	Director General de Ecosistemas Biodiversidad	MARN
14/6/21	10h00	María Elena Rivas de Palacios	Presidente	Comité Local Ramsar - Bahía de Jiquilisco
	12h30	Verónica Coreas	Participante Campaña Desechos Sólidos	Comunidad La Arenera
	13h30	Francisco Saca	Director CENDEPESCA	MAG
	14h30	Silvia Fuentes	Oficial Administrativo	JICA
15/6/21	08h00	José Ismael Rivas Ferrera	Presidente	Asociación Cincahuite - Sector Puerto Parada - Bahía de Jiquilisco
	08h30	José Arriaza	Coordinador UAM	Alcaldía Usulután
	09h00	Karen Yamileth Orellana Cruz	Jefe Unidad Ambiental	ISTA
	14h00	Saida del Carmen Morales de Bánuga	Directora	Cooperativa ACPAME
16/6/21	07h00	Julio Noyola	Jefe División Cambio Climático	MAG

		Bernardo Napoleón Romero Paz Lucía Alicia Gómez Vaquerano	Ex-Jefe de División de Cambio Climático Ex-Jefe de División de Cambio Climático	MAG MAG
	09h00	Agustín Martínez	Guarda-Recursos, ANP Nancuchiname	MARN
	10h00	Miguel Ángel Ruiz	Ganadero	Laguna El Jocotal / El Tránsito
	14h00	Ariana Bazzaglia Badia	Coordinadora de Proyecto	MARN
19/6/21	09h00	Manuel Maravilla	Ganadero	El Tránsito
24/6/21	14h00	Debriefing: Silvia Guzman Ariana Bazzaglia Badia Ing. Miguel Alberto Gallardo Meléndez Santiago Carrizosa Fernando Pinel Rafael Pleitez Mónica Merino	 Analista de Gestión Coordinadora de Proyecto Director General de Ecosistemas Biodiversidad Asesor Técnico Regional Asociado de Programa Representante Residente Auxiliar y Economista Jefe Representante Residente AD Interi	 PNUD MARN MARN PNUD-GEF Panamá GEF Panamá PNUD PNUD
02/08/21	00h00	Draft report submission		
03/08/21	00h00	Compliance review		
04/08/21	00h00	Complied draft report submission		

Annexe 5: List of Persons Consulted

Name/s of Person/s	Title, Institutional Affiliation
ANGULO VELASCO Marcela María	Gerente Vida Silvestre, MARN
ARRIAZA José	Coordinador UAM, Alcaldía Usulután
ÁVILA Ryna	Ponto Focal, PNUD
BAZZAGLIA BADIA Ariana	Coordinadora de Proyecto, MARN
BERNAL Ramón	Coordinador UAM, Alcaldía Jiquilisco
CARRIZOSA Santiago Carrizosa	Asesor Técnico Regional, PNUD-GEF Panamá
CARROS Rafael	Técnico – Monitoria, Fondazucar
CISNEROS Armando	Coordinador UAM, Alcaldía El Tránsito
COREA Verónica	Participante Campaña Desechos Sólidos, Comunidad La Arenera
DEL CARMEN MORALES DE BÁNUGA Saida	Directora, Cooperativa ACPAME
DEL FORNO Alessandro	Representante El Salvador, ISCOS
FLORES Rene	Guarda-Recursos Puerto Parada, MARN
FUENTES Silvia	Oficial Administrativo, JICA
FUNES Pedro	Beneficiario acuerdos ambientales Isla Chaguantique
GALLARDO MELÉNDEZ Miguel Alberto	Director General de Ecosistemas Biodiversidad, MARN
GARBELLINI Enrico	Ex Coordinador de Proyecto, ISCOS
GÓMEZ VAQUERANO Lucía Alicia	Ex-Jefe de División de Cambio Climático, MAG
GONZALES Ronald	Administrador Financiero del proyecto, MARN
GUZMÁN Silvia	Analista de Gestión, PNUD
GUZMÁN SORTO Edwin	Coordinador UAM, Alcaldía Chirilagua
HERNÁNDEZ Karla	Especialista en Monitoreo del Proyecto, MARN
LISETH VÁSQUEZ Verónica	Beneficiaria Micro-proyecto Lombricultura Laguna de Olomega
MARAVILLA Manuel	Ganadero, El Tránsito
MARROQUÍN Don Manuel	Productor de Caña, Jiquilisco
MARTÍNEZ Agustín	Guarda-Recursos, ANP Nancuchiname, MARN
MARTÍNEZ Evangelina	Guarda-Recursos Normandía, MARN

MEDARDO BONILLA Héctor	Beneficiario acuerdos ambientales Isla San Sebastián
OLANO NOYOLA Julio Alberto	Jefe División Cambio Climático, MAG Ex-Jefe de División de Cambio Climático
ORELLANA CRUZ Karen Yamileth	Jefe Unidad Ambiental, ISTA
PARADA Julio	Especialista en Desarrollo Local Sostenible del Proyecto, MARN
PARADA Paola	Especialista en Educación Ambiental del Proyecto, MARN
PINEDA Luís	Responsable Controlo Pato Chancho
PINEDA DÍAZ José María	Presidente, Comité Local Ramsar Laguna de Olomega
PINEL Fernando	Asociado de Programa, GEF Panamá
RAMOS Aberdalo	Especialista en Agricultura Sostenible del Proyecto,MARN
RIVAS DE PALACIOS María Elena	Presidente, Comité Local Ramsar - Bahía de Jiquilisco
RIVAS FERRERA José Ismael	Presidente, Asociación Cincahuite - Sector Puerto Parada - Bahía de Jiquilisco
RODRÍlGUEZ Claudia	Técnica en Conservación Cerrón Grande, MARN
ROMERO Arturo	Ingeniero Hacienda Concordia – Jiquilisco
ROMERO PAZ Bernardo Napoleón	Ex-Jefe de División de Cambio Climático, MAG
RUIZ Miguel Ángel	Ganadero, Laguna El Jocotal / El Tránsito
SACA Francisco	Director CENDEPESCA, MAG
TANSY GOMEZ Earl	Técnico Dirección de Construcción y Mantenimiento de la Obra Pública - San Miguel, MOPT
VÁSQUEZ Oscar	Productor de Caña
VENTURA ROSA Israel	Beneficiario micro-proyecto sistema agropastoril - Laguna de Olomega
VIDES CANAS Silvia Eunice	Ex Ponto Focal, PNUD
VIDES Cecilia	Asesor técnico, GIZ
VILLAFRANCO Don Misael	Productor de Caña, Usulután
VILMA RODRÍGUEZ DE LA PEÑA Rosa	Directora, Fondazucar
XIOMARA GUEVARA Maira	Beneficiaria micro-proyecto Biodigestor - Bahía de Jiquilisco
ZELAYA Walter	Especialista Legal del Proyecto, MARN

Annexe 6: List of Documents Consulted

Anexo 8.11. Modelo de diagnóstico social y ambiental
CABO BUJAN José Antonio. (2019 MTR "*Conservación, Uso Sostenible de Biodiversidad y Mantenimiento de Servicios del Ecosistema en Humedales Protegidos de Importancia Internacional"*
CBD. (2019). *Convention on Biological Diversity*
Corpeño y Asociados. (2020) Audit "*Conservación, Uso Sostenible de Biodiversidad y Mantenimiento de Servicios del Ecosistema en Humedales Protegidos de Importancia Internacional"*
Corpeño y Asociados. (2019) Audit "*Conservación, Uso Sostenible de Biodiversidad y Mantenimiento de Servicios del Ecosistema en Humedales Protegidos de Importancia Internacional"*
GEF. CEO Endorsement
GEF. (2011). *GEF 5 Focal Area Strategies.*
GEF. (2019). *Country Profiles. El* Salvador
UNDP. (2014) "*Project Document: Conservación, Uso Sostenible de Biodiversidad y Mantenimiento de Servicios del Ecosistema en Humedales Protegidos de Importancia Internacional"*
UNDP-GEF. (2014). *Guidance for Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects*
UNDP. (2011) *National Implementation by the Government of UNDP Supported Projects: Guidelines and Procedures*
UNDP. (2014) Plan de inicio for a GEF Project Preparation Grant (PPG)
UNDP. (2015) UNDAF 2016-2020
UNDP. (2017) Combined Delivery Report
UNDP. (2018) Combined Delivery Report
UNDP. (2020) Combined Delivery Report
UNDP. PIR 2018
UNDP. PIR 2019
UNDP. PIR 2020
MARN. (1998) Ley de Medio Ambiente
MARN. (2011) INTEGRACIÓN DE LA INFORMACIÓN EXISTENTE RELACIONADA CON EL ESTUDIO EN FORMATO FICHAS DE LAS ÁREAS DE CONSERVACIÓN
MARN. (2012) Estrategia de Biodiversidad
MARN. Contrapartida 2017
MARN. Contrapartida 2018
MARN. Contrapartida 2019
MARN. Folleto Proyecto
MARN. (2017) List of contract and procurement items over $5,000
MARN. (2018) Informe anual 2017
MARN. (2018) Informe anual 2018
MARN. (2018). *Inventario Nacional de Humedales, El Salvador.*

MARN. (2018) List of contract and procurement items over $5,000
MARN. (2019) List of contract and procurement items over $5,000
MARN. (2019-09) Steering Committee Meeting
MARN. (2020) Informe anual 2019
MARN. (2020) List of contract and procurement items over $5,000
MARN. (2020-10) Informe trimestral Julio – septiembre 2020
MARN. (2020-05) Informe trimestral enero – marzo 2020
MARN. (2020-07) Steering Committee Meeting
MARN. (2020-10) Informe trimestral Julio – septiembre 2020
MARN. (2021) List of contract and procurement items over $5,000
MARN. (2021-03) Steering Committee Meeting
(2016-05) LPAC Minutes
UNDP. (2018-02) Informe de campo
UNDP. (2018-08) Informe de campo
MARN. Monitoreo de Medios
MARN. Mapa del proyecto

Annexe 7: Evaluation questions matrix

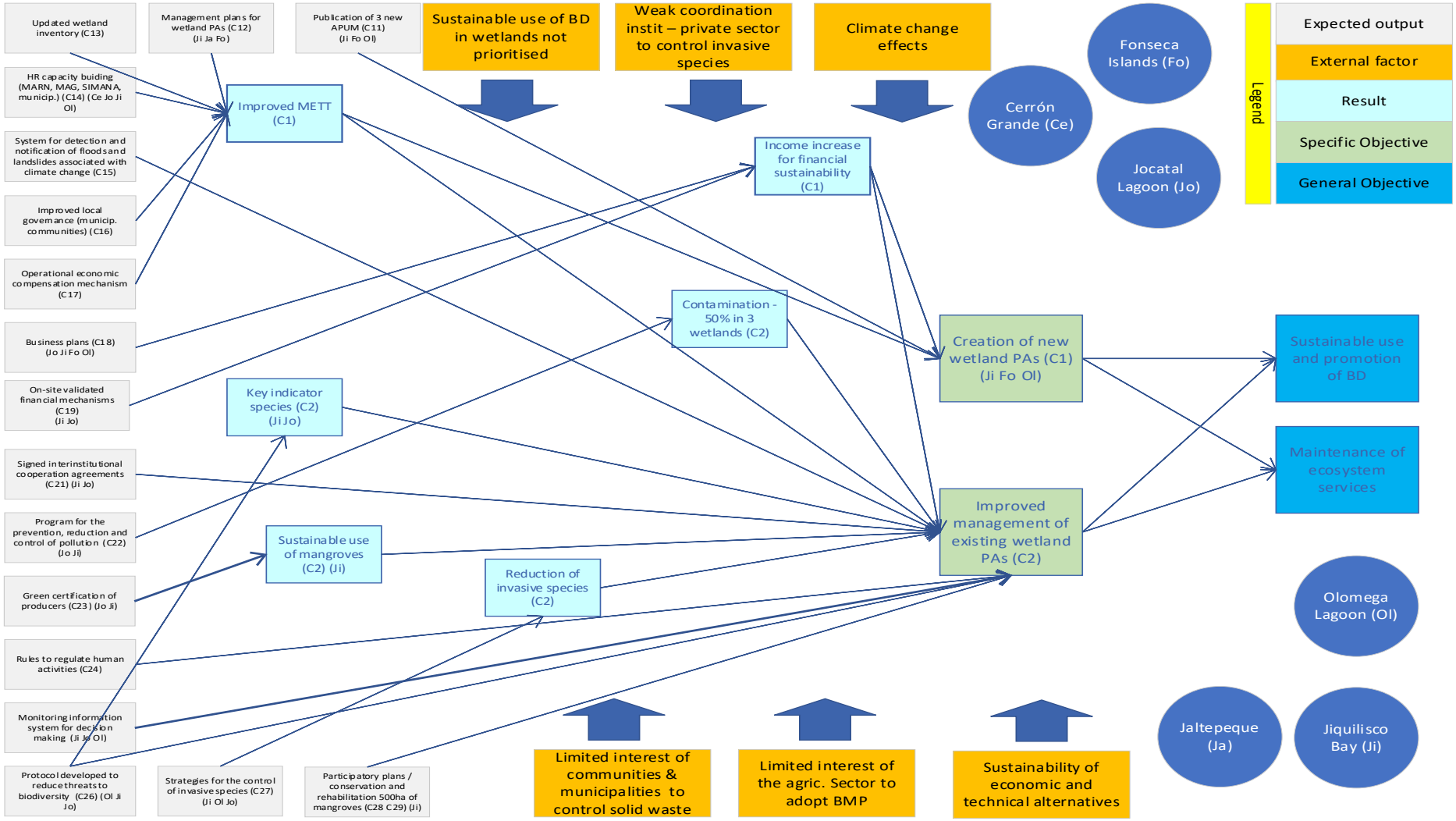
Criteria	Question	Indicator	Source of information
Relevance	• To what extent are the project's objectives consistent with beneficiaries' requirements, country needs, national priorities and policies, global priorities and partners' and GEF policies and priorities?	- Adequacy of activities in relation to policies and stakeholders' needs	- Policy documents - Interviews of stakeholders / beneficiaries - Interviews steering committee members
Effectiveness	• To what extent have the expected outcomes and objectives of the project been achieved? • To what extent did the project contribute to the Country Programme outcomes and outputs, the SDGs, the UNDP Strategic Plan and Country Programme, GEF strategic priorities, and national development priorities? • What factors have contributed to the achieving or not achieving intended outcomes and outputs? Could the project include alternative strategies? • Has the project produced unintended results -positive or negative? If there are negative results, what mitigation activities are in place? • To what extent the project has demonstrated: a) scaling up, b) replication, c) demonstration, and/or d) production of public good	- PAs effectively created (legislative doc) / updated management plans - Number of key priorities that have been met through the project - Assumptions not met / unpredictable effects - Number of relevant initiatives not directly financed by the project	- UNDP/UN & annual Gov reporting Documents - SNAP staff interviews - Project staff interviews - Interviews NGOs & private sector - Interviews final beneficiaries
Efficiency	• To what extend has the project completed the planned activities and met or exceeded the expected outcomes in terms of achievement of global environmental and development objectives according to schedule, and as cost-effective as initially planned? • To what extent were project funds and activities delivered in a timely manner?	- Activity modifications (removal / adding) - Circumstances for no-cost extension - Functionality of M&E system	- UNDP finance & project staff - Project Director interview - Annual reports
Financing and co- Financing	• Are there variances between planned and actual expenditures? What are the main reasons? To what extend did financial controls allow the project management to make informed decisions regarding the budget?	- Disbursement trends - Follow-up and adjustments of procurement plan	- UNDP finance & project staff - Project Director interview - Annual reports

	• How many resources have the project leveraged? How have they contributed to the project's ultimate objective?	- Co-financing complementarities / substitution - M&E system updates and annual/intra-year budgetary adjustments	
Implementation, Oversight and execution	• To what extent has UNDP delivered effectively on activities related to project identification, concept preparation, appraisal, preparation of detailed proposal, approval and start-up, oversight, supervision, completion and evaluation? • To what extent has the Implementing Partner effectively managed and administered the project's day-to-day activities? How was UNDP's overall oversight and supervision?	- Changes in UNDP staff - Periodicity of technical meetings with project team & relevant support / timeliness of recruitments - Changes in project team staff - Activity / staff / service payment delays…	- Annual reports / MTR report - UNDP, ministry & project team interviews - CDR
Sustainability and ownership	• What extent are there financial, institutional, socio-political, and/or environmental risks to sustaining long-term project results? • Have been the country representatives (e.g., governmental official, civil society, etc.) actively involved in project identification, planning and/or implementation? Do they maintain commitment to the project and its results? • How have the implementing partner and UNDP contributed to ensure national ownership?	- Level of autonomy/operationality of structures in place & their funding - degree of buy-in of final beneficiaries - actual economic feasibility of project technical solutions - level of institutionalization of project results (structures in place, follow-up, meetings…) - Degree of participation of all stakeholders in the formulation, & implementation of the project - degree of transfer of responsibility of project results & subsequent empowerment	- annual reports - interviews project staff, UNDP, final beneficiaries & private sector operators - interviews national institutions (incl. municipalities) / UNDP and project staff
Contribution to impact	• To what extent are there indications that the project has contributed to, or enabled progress toward reduced environmental stress and/or improved ecological status?	- Pollution/eutrophication reduction - Operationality of monitoring /controlling structures - Reduction of pressures (fisheries, agriculture, ranchers (through behavior change)	- Technical reports - Monitoring reports - Interview of wetland users - Interviews of NGOs & community representatives
Gender Equality and human rights	• How were gender and human rights considerations integrated in the project's design, including analysis, implementation plan, indicators, targets, budget, timeframe and responsible party? • To what extent have the project contributed to gender equality, the empowerment of women and human rights of disadvantaged or marginalized groups?	- M&E system covering gender - Activity adaptability as per gender and target beneficiaries' types - Degree of project targeting of vulnerable people	- Gender-specific & marginalized group interviews (focus groups) - Project team interview - Municipalities interviews - Annual reports

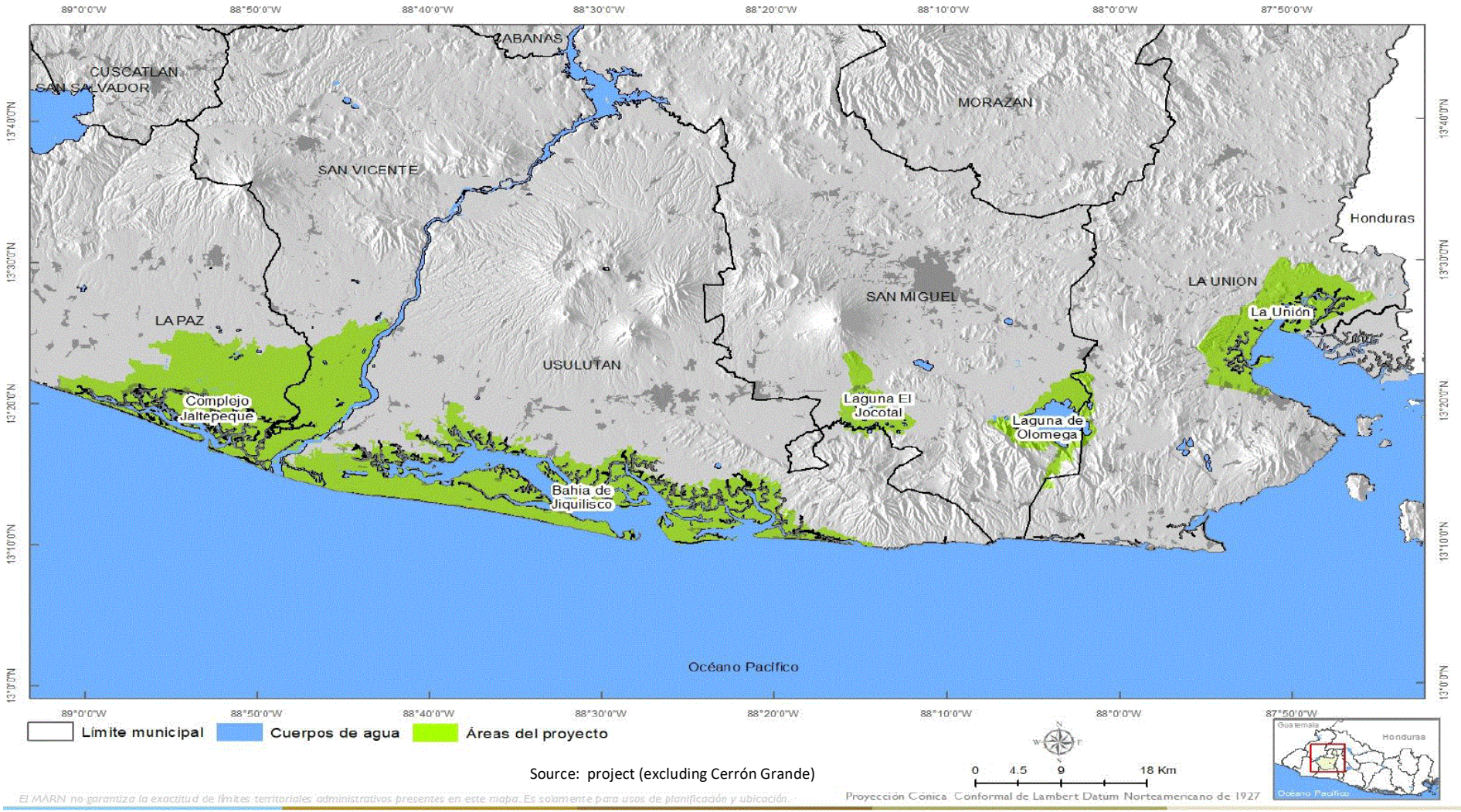
	• To what extent did women, poor, indigenous, persons with disabilities, and other disadvantaged or marginalized groups participate and benefit from the project? • Was the UNDP Gender Marker rating assigned to the project document realistic and backed by the findings of the gender analysis? • Is there any potential negative impact on gender equality, women's empowerment, disadvantaged or marginalized groups? If so, what can be done to mitigate this?	- Number of women & vulnerable people that were direct beneficiaries from project's results - Level of participation of vulnerable groups & women in activities' operationalization	
Other cross-cutting issues	• How have the project activities contributed to poverty reduction and sustaining livelihoods? • To what extend has the project contributed to better preparations to cope with disasters or mitigate risk, and/or addressed climate change mitigation and adaptation? • To what extend has the project incorporated capacity development activities? Were results achieved?	- Conversion incentives success rate - Increased resources through improved technology (& capacity building) / diversification - Pilot-project appropriation and empowerment - Level of operationality of surveillance committees	- Interviews project staff - Interviews final beneficiaries - Interviews community & committee members / representatives
Stakeholder engagement and partnership	• To what extent do project stakeholders share a common understanding and are involved in the decision-making process of the project? • To what extent did stakeholder's participation mechanisms in place lead to empowerment and joint ownership of the project? What should be done better to increase their participation and engagement?	- Degree of active participation in project activities / capacity building training - Project responsiveness re. final beneficiary/community needs - Degree of participation of stakeholders in project (annual) planning	- Project staff & ministry interviews - Interviews of community representatives and municipalities
Results framework	• To what extent the project's objectives and components are clear, practicable and feasible within its time frame? • Was there a clearly defined and robust Theory of Change? • Were the indicators in the Results Framework SMART?	- Number of activities that were amended / terminated and reasons - Follow-up of METT indicators - Changes of indicators during implementation, nr of indicators not assessed - Usability of baseline studies	- Interviews project team - Interviews of ministry - Interviews steering committee members
Monitoring and Evaluation	• To what extent did the Monitoring systems allow the collection, analysis and use of information to track the project's progress, risks and opportunities toward reaching its objectives and to guide management decisions?	- Level of functionality of M&E system; updating and effective integration into decision-making (planning + adjustments)	- Interviews project team

	• Were the budget and responsibilities clearly identified and distributed?		
Risk Management, Social and Environment Standards and Adaptative management	• To what extent were risks (both threats and opportunities) properly identified and managed? • To what extent did the project maximize social and environmental opportunities and benefits and ensured that adverse social and environmental risks and impacts were avoided, minimized, mitigated, and managed? What "safeguards" did the project implement? • Were the project's changes based on evidence? Were they properly managed?	- Updating of assumptions and risks realistic - Relevant project implementation changes - M&E system operationality	- Project team interviews, UNDP interview
Efficiency	• How did the project adapt to the new normality COVID-19? Did the project contribute to minimizing the socioeconomic effects of the Pandemic?	- Implementation adjustments (e.g., remote training, more widespread use of technology for communication / decision-making	- Interviews steering committee members - Interviews of activity implementers - Interviews of project team
GEF additionality	• To what extent has the project lead to additional outcomes? o Global Environmental Benefits o Livelihood improvements and/or social benefits o Innovation Additionality	- Overall increase / stabilization of ecosystem benefits/services - High-profile species status - METT score increase	- Interviews SNAP & ministry - Interviews project team - Annual reports

Annexe 8: Theory of Change



Annexe 9: Project map



Annexe 10: Brief Expertise of Consultant

Mr Vincent Lefebvre:
(lefebvrevinc@gmail.com)

- Programme management & coordination / project formulation & implementation, M&E - knowledge of PCM, logical framework & ZOPP methodologies / equipment specifications.
- MA in tropical agriculture and post-graduation in business administration
- Programme & project evaluation / technical audit / institutional appraisal: analysis of relevance / effectiveness / efficiency / social, institutional & economic impact / political, social & cultural, technological, institutional & financial sustainability / cross cutting issues (gender, AIDS, environment & institutional capacity building); questionnaires design & interviews of beneficiaries.
- Data acquisition methods for evaluations: questionnaires drafting & interviews of beneficiaries; SWOT analysis; (semi-) structured interviews, focus groups.
- Knowledge of monitoring & evaluation methodologies (incl. Management Effectiveness Tracking Tool).
- Food security / Agronomy / agro-forestry / agro-industry / agro-climate and climate mitigation - adaptation / horticulture.
- Cartography / remote sensing / mapping / GIS (Arcinfo, Mapinfo, Ilwis) / Database management systems (MECOSIG, COONGO).
- Land & water resources evaluation / crop potential analysis / participatory rural appraisals / natural resources management / mountain agro-ecosystems.
- Soil survey / soil conservation / soil fertility.
- Statistics including programming in SAS & Delphi.
- Renewable energies (wind, bio-diesel, rape seed oil).

Annexe 11: Evaluation Consultant Code of Conduct and Agreement Form

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 limitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

Evaluation Consultant Agreement Form[55]

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

Name of Consultant: __Vincent LEFEBVRE_____

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 19/08/2021 

Signature: _____

[55] www.unevaluation.org/unegcodeofconduct

Annexe 12: Evaluation Report Clearance Form

(to be completed by CO and UNDP GEF Technical Adviser based in the region and included in the final document)

Evaluation Report Reviewed and Cleared by

UNDP Country Office

Name: Silvia Guzman

Signature: Silvia Guzman Date: 14-Sep-2021

UNDP GEF RTA

Name: Santiago Carrizosa

Signature: Date: 14-Sep-2021

Annexe 13: Audit trail

Annexed in a separate file