MINISTRY OF THE ENVIRONMENT AND SUSTAINABLE DEVELOPMENT
NATURA FOUNDATION
INTER-AMERICAN DEVELOPMENT BANK
GLOBAL ENVIRONMENTAL FUND

FINAL (TERMINAL) EVALUATION

Project "Sustainable Management and Conservation of Biodiversity in the Magdalena River Basin ATN/FM-15981-CO" (GEF Magdalena - Cauca Vive)

GEFSEC ID: 4849
GEF AGENCY PROJECT ID: CO-G1003
BID ID: CO-T1412
GEF FOCAL AREA: Biodiversity

Partner entities: **MADS, IDEAM, CORMAGDALENA and Adaptation Fund**

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Project "Sustainable Management and Conservation of Biodiversity in the Magdalena River Basin ATN/FM-15981-CO" (GEF Magdalena - Cauca Vive)

FINAL EVALUATION

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ANLA	National Authority for Environmental Licenses
APR	Áreas Protegidas Regionales
AUNAP	National Aquaculture and Fisheries Authority
BID/Banco	Banco Interamericano de Desarrollo
C	Component
CAR	Regional Autonomous Corporations
CC	Climate change
CCT	Convenio de Cooperación Técnica
CD	Steering Committee
CIAT	International Center for Tropical Agriculture
CONPES	National Council for Economic and Social Policy
CORANTIOQUIA	Regional Autonomous Corporation of Central Antioquia
CORMAGDALENA	Regional Autonomous Corporation of the Rio Grande de la Magdalena
CORNARE	Regional Autonomous Corporation of the Negro and Nare River Basins
CORPAMAG	Regional Autonomous Corporation of Magdalena
CORPOCESAR	Regional Autonomous Corporation of Cesar
CVS	Corporación Autónoma Regional del Valle del Cauca
CPUE	Average annual catch per unit effort
CRQ	Regional Autonomous Corporation of Quindío
COP	Conference of the Parties
CT	Technical Cooperation or Technical Committee
DA	Environmental determinants
DCT	Technical Cooperation Document
DRMI	Regional Integrated Management District
DS	Desarrollo Sostenible
EA	Executing agency
ECDBC	Estrategia Colombiana de Desarrollo Bajo en Carbono
EMT	Mid-term evaluation
FA	Fondo Adaptación (Adaptation Fund)
FE	Final Evaluation
FN	Fundación Natura (Natura Foundation)
GEF	Global Environmental Facility
GEF-MCV	GEF Magdalena-Cauca ViVe (Project "Sustainable Management and Conservation of Biodiversity in the Magdalena River Basin)
GEI	Gases Efecto Invernadero
GHG	Gases Efecto Invernadero (Green House Gases)
GoCO	Gobierno de Colombia
Ha	Hectares
HC	Huella de Carbono
HMP	Herramientas de Manejo del Paisaje
HS	Highly satisfactory
HU	Highly unsatisfactory
I	Improbable
IA	Implementing agency
IDB	Inter-American Development Bank
Ip	Improbable
IAvH	Alexander von Humboldt Biological Resources Research Institute
IDEAM	Institute of Hydrology, Meteorology and Environmental Studies
INE/RND	División de Medio Ambiente, Desarrollo Rural y Administración de Riesgos por Desastres
LL	Lesson learned
MADS	Ministry of the Environment and Sustainable Development
MC	Conservation Mosaic
MdE	Memorando de Entendimiento

MDG	Millennium Development Goals
M&E	Monitoring and Evaluation
METT	Management Effectiveness Tracking Tool
MOP	Project Operations Manual
MP	Management plans or Moderately Probable
MS	Moderately satisfactory
MoU	Memorandum of Understanding
MU	Moderately unsafisfactory
MUn	Moderately Unlikely
MPP	Monitoreo Pesquero Participativo
N.a.	No aplica
OE	Organismo Ejecutor
ONG	Organización no Gubernamental
P	Probable
PA	Protected areas
PAC	Planes de Adquisiciones y Contrataciones
PCU	Project Coordination Unit
PDD	Project Design Document
PEP	Multi-year execution plan
PFNR	Propuesta de Financiamiento No Reembolsable
PIC	Small Community Initiatives
PIF	Project Identification Form
PIR	Project Implementation Report
PMR	Project Monitoring Report
PNN	National Natural Parks of Colombia
PNUD	Programa de las Naciones Unidas para el Desarrollo
PO	Operations plan
POA	Annual Operating Plan
POMCAS	Hydrographic Basin Planning and Management Plan
POT	Planes de Ordenamiento Territorial
PPD	Programa de Pequeñas Donaciones
REDD	Reducción de Emisiones por Degradación y Deforestación
RFCE	Request for CEO Endorsement
S	Satisfactoriy
SDA	Secretaría Distrital de Ambiente (Bogotá)
SIAC	Environmental Information System of Colombia
SINAP	National System of Protected Areas
SIRH	Water Resources Information System
SMART	Specific, measurable, affordable, relevant and limited in time
TC	Technical cooperation
TE	Terminal evaluation
tCO2e	Toneladas de Carbono Equivalente
TNC	The Nature Conservancy
ToR	Terms of reference
TT	Tracking tools
U	Unsatisfactory
UAESPNN	Special Administrative Unit of the National Natural Parks System
UCP	Project Coordination Unit

1 EXECUTIVE SUMMARY

1.1 Key aspects of the evaluation approach and methodology

The proposed methodology was participatory and synergistic and included a dynamic process, during which progress was made intermittently or simultaneously in the scope of various activities.

The evaluation used the criteria of relevance, effectiveness, efficiency, sustainability and impact. The general evaluation questions are presented below, with which a series of questions were drafted (Annex 1) that covered in depth each of these criteria included in the ToR.

The dimensions were assessed, according to the evaluator's criteria, using the qualification keys of the "guide for final evaluations of projects supported by UNDP and financed by the GEF"[1] (Table 4).

1.2 Project description

The project was structured in three components, namely:

***Component 1**: Conservation of priority areas.*

***Component 2** Ecosystem health management.*

***Component 3** Monitoring and evaluation.*

Estimated project costs by component are shown in the Table 1.

Table 1*:* ***Program and financial costs (in thousands of US$)***

PRODUCTO	PRESUPUESTO PLANIFICADO 2016-2022			
	BID/GEF	RECURSOS ADICIONALES EN EFECTIVO	RECUROS ADICIONALES ESPECIE	TOTAL**
Component 1 Conservation of priority areas	2 448 600	1 826 000	5 301 598	9 576 198
Component 2: Ecosystem health management	2 300 000	806 773	16 306 733	19 413 506
Component 3: Monitoring and evaluation	1 300 000	758 896	0	2 058 896
Administration	255 000	0	0	255 000
Audit	60 000	0	0	60000
PROJECT TOTAL	**6 363 600**	**3 391 669**	**21 608 331**	**31 363 600**

***Source:** BID 2016.*

[1] https://www.gefieo.org/sites/default/files/ieo/evaluations/files/gef-guidelines-te-fsp-2017.pdf

1.3 Assessment Score Summary

The Final Evaluation (FE) aims to provide an independent and in-depth review of the achievements of project implementation. The FE is carried out according to the guidelines, norms and procedures established by the IDB and the GEF, as established in the Guide for Agencies of the GEF to carry out Final Evaluations *("Guidelines for GEF Agencies conducting Terminal Evaluations", "GEF Evaluation Office Ethical Guidelines")*.

The rating of the different dimensions analyzed is presented below, as established in the ToR (the table of the evaluation keys is presented in Table 4).

Table 2 Summary of the Project Evaluation ratings

RESULTS' EVALUATION	RATING
Relevance	Highly satisfactory (HS)
Impact	Highly satisfactory (HS
Effectiveness	Highly satisfactory (HS
Efficiency	Highly satisfactory (HS
Sustainability	Probable (P)

Note: The higher the number in the range, the better the score.

Fuente: *GEF 2018 template, with results from the 2023 evaluation.*

1.4 Main findings

1.4.1 Analysis of the design, execution and relevance

The project clearly identified the needs and priorities of the beneficiaries and local and regional actors and carried out an adaptive management appropriate to the changes in the context. The results achieved are clearly linked to the development problems identified and to national and international political-legal regulations. The project was analyzed from the perspectives described below:

- *The causal paths of the project were adequately modified to adapt them to the changes in the context, which resulted in the success of the intervention.*
- *The project was well designed to address the identified problems that it was intended to solve. (**Table 5**).*

The objectives of the project were not modified, but there were changes in the context that affected it:

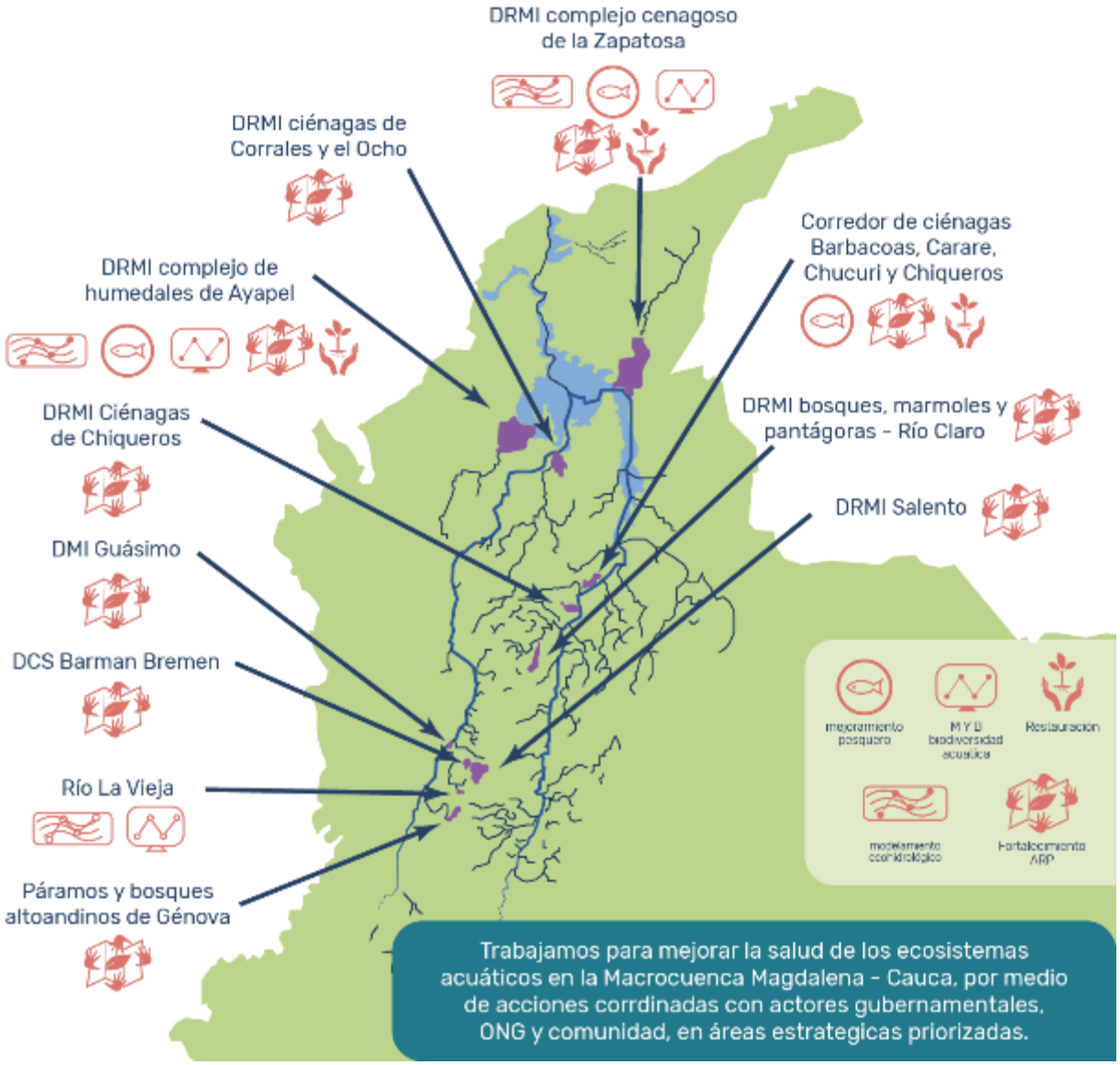
- *The situation of the COVID-19 Pandemic completely paralyzed the field work of the project for a few months between March and August and later it was restarted with some limitations.*
- *Floods that caused the loss of restoration efforts and impeded or made difficult the access to different areas of the project.*
- *There were national blockades that made access difficult for some communities.*
- *Changes in the personnel of the participating institutions, such as corporations and local and regional governments, which caused delays and efforts to update the knowledge of the new authorities about the project and the problems it was intended to solve.*

Regarding environmental and social safeguards, despite the fact that this project was classified in category "C" in accordance with the Environment and Safeguards Compliance Policy (OP-703). (IDB 2016), it did apply the guidelines of the IDB's environmental and social policy.

The project effectively used the risk matrix as a planning tool and regularly updated it. And, it adequately used the different IDB instruments for the follow-up and evaluation of technical co-operation (TC).

The actors and partners of the project were key to its success and the development of the inter-institutional and revitalizing tables is considered innovative, which had the function of improving governance towards sustainable development.

Map 1 ***Geographical scope and scope of the Magdalena-Cauca Vive Project***



Source: *Project Magdalena-Cauca Vive 2023.*

1.4.2 Impact, Effectiveness and Efficiency

This project achieved a transformational change in its beneficiaries and the institutions and partners, according to the interviews carried out, together with the development of an intervention methodology that can be replicated in other projects. However, the design did not include impact indicators, but did include outcome and product indicators, which were managed jointly with the IDB.

The project managed to achieve all product goals and exceed others. And, it managed to link the results to a strict budget management without needing to exchange items between components and, adapting the time to the context/circumstances, related to the delay in implementation mainly due to COVID-19.

Regarding the additional resources, contributed by the partners/actors of the project, although these were not executed as scheduled, they met the goal by reaching the proposed amount.

1.4.3 Sustainability

According to the interviews carried out, many of the activities initiated by the project will continue with their own resources or those of local and regional governments. But, in many cases, continuity will be given through other projects for which it is in the design stage and for which it is expected to obtain financing, such as the one obtained by Fundación Natura (FN) with Ecopetrol (Annex 9).

1.5 Summary of lessons learned, and recommendations

Below is a summary of the lessons learned and the most relevant recommendations..

Table 3: ***Lessons learned and most relevant recommendations***

LESSON LEARNED	RECOMMENDATIION
1. The causal paths identified in the project design theory of change are not rigid and must be assessed to obtain the desired results in their implementation	The causal paths must be in constant review and periodic evaluation, before the start and during the operation, in order to adjust them to the prevailing conditions to achieve the objectives of the project
2. The participation of the relevant actors in the identification of the development problems to be solved is the initial step for the success of the project, together with adequate indicators to measure its progress towards the proposed objectives.	Project design should identify, additionally and few in number, key impact indicators to monitor progress towards its objective
3. The adaptive and participatory management of the project is relevant to achieve the proposed objectives	It is necessary to prioritize the work and hiring of personnel and local-based organizations in order to build trust, reduce risks during implementation and ownership of activities, which is the driver of transformational change and sustainable development that is sought to be achieved with the project
4. The procedures and (scientific) methodologies developed and used must be validated with the experts and the users or actors directly involved	A continuous process of feedback and validation of the activities to be implemented must be planned in order to carry out adaptive management and develop useful instruments that can be put into practice once the Project activities are closed
5. The project must make the necessary changes on time to adapt to reality during its implementation	Projects must carry out technical and executive reviews during their implementation in order to adapt planning and goals to changes in the context

LESSON LEARNED	RECOMMENDATIION
6. The risk matrix should be used as a dynamic planning tool in the operation of the project	The risk matrix must be reviewed and adapted at least every six months in changing and more unstable contexts
7. Projects must continuously develop and put into practice the virtual means of communication, in order to reach the beneficiaries more continuously and lighten the decision-making process with the partner entities	Projects must promote digital media, not only to promote their own activities, but as a complement to the productive activities of the communities, especially in relation to the commercialization of products
8. Ecohydrological models are an innovation attributable to this project, which are used as a more accurate simulation and planning tool in search of sustainable development	Ecohydrological models must be constantly evolving in search of greater precision, in order to serve for adequate planning and decision making
9. The identification and consolidation of legitimate instances of joint decision-making for the management of protected areas, their buffer zones and complementary strategies, are essential for sustainability once the project ends	The projects must involve in a participatory way the different actors with incidence in the territories, in order not to duplicate actions and seek synergies to achieve the objectives more efficiently and effectively
10. The involvement of locally based organizations and institutions results in awareness and appropriation of the activities carried out by the project, which provide continuity after its completion	The execution of the projects must include a product related to the design of projects for the search for financing that give continuity to the activities started
11. Management plans must be incorporated into action and development plans at local, regional and national levels	The project must set out the management plans and community needs in the different development and action plans at the local, regional and national levels
12. The co-financing goals must be clearly stated from the beginning of the operation (design)	The goals to be met with the co-financing funds must be clear from the design, to help meet the proposed objectives and promote the sustainability of the activities initiated by the project
13. It is important that the products produced in this project are available to the general public and published electronically	All products reached should be published on the WEB

2 BASIC INFORMATION

In US$

Project number BID ***CO-T1412;*** *Nº ATN/FM-15981-CO, GEFSEC ID:* ***4849,*** *GEF AGENCY PROJECT ID CO-G1003*
Title: Project: **"Sustainable Management and Conservation of Biodiversity in the Magdalena River Basin" (Magdalena - Cauca Vive)**
Non-reimbursable Financing contract number: Nº ATN/FM-15981-CO
País: Colombia
Executing Agency: Natura Foundation (FN)
Partner entities: Ministry of the Environment and Sustainable Development (MADS), Institute of Hydrology, Meteorology and Environmental Studies (IDEAM), Regional Autonomous Corporation of the Rio Grande de la Magdalena (CORMAGDALENA), Adaptation Fund (FA)
GEF Focal Area: Biodiversity

Approval date PIF: 6/11//2013
CEO authorization date: 11/08/2016
PRODOC signature date: 17/01/2017
Agreement signing date: 17/01/2017
First disbursement date: 28/06/2017

Amount Non-reimbursable Investment Financing Agreement
Original amount: 6.363.600
Current amount 6.636.600
Additional Resources: Cash 3,391,669 – In kind 21,608,331 Total 25.000.000
Total project cost: 31.363.600

Months of execution
Since agency approval: 60+12
From the effective date of the non-reimbursable investment financing agreement: 57+12

Disbursement periods
Original final disbursement date: 14/12/2019
Current final disbursement date: 14/02/2021
Cumulative extension (months): 12
Special extension (months): 0
Disbursements (30/12/2022)
Total amount of disbursements to date: 6.636.600
Additional resources registered to date: 25.000.000

3 INTRODUCTION

3.1 Purpose of the evaluation

Terminal evaluations (TE) provide an independent, comprehensive and systematic explanation of performance at the end of the project cycle. These consider the totality of the effort, from the design of the project to its application and conclusion; they also take into account the likelihood of sustainability and possible impacts. It is designed to identify problems in the design and during the execution of the project, evaluate the achievement of the objectives, results and products, identify and document lessons learned, as well as provide recommendations on specific actions that should be taken to improve the design and implementation. execution of other projects. With this evaluation there is an opportunity to know and have indications about the success or failure of the project in the future.

The general objective of the consultancy is to carry out the evaluation of the final results of the GEF Magdalena - Cauca ViVe project, providing a complete and systematic analysis from the design of the Project, the implementation process, and obtaining the products, results and possible impacts, according to the guidelines and directives of the GEF and the IDB.

The specific objectives of the final evaluation are presented below:

a. *Present an analysis of the stakeholders involved in the project during its life and their impact on its results.*

b. *Evaluate the results obtained in the project in the different components in qualitative and quantitative terms (take into account the indicators of the Project's results, as well as compliance with the recommendations of the mid-term evaluation). Assess the sustainability of the Project and its components in institutional, financial, environmental, and sociopolitical terms (as well as the degree of appropriation of its users/target groups).*

c. *Systematize the process of presentation of results and accountability, as well as verify the incidence of the socializations and closures of the Project in its geographical areas of influence.*

d. *Systematize the lessons learned that can improve the selection, design, and execution of future activities financed by the IDB and GEF.*

e. *Provide feedback on the issues that are recurring in IDB and GEF projects according to the strategic objectives established for the financing of biodiversity projects.*

f. *Report on the relevance of the project results with respect to the objectives of the IDB, GEF and national priorities.*

g. *Evaluate the performance of all the institutions involved in the execution of the Project, and the support and supervision provided by the Inter-American Development Bank in its capacity as implementing agency of the GEF.*

h. *Evaluate the use and level of disbursement of resources, both from the donation and from the counterpart/co-financing* identified for this project.*

The consultancy complied with the activities described in the terms of reference (ToR). In this exercise, an analysis of the Project's execution process, the products obtained and the fulfillment of the Project's objectives as set forth in the approved documents was thus carried out. This analysis focused on the following aspects.

- *Evaluate the relationship of the expected and planned products with the achievement of the indicators of the Project results, identifying the real contribution to the conservation and sustainable use of biodiversity in the Magdalena River Basin through the protection of priority habitats, improvement of the health of ecosystems, governance and strengthening of local capacities.*
- *Evaluate the degree of progress and compliance obtained in the execution of the Project, qualitatively and quantitatively identifying the achievements in the technical and institutional framework, as well as the lessons learned.*
- *Evaluate the sustainability of the Project and its components in institutional and financial terms, as well as the role of the different entities involved in the project, and the degree of appropriation of its users/beneficiaries.*
- *Present lessons learned within the framework of the final evaluation carried out, identifying possible alternatives for future projects.*
- *Evaluate the use and level of disbursement of resources, both from the IDB and from the counterpart identified for this project.*

3.2 Scope and methodology

The FE was carried out according to the guidelines, norms and procedures established in the Guide for GEF Agencies to carry out Final Evaluations *("Guidellines for GEF Agencies conducting Terminal Evaluations[2]" (p. 77-94), "GEF Evaluation Office Ethical Guidelines[3]", "GEF Evaluation Office Ethical guidelines[4]", y "Guidelines on the Project and Program Cycle Policy - 2020 update[5]"),* as well as IDB policies in this regard will be taken into account.

The proposed methodology was participatory and synergistic and included a dynamic process, during which progress was made intermittently or simultaneously in the scope of several activities.

The evaluation used the criteria of relevance, effectiveness, efficiency, sustainability and impact. The general evaluation questions are presented below. With these, a series of questions was drafted that covered in depth each of these criteria included in the ToR. (Annex 1).

- *Relevance* Were the lines of action or strategies designed and prioritized (quality of design and adaptation to the context of challenges and opportunities) appropriate to the development problem to be solved? And the monitoring mechanisms of the Project? How do the project objectives relate to environmental and development priorities at local, regional and national levels? What were the successes, failures and gaps in the design and management of the project? What internal and external factors have influenced to meet the objectives set? Is the project still relevant given the changes in the context?
- *Impact*: Is there evidence that the project reduced environmental stress or improved ecological status, or allowed progress toward those results? What was the impact achieved by the actions (achievement of objectives, verifiable changes in threats or modifications of viability factors, replicability)? Was the gender strategy of the project aligned with the

[2] https://www.gefieo.org/sites/default/files/ieo/evaluations/files/gef-guidelines-te-fsp-2017.pdf

[3] https://www.gefieo.org/sites/default/files/ieo/evaluations/gef-eo-ethical-guidelines-2007.pdf

[4] https://www.gefieo.org/policies

[5] https://www.thegef.org/council-meeting-documents/guidelines-project-and-program-cycle-policy-2020-update

gender equality policy of the IDB and the country, and how were the proposed gender indicators aligned with the vertical logic of the project during its execution?

- *Effectiveness*: To what extent have the expected results and objectives of the project been achieved? Were the project activities in line with the schedule of activities? Have there been any unintended effects/results? What are the key issues/barriers that affected the implementation of the project?
- *Efficiency*: Were project disbursements and expenses in line with budget plans? Was the project implemented efficiently, in accordance with national and international norms and standards? How were the investments made vs. the results obtained (cost-efficiency)?
- *Sustainability*: To what extent are there financial, institutional, socioeconomic, or environmental risks to sustaining project results in the long term?

The evaluation provides credible, reliable, and useful evidence-based information. The evaluation follows a participatory and consultative approach that ensured close engagement with government officials, in particular the project team, the institutional focal point, the IDB Country Office, and key stakeholders/beneficiaries. A mission (final evaluation) was carried out, in which the project office and other key actors in the different regions of project participation were visited, as provided on page 3 of the contract for this consultancy (the list of persons/organizations to be interviewed during the field mission is presented in Annex 2, which was provided by the project coordinator).

The previously described dimensions were assessed, according to the evaluator's criteria, using the qualification keys of the "guide for final evaluations of projects supported by UNDP and financed by the GEF"[6],, which is presented in the Table 4.

Table 4: Assessment Scoring Key Table

RELEVANCE, EFFECTIVENESS, EFFICIENCY, AND IMPACT RATINGS	SUSTAINABILITY RATINGS (AND RISK[7])
6: Highly Satisfactory (HS): no deficiencies	4. Probable (**P**): Negligible risks to sustainability.
5: Satisfactory (S): minor deficiencies	
4: Moderately Satisfactory (MS): moderate deficiencies	3. Moderately Probable (MP): moderate risks
3. Moderately Unsatisfactory (MU): Major deficiencies	
2. Unsatisfactory (U): important deficiencies	2. Moderately Unlikely (MUn): Significant risks.
1. Highly Unsatisfactory (**HU**): major deficiencies	1. Improbable (**Ip**): Serious risks.

Source: *Adapted from GEF 2008.*

Below is a brief description of some important methodological aspects considered to address the dimensions of the evaluation.:

[6] https://www.gefieo.org/sites/default/files/ieo/evaluations/files/gef-guidelines-te-fsp-2017.pdf

[7] *Risk is read contrary to sustainability; Thus, an improbable risk is the one with the least risk.*

RELEVANCE

- Connection of the project with development problems and national policies, from design. Deviations; proposals for adjustments required in the technical, financial, economic and institutional framework and monitoring for execution
- Changes in context and review of assumptions were examined
- Connection of the project with national and international legal regulations and with the GEF
- Degree of collaboration and complementarity of the Project with local partners and actors (environmental corporations, community organizations, civil society reserves) or with other projects and initiatives in the Colombian and/or international arena, highlighting the commitments and responsibilities acquired by them
- Detection of deviations from the design and proposals for adjustments required in the technical, financial, economic and institutional framework for the execution of the Project

EFFECTIVENESS

- Comparison between planned and achieved/achieved outputs/indicators by component
- The results in terms of products achieved in relation to the expected objectives were reviewed: Are the project activities in line with the schedule of activities defined by the semi-annual reports and annual operating plans? Are project disbursements and expenditures in line with expected budget plans? And with the monitoring mechanisms of the Project?

EFFICIENCY

- Comparison of physical achievements with budget/execution

IMPACT

- Analysis of project impact indicators

SUSTAINABILITY

- The likely ability of the intervention to continue to provide benefits for a period after its completion
- Degree of collaboration and complementarity achieved with other projects and initiatives in the Colombian and/or international arena, in order to identify possible alliances and joint investments with other institutions for the scope of value-added products.

LESSONS LEARNED, CONCLUSIONS AND RECOMMENDATIONS

Lessons learned can be defined as the knowledge acquired about a process or one or several experiences, through reflection and critical analysis of its results and the critical factors or conditions that may have affected or hindered its success. The lessons learned focus on the hypothesis that causally links the results sought and what has worked or has not worked to achieve them. The lessons learned make it possible to identify tendencies of cause-effect relationships, limited to a specific context and suggest practical and useful recommendations for the replication of new knowledge in other contexts and in the design and/or execution of other

projects or initiatives that are proposed. achieve similar results (publications.iadb.org/publications/spanish/document/Lecciones-aprendidas.pdf).

Understood in this way, the added value of the lessons learned and the recommendations derived from them is that they allow, for a given context, to identify: 1. success factors (effectiveness, efficiency, sustainability), 2. deficiencies ("shortcomings") in policies, strategies, programs, projects, processes, methods and techniques, 3. potential solutions to recurring problems by identifying new courses of action, 4. potential solutions to replicate successes, and 5. potential courses of action to mitigate risks.

The lessons learned from the project were identified/collected as the evaluation was carried out. It is a process that is carried out throughout the intervention. The lessons learned emerged from the review and analysis of the project documents, as well as from the analysis of the information and the interviews with the different stakeholders. The lessons learned were obtained from the collected evidence, from which the conclusions were drawn and recommendations were provided to strengthen, correct or mitigate the finding.

Recommendations were generated that pointed towards the scope of the impact of the project: Also, the conclusions obtained from all the data collected and tests carried out were included. The recommendations are succinct suggestions for critical interventions, which are specific, measurable, achievable, and relevant. A table of recommendations was included in the executive report of the report.

INTERVIEWS

They were carried out according to an interview schedule to obtain opinions and perceptions of different actors on the performance of the Project, as appropriate (the final interviewees were agreed with the Project coordination):

- *Ministry of Environment and Sustainable Development (MADS)*
- *Regional Autonomous Corporations of the areas of influence of the project (CORPAMAG, CORPOCESAR, CORNARE, CRQ),*
- *National Aquaculture and Fisheries Authority – AUNAP*
- *Local governments (local mayors' offices and Action Boards linked to the processes in the project windows - Río Claro and Zapatosa)*
- *Personnel from the Inter-American Development Bank responsible for the design, technical and fiduciary supervision of the Project.*
- *Staff of the Project Coordination Unit (UCP)*
- *Other programs and cooperation entities related to the Project.*
- *Project beneficiaries, public and private*
- *Others that were considered relevant*

In addition, the consultant conducted interviews with the consulting firms and individual consultants in charge of carrying out the studies and specific activities of the Project..

3.3 Structure of the evaluation report

After the introduction, the second chapter of the evaluation report is structured describing the content and purpose of the project, as well as the context in which it was designed, relevant background information, and the immediate objectives and main stakeholders.

The following chapter describes the evaluation findings, subdivided into project design and formulation findings and project results findings. This second section describes the relevance, impact, effectiveness, efficiency and sustainability of the project in Colombia.

The last chapter deals with the lessons learned, conclusions and recommendations.

4 PROJECT DESCRIPTION

The Project's objective was to "*contribute to the conservation and sustainable use of biodiversity in the Magdalena basin by protecting priority habitats, improving the health of ecosystems, and strengthening local governance and capacities"*.

Due to the complexity of the threats, the project prioritized addressing the following challenges for the conservation of freshwater ecosystems: *(i) low representation of these ecosystems in SINAP; (ii) insufficient availability of scientific information on the relationships between the main threats and the health of ecosystems; and (iii) low environmental and territorial management capacity of regional and national authorities*. Due to the extension of the basin and to be effective in addressing these threats, a portfolio of nine conservation areas was prioritized as territorial units for the implementation of the project. The project consisted of the components described below:

Component 1: Conservation of priority areas. The objective of this component was to improve the representativeness and ecological integrity of freshwater ecosystems in the basin, through the creation of at least five new Protected Areas (PA) that will add 160,000 new hectares (ha) to the SINAP, and the strengthening of four PA existing ones that cover 188,376.76 ha. In the relevant areas, but not feasible for the PA declaration, it was intended to establish three conservation mosaics in 500,000 ha. For the new PAs, technical assistance would be financed to support the cycle of creation, formalization, formulation and implementation of management plans (MP); and for existing PAs, the implementation of Management Plans would be supported, especially activities related to improving management effectiveness (equipment and/or minor infrastructure, strengthening of governance, etc.). For the conservation mosaics, the aim was to support the design of territorial planning instruments for the management and implementation of strategic actions based on landscape, connectivity and biodiversity criteria. These actions would be the basis for the identification of environmental determinants (core areas of the mosaics) for territorial planning, which are mandatory for the Hydrographic Basin Planning and Management Plan (POMCAS) and the Land Planning Plan (POT).

Component 2: Ecosystem health. The objective of this component was to contribute to the maintenance and health of freshwater ecosystems, through: *(i) improvement of freshwater habitats of importance for the reproduction of the Bocachico fish (Prochilodus magdalenae), based on the formulation of Fishing Management Plans, development of tools and local capacities to establish a responsible and profitable artisanal fishing model in Barbacoas (based on current capacities); and adoption of conservation agreements with communities for restoration and repopulation, co-financed by the Regional Autonomous Corporations (CAR) and by CORMAGDALENA; and (ii) incorporation of criteria for the management of freshwater ecosystems in the environmental and territorial planning of the basin*. The generation of three hydrological models would be supported to understand the dynamics of hydrosystems, through the quantification of the variables that determine their health and the evaluation of threats, especially those linked to sedimentation processes, alteration of the water regime, climate change. and other pressures on water resources. The results of the models would provide technical guidelines to be included in the POMCAS, POT and in the Strategic Plan of the Macro-basin, among others. The above was sought to be developed with the National Modeling Center of the Institute of Hydrology, Meteorology and Environmental Studies (IDEAM), who would ensure the transfer of knowledge and technology to other relevant institutions, such as the CAR, National Authority for Environmental Licenses (ANLA), Ministry of Environment and Sustainable Development (MADS), among others.

Component 3: Monitoring and evaluation. The objective of this component was to strengthen the monitoring systems that are part of the SIAC for monitoring the health of freshwater ecosystems and associated biodiversity. During a first stage, the project would support the institutions that make up the SIAC to conceptually design the system, define indicators, establish competencies, and agree on the institutional arrangements required to adopt concerted measures within the framework of the information systems that currently feed the SIAC. In this sense, the Humboldt Institute[8] would participate, given its relevant experience on the subject. Likewise, it sought to support the collection and processing of information for some of the critical indicators; design and implement a methodology to determine the effectiveness of management actions in wetlands and fish species to determine replicability; and carry out activities that would allow the performance of the project to be measured through mid-term and final evaluations. All the knowledge generated would be disseminated through a communication strategy of the Project.

[8] *Biodiversity Research Institute in Colombia attached to the Ministry of Environment and Sustainable Development.*

5 FINDINDS

In the *"Findings"* chapter, an evaluation of the dimensions of relevance, effectiveness, efficiency, impact and sustainability is carried out, as well as a comparison of the design of the project and its execution on issues such as alignment of the project with development problems, connection with national and international legal regulations, results and risks, monitoring and evaluation, and relevant actors and coordination.

5.1 Relevance

*This project is qualified as **highly satisfactory (AS)**, because it harmonized the needs and priorities of the beneficiaries and local and regional actors, carried out an adaptive management to mitigate the impacts of changes in the context and, the planned results are clearly linked to development issues and national and international legal regulations.*

5.1.1 Theory of change

Analysis of design

The theory of change of the project intended to contribute to the conservation and sustainable use of biodiversity in the Magdalena basin, through the protection of priority habitats through the declaration of five new PAs and the strengthening of four existing ones, carrying out activities to improve their driving effectiveness; improving the health of freshwater ecosystems based on improved planning; and effective monitoring of freshwater ecosystems and associated biodiversity. The project intended to achieve this objective through the following causal pathways (the objectives and components of the project, as well as the delivery model are described in Chapter 4):

- *Finance technical assistance to support the cycle of creation, formalization, formulation and implementation of management plans for the new PAs.*
- *Support the implementation of MP, with emphasis on activities to improve management effectiveness (equipment and minor infrastructure, strengthening of governance, among others), for existing PAs.*
- *Support the design of territorial planning instruments for the management and implementation of strategic actions based on criteria of landscape, connectivity and biodiversity, which will serve to identify environmental determinants - core areas of the mosaics for territorial planning -, of mandatory compliance in POMCAS and POT, for conservation mosaics.*
- *To contribute to the maintenance and health of freshwater ecosystems, the following activities:*
    - *Fisheries management plans, development of tools and local capacities to establish a responsible and profitable artisanal fishing model in Barbacoas (based on current capacities) and conservation agreements with communities for restoration and repopulation co-financed with CAR and CORMAGDALENA, to improve the freshwater habitats of importance for the reproduction of the Bocachico fish.*
    - *Support the generation of three hydrological models to understand the dynamics of hydrosystems to incorporate management criteria for freshwater ecosystems in the environmental and territorial planning of the basin.*
- *To strengthen the health monitoring systems of freshwater ecosystems and associated biodiversity, the following activities:*

- *Strengthen the institutions that make up the SIAC, with the support of the Humboldt Institute, to conceptually design the system, define indicators, establish competencies and agree on institutional arrangements to adopt concerted measures within the framework of the information systems that feed the SIAC. Support the collection and processing of information on critical indicators.*
- *Design and implement a methodology to determine the effectiveness of management actions in wetlands and fish species to determine replicability.*
- *Mid-term and final evaluations to measure project performance.*

- *Communication strategy of the project to disseminate the knowledge generated.*

Analysis of the execution

Below is a summary of how the causal pathways described above were effectively implemented and adapted by the project, confirming the hypothesis, based on the interviews carried out during the fieldwork and on the review of the project information:

- *The Project acted throughout the Magdalena-Cauca basin, concentrating actions in three nuclei or areas of influence: i) Caribe - Lower Magdalena Nucleus: giving priority to the sectors of the wetland complexes of the Ciénagas de Zapatosa and Ayapel (Mojana Complex); ii) Magdalena Medio Nucleus: to work in the area of the wetland complexes of the Barbacoas swamp and Claro River – South Cocorná; iii) Nucleus of the Coffee Axis: in its protected areas and zones of influence.*
- *Management plans (MP) were formulated in coordination with corporations and other relevant stakeholders, for which the official guide was used. To this end, technical assistance was provided and institutional participation was guaranteed with more than 40 community workshops in the territories of the areas and municipalities linked to the Protected Areas (PA).*
- *For the existing PAs, minor infrastructure equipment was not provided, but restoration activities, strengthening of governance and communication were provided.*
- *The activities of the project took a turn in order to strengthen governance, with a more effective participation in the development, approval (of the Boards of Directors of the corporations) and implementation of the MPs, for which Inter-institutional and Community Tables were implemented in Barbacoas and Zapatosa and Tables of the Dynamizing Committee in Río Claro, and the Committee of Protected Areas of the Coffee Region was strengthened.*
- *Fishing agreements were made in Barbacoas and Zapatosas, made up of 10 management lines for fishing, which will be an input for the Fishing Management Plans, which correspond to AUNAP.*
- *Thirty-six conservation agreements for ecological restoration were signed with private property owners in the project intervention areas.*
- *The ecohydrological modeling of the Basin was carried out and the SIAC was strengthened, through contributions to the SIRH (biotic-aquatic indicators).*

5.1.2 Alignment of the project with the development problems

Analysis of design: context

The *"Request for CEO Endorsement"* (GEF 2013) clearly identified the development problems the project was intended to solve and with which the initial design of the project was aligned (Table 5).

Table 5 ***Identification of the development problems that gave rise to the design of the project***

PROBLEM	CLARITY IN DIAGNOSIS	¿TC OBJECTIVE?	EXPLANATION
Of the 21 PAs in the Magdalena basin, only 3 are aquatic despite the global importance of biodiversity in freshwater and surrounding ecosystems	VC	Yes C1 PA conservation	Recognizing the underrepresentation of aquatic ecosystems in SINAP, the Government (CORMAGDALENA and MADS), with the technical assistance of TNC, prioritized the conservation of freshwater ecological systems. Taking into account a series of environmental and socioeconomic variables, 86 (of 232 priority ecosystems) are classified as high priority. Of these, 27 were classified as short-term priorities, which are distributed throughout the basin and cover approximately 26,000 square kilometers (less than 10% of the basin area).
Biodiversity is further compromised by increasing pressures on land and resource use	VC	Yes C2 Ecosystem health management	Population growth across the basin has increased the demand for consumer goods and urban and rural land, including agricultural and forestry products. It was estimated that the area of forest cover in the upper basin was reduced by 400,000 ha during 1970-1990, which represents 23% of the upper Magdalena basin (Restrepo 2008). Up to 80% of the total population of Colombia lives in the Magdalena basin, which includes its four main cities (Bogotá, Medellín, Cali and Barranquilla). The population of these four cities has increased by 45% between 1985 and 2005 (DANE 2005). Population growth has been accompanied by similar industrial growth. This in turn has increased the demand and the conflict for the use of water. Drinking water supply systems in rural areas are commonly used for productive enterprises, such as horticulture, livestock watering, or recreational and tourism development. Irrigation for agriculture uses up to 70% of the water for human use. In addition, the Magdalena river is the main collector of municipal and industrial wastewater in Colombia
Altered hydrology	VC	Yes C2 Ecosystem health management C3 Monitoring and evaluation	Patterns of water flow and the amount of water available are of paramount importance for the survival of freshwater biodiversity. In addition, river flows are very important for various productive sectors. With a total of 36 dams, the flow of the Magdalena is used to take advantage of 70% of the country's hydraulic energy (30 additional dams are in different planning stages). The original project area was impacted by 12 dams and 6 more are being planned for two of these areas. Additionally, these areas are affected by various reservoirs throughout the basin. Currently, environmental licenses and water concessions for the management of river flows are issued based on hydrological criteria without an analysis of the flow patterns necessary for freshwater species to survive (much of the biodiversity of freshwater requires particular flow patterns to maintain vital functions). There is an urgent need to introduce biodiversity considerations into decision-making processes related to the use of water resources in the Basin. Inadequate management of flow patterns can lead to severe impacts on biodiversity, including (IUCN 2001): blocking the movement of migratory species leading to the extirpation or extinction of genetically distinct species or populations, changes in turbidity and sediment levels , entrapment of nutrients depriving downstream ecosystems of them, changing flow patterns from moving to quiescent, which changes the oxygen content of waterways, possibly fostering exotic spe-

PROBLEM	CLARITY IN DIAGNOSIS	¿TC OBJECTIVE?	EXPLANATION
			cies, changing normal seasonal hydrological patterns that affect available nutrients, filtering woody debris that provide habitats and sustain a food chain, among others. Other infrastructure such as levees, and channel obstructions (mostly due to cattle ranching) inhibit the free flow of the river and cause loss of floodplain connectivity. In addition to changes in flow patterns caused by dams and levees, watershed degradation poses additional threats to water regulation. Flood mitigation services are severely compromised by deforestation and unsustainable land uses such as agriculture and ranching
Pressure from the rural productive sector	VC	Yes C2 Ecosystem health management C3 Monitoring and evaluation	Data on land degradation and land use change is often missing or out of date, but existing data at the watershed level show worrying trends. Recent data suggests continued increases in deforestation rates: Terra-i, a tool developed by CIAT (International Center for Tropical Agriculture) and TNC (The Nature Conservancy), detected an annual deforestation rate of 152,000 ha/yr, but with a growing rate from 100,000 ha/year between 2004 and 2007 to 200,000 ha/year in 2008 and 2009 in the Magdalena basin. Increased demand for agricultural and forest products fuels this land-use change, reducing biodiversity habitats, fragmenting landscapes, and changing natural freshwater flows in wetlands and floodplains. The four selected areas of the project have a high intensity agricultural activity that covers 20 to 48% (Cabecera del Río La Vieja) of these areas
Climate change	VC	Yes C2 Ecosystem health management C3 Monitoring and evaluation	Biodiversity in the project areas is also threatened by climate change. Recent research suggests that the increased frequency and magnitude of extreme weather events may be related to climate change. The resources and ecosystems of the basin and the river flows are aggravated by the increase in the occurrence of La Niña. The rainy emergency that began in the second half of 2010 and lasted well into 2011 drew the country's attention to the Magdalena River basin, due to extensive flooding that affected crops and localities located in the central and lower basins. and the destructive impacts of floodwaters on agriculture, infrastructure and housing (more than 950,000 new hectares of land flooded during the 2010-2011 rainy season compared to previous years). The four selected areas, in particular Canal del Dique, Río Cesar and Depresión Momposina were severely affected by this extreme rainfall event that covered from 33 to 98% (Canal del Dique) of their area. In the selected project areas, the departments of Bolívar, Cesar and Atlántico were the most affected with 409,010, 104,077 and 228,914 people respectively, which represents a third of the total population affected during the 2010-2011 event. Other economic and social infrastructures have also been damaged. Although probably significant, the impacts on biodiversity have not been evaluated
Institutional coordination	VC	Yes C1 PA conservation C2 Ecosystem health management	Strengthening the capacity and coordination of the agencies that have jurisdiction over the Basin, and in the four project areas in particular, is a necessity and could greatly contribute to mitigating threats to biodiversity in the region. The project areas are located within five departments, with a similar number of regional environmental agencies (CARs) and CORMAGDALENA (the regional environmental agency) that also have some form of institutional supervision and control over the resources in their jurisdictions. MADS and IDEAM activities and projects also influence the way in which the region's biodiversity is used and managed. Currently, MADS is leading the formulation of the strategic action plan for

PROBLEM	CLARITY IN DIAGNOSIS	¿TC OBJECTIVE?	EXPLANATION
		C3 Monitoring and evaluation	the Magdalena basin. IDEAM is in charge of producing, analyzing, processing and disseminating information on hydrology, hydrogeology, meteorology, vegetation and surface to improve the use and care of the country's biophysical resources. Finally, CORMAGDALENA leads the Magdalena Management Plan, which is in the process of being updated, and is also in charge of developing a Magdalena Action Plan. Likewise, Law 99 of 1993 made the following environmental authorities responsible for the granting of Environmental Licenses: MADS, the Regional Autonomous Corporations, the Sustainable Development Corporations and the Municipalities. The effectiveness of this institutional multiplicity is limited by overlapping mandates, weak institutional structures, and insufficient information for decision-making

Note: VC= Very clear C= Clear NC= Not Clear NM= No mentioned

Source: *GEF 2013 and interviews 2022.*

During its design, this project was extensively discussed with The Nature Conservancy (TNC), IDEAM, MADS, Alexander von Humboldt Biological Resources Research Institute, Regional Autonomous Corporation of the Rio Grande de la Magdalena (CORMAGDALENA), National Aquaculture Authority and Fisheries (AUNAP) and IDB, among others.

Analysis of the execution: change in the context

The development problems identified in the project design were addressed during its execution, as described in the third column of ***Table 5***. However, during the course of the project changes were made to adapt the project to existing circumstances. at the time of its implementation; Thus, the scope of the project was modified according to the following table.

Table 6 Adjustments made to the original project results matrix

RECOMMENDED ACTIONS	ORIGINAL PROJECT MATRIX	PROPOSED ADJUSTED MATRIX
Component 1 Conservation of priority areas		
Product indicators Proposed action: Change the indicator name and goal	*Indicator 1.2* Planning instruments for Landscape Conservation Mosaics developed (3)	*Indicator 1.2* Regulatory framework designed (2)
	Indicator 1.3 Management plans for new and existing protected areas implemented	*Indicator 1.3* Implemented Action Plans
Result indicators Proposed action: Change the indicator name and goal	*Indicator 2.1* At least 160,000 hectares of priority freshwater ecosystems declared as protected areas (5)	*Indicator 2.1.* New protected areas declared in the Magdalena River basin (ha)
	Indicator 2.2 At least two legal instruments (environmental determinants) approved and applied to improve the health of freshwater ecosystems	*Indicator 2.2.* Legal instruments for the conservation of freshwater ecosystems adopted by the CARs in mosaic areas (quantity)
Result indicators Proposed action: Add a new indicator	N/A	*Indicator 2.3.* Ecological connectivity corridors in the area of established conservation mosaics (2 connectivity corridors)
		Indicator 2.4. Número de productos de la matriz de resultados que incluyen un enfoque de género

RECOMMENDED ACTIONS	ORIGINAL PROJECT MATRIX	PROPOSED ADJUSTED MATRIX
		(quantity – Nº. Productos)
Result indicators Proposed action: Change the indicator name	*Indicator 3.1.* Improved management effectiveness of new and existing protected areas covering 348,377 ha (average percentage)	*Indicator 3.1.* Management effectiveness score of the 9 protected areas supported (average score)
Component 2 Ecosystem health management		
Product indicators Proposed action: Change the indicator name	*Indicator 2.1* Preparation of fisheries management plans that include environmental sustainability guidelines	*Indicator 2.1* Governance models designed/implemented
	Indicator 2.2 Marketing plan for sustainable fishing in the Ciénaga Barbacoas implemented	*Indicator 2.2.* Pilot interventions implemented
	Indicator 2.4 Developed hydrological models that represent strategic hydrosystems for conservation	*Indicator 2.4* Ecohydrological models that represent strategic hydrosystems for conservation developed
	Indicator 2.5 Proposal of technical guidelines to be considered in environmental and territorial planning and administration instruments developed	*Indicator 2.5* Regulatory framework designed
	Indicator 2.6 Environmental institutions at the national, regional and local level, trained in managing the health of ecosystems	*Indicator 2.6.* Trained people
Result indicators Proposed action: Eliminate the indicator	*Indicator 4.1* Reduction in total catches of juvenile Prochilodus magdalenae (porcentage)	N/A
	Indicator 4.2 Reduction in total catches of juveniles of Pseudoplatystoma magdaleniatum (porcentage)	
Result indicators Proposed action: Add a new indicator	N/A	*Indicator 4.3.* Average annual catch per unit effort (CPUE) for the group of the 10 most commercially important fish species (Kg/day)
		Indicator 4.4. Beneficiarios de iniciativas para la gestión pesquera sostenible (desagregado in Men-Women)
Component 3 Monitoring and evaluation		
Product indicators Proposed action: Change the indicator name	*Indicator 3.1* Proposal to strengthen SIAC to strengthen the monitoring of freshwater ecosystems designed	*Indicator 3.1* Diagnostics and assessments completed
	Indicator 3.4 Implemented project communication strategy	*Indicator 3.4.* Awareness campaigns designed/implemented

Source: *Magdalena-Cauca Vive project 2022.*

According to most of the interviewees with knowledge of the subject, there were also changes (socioeconomic and environmental) that had repercussions - on the project -, namely:

- *The situation of the COVID-19 Pandemic completely paralyzed the field work of the project for a few months, between March and August 2020; which was later restarted with some limitations.*

- *Floods that caused the loss of restoration efforts and impeded or made more difficult the access to different areas of the project.*
- *There were national blockades that made access difficult to some communities.*
- *Changes in the personnel of the participating institutions, such as corporations and local and regional governments, which caused delays and efforts to update the knowledge of the new authorities about the project and the problems it was intended to solve.*
- *Law of guarantees in 2017, which prevented government entities from making any contracting and signing agreements.*

5.1.3 Connection of the project with national and international legal regulations

Analysis of design

The project aligned its objectives with State laws, as well as with public policies and national plans in force at the time of its design, such as the following (BID 2016, GEF 2013)

- *National Development Plan (2014-2018) in its Objectives 2 and 3, related to the sustainable use of natural capital and reducing vulnerability to disaster risks and climate change.*
- *Due to the fundamental role of biodiversity in the water cycle and in the provision of ecosystem services related to water regulation, the National Policy for Comprehensive Management of Biodiversity and its Ecosystem Services. The relevant strategies included the following: i) Consolidation of the National System of Protected Areas - SINAP, ii) Reduction of harmful processes for biodiversity, iii) Restoration of ecosystems and threatened species, and iv) Characterization of the elements and promotion of sustainable management systems.*
- *The National Policy on Protected Areas (CONPES 3680 of 2010), which dictates the necessary policy strategies for the consolidation of the National System of Protected Areas as a comprehensive, effectively managed and ecologically representative system. For example: creation of new protected areas to conserve fragile ecosystems not represented or underrepresented in SINAP and continue with the identification of priority sites for conservation.*
- *The principles, objectives and strategies of the National Policy for Comprehensive Water Resource Management (MADS 2010, MADS 2012) were followed, with five key objectives: supply, demand, quality, risks and institutional capacity and, governance. In particular, strategies for the planning, management and conservation of water resources are directly relevant to this project.*
- *The National Policy for Wetland Areas that defines methods to combine biodiversity conservation with sustainable management activities in critical wetland areas. This policy is also contributing to the formulation of the new Strategic Action Plan for the Magdalena River basin that MADS is developing. The main objective of this new action plan is to define guidelines for the sustainable management of the basin. As this project focuses on sustainable management guidelines, their development is directly relevant to the implementation of the proposed project.*
- *The project is also consistent with the National Development Plan (PND 2010-2014), which adopts biodiversity as part of the country's sustainable development strategies, together with the promotion of competitive and sustainable production processes to improve environmental performance. (see Chapter 6). Consequently, a series of priority actions for the protection of biodiversity and the mitigation and management of risks for the Magdalena basin are mainly included in the strategies "Biodiversity and ecosystem services" and "Integrated management of water resources". The PND proposes the implementation of a pilot project that incorporates sustainability in priority areas, including the Colombian Massif and La Mojana, both in the Magdalena Basin. Finally, one of the other main objectives of the PND is the demarcation of the agricultural frontier in the wetland systems of the Magdalena basin.*
- *Update of the Institutional Strategy 2010-2020.*

- *Country Strategy with Colombia 2015-2018 in the transversal area of green growth that prioritizes actions for adaptation to climate change, conservation and effective management of protected areas and is one of the main strategies according to the Conference of the Parties, United Nations Framework Convention on Climate Change (COP-2014).*

The project also contributes to achieving objectives 1 and 2 of the GEF biodiversity focal area. In relation to BD-1, the project contributes to result 1.1 *"Improved management effectiveness of existing and new protected areas"* through the establishment and management of new critical conservation areas for biodiversity that will guarantee long-term protection terrestrial and critical freshwater biodiversity. In relation to BD-2, it contributes to result 2.2 *"Measures to conserve and sustainably use biodiversity, incorporated into the normative and regulatory frameworks",* specifically by generating, making accessible and providing training on the use of new methodologies and models to ensure better management of freshwater ecosystems and to reduce threats to biodiversity, as well as integrating biodiversity into local river basin plans. In addition, the project contributes to BD-2 by addressing outcome 2.1 *"Increased sustainably managed landscapes and seascapes that integrate biodiversity conservation"* by providing incentives to implement sustainable production practices in terrestrial ecosystems and aquatic (GEF 2016, GEF 2013).

At the international level, the proposal is consistent with the ratification by Colombia of the United Nations Convention on Biological Diversity on November 28, 1994, and the adherence to the United Nations Convention to Combat Desertification signed on June 8, 1999, as well as his support for the Millennium Development Goals (MDG). In particular, the policy documents CONPES 91/2005 *"Colombia's goals and strategies for the achievement of the MDG-2015"* and CONPES 140/2011, include specific conservation indicators that are directly relevant to this project, such as the proportion of areas dedicated to the conservation of ecosystems in the National System of Protected Areas (SINAP) and number of protected areas with a management plan, to achieve MDG 7 *"Ensure environmental sustainability"* (GEF 2013).

In the execution stage

The plans and territorial ordering are regulated by Law Nº. 152 of 1994 and Law Nº. 388 of 1997. The first provides the roles and guidelines for national, departmental, and local governments to develop their development plans, and the second assigns the roles of territorial zoning to the municipal territorial entities to prepare the Land Management Plans (POT), considering the environmental determinants (DA) [9] defined by the CARs. The project team worked with the Regional Autonomous Corporation of Central Antioquia (CORANTIOQUIA), the Regional Autonomous Corporation of Magdalena (CORPAMAG), and the Regional Autonomous Corporation of Cesar (CORPOCESAR), updating and integrating conservation considerations freshwater ecosystems in environmental determinants, and supporting the efforts of municipalities in updating their urban and land use plans.

However, the CARs with which the project worked did not encounter a feasible way to implement the *"Conservation Mosaic (MC)"* figures - provided for in the terms of reference of the project - to adopt it as DA; which would have implied a long and complex internal management, added to the external management with territorial entities (Governments and Mayors) (MADS 2020; pages 99-107), so that the DA becomes part of a territorial ordering process.

Therefore, although the CARs found the conceptual framework of the two MCs proposed by the project pertinent, especially the analysis and guidelines for strengthening governance in

[9] *"Environmental Determinants-DA" refer to the "terms and conditions set by the environmental authorities to guarantee the environmental sustainability of land use planning processes (MADS 2020).*

the territories, they would not be willing to manage them as DAs. For these reasons, the project ended up specifying the actions in the area of MC-Barbacoas and MC-Zapatosa, as a specific management instrument that allowed two ecological connectivity corridors to be favored, as well as supporting local communities with the strengthening of activities sustainable production activities, such as handicrafts and community nurseries.

5.1.4 Analysis of environmental and social safeguards

Analysis of design

The analysis of the project's actions did not identify negative environmental and social impacts, for which reason the project was classified in category *"C"* in accordance with the Environment and Safeguards Compliance Policy. (OP-703). (IDB 2016).

Analysis of the execution

The project worked in critical ecosystems (OP-703 B9) hydrological units, in the Magdalena River Basin, delimited as freshwater ecosystems, which are highly threatened and key ecosystems such as the following: wetland complexes of the Zapatosa swamps and Ayapel (Mojana Complex) and Barbacoas and Río Claro (South Cocorná).

The project complied with national regulations and multilateral environmental agreements (B2). In the implementation of agroecological practices, as adaptation measures, the non-use of agrochemicals and the reuse of organic waste to produce organic fertilizer, biofertilizers and compost were promoted (B11).

Organizations, some of them women's, were contracted to support the implementation in the field of the activities promoted by the project (OP-761). A process of capacity building and strengthening of enterprises was carried out. In total, the project worked with 266 people (146 women and 120 men).

Regarding the regulation and supply of water, all the adaptation measures promoted by the project contribute to the reduction of climate change (OP-704).

The project worked with children and young people, at the level of houses of culture with schools, for the recovery of cultural knowledge, environmental issues, among others.

The project did not carry out any type of archaeological studies, but they do exist for the area, according to the interviews carried out with the coordination of the project. The project did not register any archaeological site within its area of influence nor did it carry out high-impact activities; neither during its execution, was any vestige or sign of its existence found (OP-703 B9).

5.1.5 Results framework and identified risks

In the design

The results framework (matrix) presents a vertical logic: the output indicators respond to the outcome indicators, the outputs and results to the components, and the components to the objective. The objectives, components, results, products to be achieved were ambitious but feasible, as were the indicators. Both the components and the results respond to and are connected to the development problems (*Table 5*) identified in the *"Request for CEO Endorsement"* (RFCE) (GEF 2013), which has been confirmed through interviews.

The risks identified in the *"Project Identification Form"* (PIF), *"Request for CEO Endorsement"* (RFCE) were logical and coherent with the development problems and an important input to determine the activities to be developed during the execution of the project (*Table 7*).

Table 7: Risks identified in project design

RISK	SCORE	RISK MITIGATION STRATEGY
1. Lack of political will, institutional capacity, inter-institutional coordination and competition between entities	L	Given the importance of the Magdalena River in Colombia, there is significant institutional support to improve environmental management in the basin. Formation of a tripartite committee to guide project implementation and involve relevant stakeholders early on during project design will further mitigate this risk
2. The reconstruction/construction of infrastructure, which may affect the main ecological structure of the basin and its future sustainability	M	The project will promote the use of biodiversity guidelines and water flow criteria in decision-making processes related to infrastructure investments, favoring the use of green infrastructure
3. Resistance from local and regional agencies to implement their resources and actions to protect biodiversity	M	Different actors at the local and regional level will be incorporated into the design of the project, and will be key in the implementation of most of its activities, from participation in the selection and management of protected areas, the development of tools for decision-making decisions, the prioritization of investments in landscapes, to the design and implementation of long-term monitoring systems
4. Lack of co-financing to implement actions that coincide with the GEF project	L	Throughout the project design, the main partners will actively participate to properly align their institutional strategies with those of the project
5. Recurring extreme weather events negatively affect the viability of project activities	M	Risk of particular concern for land user investments and landscape rehabilitation investments. However, according to the AF guidelines, the design of land use management options and landscape investments will explicitly take into account the risks associated with extreme weather events
6. Changes in leadership in CAR and/or administrative procedures (signing of agreements) may delay the execution of the Project and/or hinder the fulfillment of technical and financial commitments	M	To mitigate this risk, actions have been established aimed at disseminating the objectives and scope of the program to the (new) authorities of the CARs and other political and institutional instances involved. Likewise, the organization of activities aimed at informing and having the Steering Committee as intercessor before the CARS and other institutions involved in the execution of the project
7. Lack of inter-institutional coordination (National, Regional and Local Level)	H	The project will create a steering and technical committee made up of all the key institutions (related to the management of the Magdalena basin) from the national, regional and local levels. By including these institutions in the execution model, the project will minimize this risk. Additionally, the Project will receive support for coordination with local partners and strategic planning of the project, among others.
8. Insufficient commitment/empowerment/capacity of the actors (fishermen, communities, cattle, sugar cane, others). Conditioning the implementation of Conservation Agreements	H	This risk is partially addressed in the project design stage, where agreements with organizations that are already involved in processes that complement the project are foreseen. To strengthen this commitment, the following actions will be carried out: Awareness Plan for Civil Society Organizations (including fishermen); formalization of agreements with organizations involved in the implementation of the agreements; strengthening their management capacities
9. The absence of an integrated intervention approach in the	M	In order to encourage the consideration of biodiversity and water flow criteria in strategic decision-making about the basin, periodic coordination and coordination meetings will be organized with other actors and projects that operate in the basin.

RISK	SCORE	RISK MITIGATION STRATEGY
basin (infrastructure, hydroelectric, navigability) could affect the ecological structure		
10. Increased impacts of natural hazards (droughts, pests, diseases) intensified by climate change	M	Information on the recurrence and frequency of weather events will be collected and monitored. Additionally, climate change scenarios will be considered for the declaration of PA and the development of Management Plans, in order to reduce vulnerability. In component two, the impacts on biodiversity due to the change in water flows (including climate change and climate variability) will be evaluated to propose adaptation measures that will be included in the planning tools.

Note: H= High M= Medium L= Low

Source: *GEF 2013, GEF 2016.*

Table 8: ***Updated risks in the execution of the project by FN***

RISK	SEVERITY			ACTIVITY	MECHANISMS[10]	INDICATOR, RESPONSIBLE, AND TERM	COMMENT FINAL EVALUATION
	VALUE	LEVEL	RESIDUE (%)				
RISKS OF EXECUTING AGENCY							
1. Human/Social/ Political: Low appropriation of the methodologies	1	B	1	01-01. Give induction to new staff, reinduction to old staff	Individual and/or group sessions at the start of the employment contract and annually for the entire team	Nº. of people hired by the project/ No. of people hired linked to the inductions Person in charge: HSEQ Coordinator Fundación Natura and/or administrative area of the project Date: December 2021 Monitoring: semester 101/101	Inductions for long-term staff. FN's quality management system is certified with ISO 9001. The inductions alert the project staff regarding the relationship with people and knowledge of the internal management of administrative and financial aspects. Also, about job security and mechanisms for the prevention and mitigation of COVID-19
				01-02. Train and sensitize the personnel participating in the processes, emphasizing the procedures applied in the project, emphasizing the biosafety protocols generated in response to the COVID-19 pandemic	Training sessions on policies, procedures and formats applicable to the project, including biosafety protocols generated in response to the COVID-19 pandemic	Nº. of people trained/ No. of certificates issued Person in charge: HSEQ Coordinator Fundación Natura and/or administrative area of the project Date: December 2021 Monitoring: annual 520/520	
2. Environmental/sustainability: Negative impacts related to environmental and social aspects generated	1	B	1	02-01. Continue with the acquisition of inputs and supplies with low environmental impact, including biosafety elements	Generation of purchase orders with type, quality and quantity specifications	Nº. of purchase orders with type, quality and quantity specifications (purchase request) Person in charge: Administrative and financial coordinator of the project Date: December 2021 Monitoring: semi-annual	Green purchases: FN seeks to apply the circular economy and biosafety, which is transmitted to the partners/beneficiaries of the project

[10] How will the activity get done.

RISK	SEVERITY			ACTIVITY	MECHANISMS[10]	INDICATOR, RESPONSIBLE, AND TERM	COMMENT FINAL EVALUATION
	VALUE	LEVEL	RESIDUE (%)				
during project execution				02-02. Continue with environmental management processes and final disposal of waste by the Foundation	Collection and delivery of material to companies with authorization (environmental license) to make final disposal of supplies	Number of certificates of final disposal and reuse of inputs (Waste generated in the organization) Person in charge: HSEQ Coordinator Fundación Natura and/or administrative area of the project Date: July 2021 Monitoring: annual 8	
3. Administrative: Exceeding the authorized values for the development or fulfillment of activities defined in the project budget	3	A	9	03-01. Budget planning of activities to be executed by each of the 3 components of the project during the year	Meetings for programming and definition of activities with PCU	PEP-POA Responsible: General coordinator of the project Date: December 2021 Monitoring: annual 1	The budget assigned to each component was respected according to the programming
				03-02. Review, rescheduling activities and budget redistribution incorporating additional costs caused by biosafety aspects as a consequence of the COVID-19 pandemic	Meetings to reschedule activities and redistribute budget with UCP	Adjusted AOP Responsible: General project coordinator Date: August 2021 Monitoring: semi-annual 4	
4. Human/Social/Politic: High staff turnover	2	M	9	04-01 Continue carrying out the selection processes according to the parameters of the selection and recruitment procedure of Fundación Natura that ensure the suitable personnel and with availability of time for the project	Disclosure of the vacancy, selection and hiring process	Selection documents Responsible: General project coordinator Date: July 2021 Monitoring: semi-annual 47	The first 2 years of the project there was a lot of turnover, due to a public call, for which a more focused selection was made, with short lists by invitation

RISK	SEVERITY			ACTIVITY	MECHANISMS[10]	INDICATOR, RESPONSIBLE, AND TERM	COMMENT FINAL EVALUATION
	VALUE	LEVEL	RESIDUE (%)				
5. Administrative: Non-compliance with proposed goals defined to achieve the strategic objectives of the project and the FN	2	M	9	05-01 Continue with the follow-up and monitoring of activities, schedules and budget	Updating project information in the MS Project tool	Percentage of progress of the project in the MS Project tool Responsible: PCU Date: December 2021 Monitoring: monthly 18	Covid-19 affected proposed goals, in financial and physical execution, for which reason the Shock Plan was developed, with closer monthly follow-up with the IDB; however, a 1-year extension was requested, in order to close the activities
RISKS DIRECTLY ASSOCIATED WITH THE PROJECT							
6. Governance: Changes in the Authorities (CAR), governments and institutions and/or administrative aspects that delay the start-up of the Project and/or make it difficult to comply with technical-financial commitments	3	H	25	06-01 Socialization of the objects and scope of the project before new directives and other political-institutional instances related to the development of the project	Meetings to present the project, advance results and benefits, and opportunities for your participation in the project.	Number of meetings with management bodies Responsible: Project component coordinators Date: December 2021 Monitoring: semi-annual 24	There were limitations in 2018 due to the election of governors and mayors, when the high command changed, so time was invested to make the new authorities aware of the project. Commitments made had to be renegotiated
				06-02 Strengthening actions by the members of the steering committee before the CARs and/or political and sectoral instances, considering the uncertainty of the permanence of the current officials and possible budget cuts generated by the measures taken in response to the COVID-19 pandemic	Meetings to present the project, advance results and benefits, and opportunities for their participation, as well as signing agreements for the continuity of actions within the contingency framework	Number of meetings with management bodies Responsible: Project component coordinators Date: December 2021 Monitoring: semi-annual 35	
7. Governance: Limited capacities, articulation and/or inter-institutional coordination (Central-regional-local levels)	2	M	9	07-01. Periodic monitoring of the technical committee of the agreement, agreement of wills, memorandum of understanding and/or resolution to establish and/or adjust work plans and investment plans	Meetings of the members of the technical committee of the parties and/or definition of agreements for the continuity of the ac-	Number of minutes of the technical committee of the agreements, agreements of wills, memorandums of understanding and/or resolution Responsible: Project component coordinators Date: November 2021 Monitoring: semi-annual	Regarding relations with committees, there were no problems. But, there were difficulties with local and regional entities, for which didactic communication strategies and novel alternatives were organized, especially related to virtual media

RISK	SEVERITY			ACTIVITY	MECHANISMS[10]	INDICATOR, RESPONSIBLE, AND TERM	COMMENT FINAL EVALUATION
	VALUE	LEVEL	RESIDUE (%)				
					tions within the framework of the contingency	29	
				07-02 Apply the communication strategy in the areas of intervention of the project	Preparation of printed and/or audiovisual materials for dissemination by the different media programmed in the communication strategy	Nº. of materials produced and/or diffusions Responsible: Component 3 Coordinator Date: July 2021 Monitoring: semi-annual 132	
8. Environmental/sustainability: Deterioration and/or loss of priority conservation areas in the Magdalena-Cauca basin due to the growth of threats from extensive cattle ranching, mining, deforestation, expansion of the agricultural frontier, industrial	3	H	25	08-01. Ensure, within the technical studies for the Declaration Route and/or for the Management Plan, the strategies to manage and minimize threats to biodiversity and the integrity of ecosystems.	Inclusion in the TDR of consultancies, the approach to strategies to manage and minimize threats to biodiversity and the integrity of ecosystems	Consulting TOR Responsible: Component 1 Coordinator Date: July 2021 Monitoring: semi-annual 66	An environmental inconvenience arose, which was a contingency in the construction of the Hidroituango Dam, which during 2018-2019 was in danger of leaking, for which reason activities in the Ayapel Swamp were suspended and resumed and ended during 2020 -2022
				08-02. Definition and prioritization of actions of the Management Plan of the protected area	Prioritize actions of the Management Plan of the protected area-	Nº. of prioritized actions management plan Responsible: Component 1 Coordinator Date: July 2021 Monitoring: semi-annual 2	

RISK	SEVERITY			ACTIVITY	MECHANISMS[10]	INDICATOR, RESPONSIBLE, AND TERM	COMMENT FINAL EVALUATION
	VALUE	LEVEL	RESI-DUE (%)				
and/or domestic effluents, overfishing, among others				08-03 Coordinate with related projects in the project's areas of influence to work on joint strategies to prevent threats	Meetings and/or coordination workshops with the entities involved, where alerts for COVID-19 are also presented	Number of coordination meetings or workshops with entities involved Responsible: Project component coordinators Date: December 2021 Monitoring: annual 27	
9. Humano/Social/ Político: Comunidades locales y/o sector privado no se involucran adecuadamente en el proyecto	1	L	3	09-01. Involve awareness-raising actions aimed at entities and organizations at the national, regional and local levels in the project's communication strategy	Implement the awareness-raising actions of the communication strategy, incorporating the response to the conditions imposed by the Pandemic.	Nº. of awareness actions Responsible: Project component coordinators Date: December 2021 Monitoring: annual 16	Didactic communication strategies and innovative alternatives were developed, especially related to virtual media.
10. Human/Social/ Political: Intensification of armed conflict and/or social conflicts and implementation of peace agreements	3	H	25	10-01 Follow-up and monitoring of social conflict in the area of influence of the project	Evaluate and reschedule activities in other areas if necessary	Nº. of follow-up meetings Responsible: Project component coordinators Date: December 2021 Monitoring: annual 0	The project had a learning evolution, to the extent that the actors got to know each other, which were armed and which were not, and ways of working in the territory with each other. From the quality and occupational safety system, FN developed protocols for entering the territories
				10-02 Implementación protocolo de seguridad física de la Fundación Natura	Capacitación en Implementación protocolo de seguridad física	Nº. of team people trained/ Nº. of team people Responsible: HSEQ FN Coordinator and/or administrative area Date: December 2021 Monitoring: annual 15/15	

RISK	SEVERITY			ACTIVITY	MECHANISMS[10]	INDICATOR, RESPONSIBLE, AND TERM	COMMENT FINAL EVALUATION
	VALUE	LEVEL	RESIDUE (%)				
11. Environment/Sustainability: Recurring extreme weather events condition the implementation of project activities	2	M	9	11.01. Follow-up and monitoring of hydroclimatic events (El Niño, Niña, floods, others), in order to reschedule activities if necessary	Periodic contact with Risk Institutions (UNGRD), CAR and IDEAM	Number of reports hydroclimatic conditions Responsible: Component 2 Coordinator Date: July 2021 Monitoring: quarterly 23	Specific events were presented, but the planned activities could be completed. In some cases, it implied the loss of restoration activities (including plant material and infrastructure) that had to be relocated or restarted.
12. Infrastructure: Absence of an integrated approach in the interventions in the basin (eg: infrastructures, hydroelectric, navigability, among others)	1	L	3	12-01 Articulate environmental impact mitigation actions with sectors that develop infrastructure projects in the basin	Periodically verify the evolution of the infrastructure project and the decisions of competent entities	Number of reports competent entities Responsible: PCU Date: December 2021 Monitoring: annual 2	There was an environmental inconvenience, which was a contingency in the construction of the Hidroituango Dam, which during 2018-2019 was in danger of leaking, for which reason activities in the Ayapel Swamp were suspended and resumed and ended during 2020 - 2022
13. Financial/Economic: Disadvantages related to procurement processes and/or accountability	2	M	9	13.01 Continue planning the procurement plan included in the POA	Follow-up meetings with the Project Coordination Unit (UCP)	adjusted PA Responsible: Project coordinator Date: July 2021 Monitoring: semi-annual 8	The budget assigned to each component was respected according to the programming

Note: H= High M= Medium L= Low

Source: *BID 206, BID 2013 and interviews 2022-2023.*

During execution

The objectives of the project were adequately defined and responded accordingly to the national development problem identified; as well as the results, products and goals.

The risk matrix identified the possible limitations that could arise and the UCP used it as an input for planning and adaptive management, which was updated by Fundación Natura, in coordination with the IDB, as a monitoring and evaluation tool (*Table 8*).

Adaptative management during Project design

The design of the project provided a way to adapt it according to the needs of the context; so it was possible to follow the following guidelines to make strategic changes according to the needs, namely (BID 2017):

> *MOP: "CLAUSULA 1.5. El MOP podrá evolucionar de acuerdo con la experiencia en la implementación del Proyecto, a medida que avanza su ejecución. Se invita a los usuarios de este documento a enviar las observaciones y recomendaciones que se deriven de la aplicación de las presentes normas a la Coordinación General del proyecto. El Coordinador es responsable de incorporar los cambios adecuados para el MOP de conformidad con los procedimientos establecidos en la sección XII, "Modificaciones al Manual de funcionamiento del proyecto", del presente documento. Los cambios en el documento sólo serán oficialmente incorporados y reconocidos por EL BANCO cuando la nueva versión sea aprobada oficialmente por LA FUNDACIÓN y previa no objeción del BANCO."*
>
> *MOP: "CLAUSULA 3.16: …y tomar decisiones sobre cuestiones técnicas y administrativas para la ejecución del mismo, incluyendo la aprobación del Plan de Adquisiciones, los POA y sus modificaciones, y cambios importantes en el proyecto. Igualmente se reunirá previo a las evaluaciones intermedia y final, para las actividades pertinentes para facilitar la implementación de las mismas."*
>
> *MOP: "La cláusula 10.11 La evaluación de medio término determinará el progreso hacia las metas establecidas, el nivel de participación de los interesados, cambios positivos en los beneficiarios que resulten de la intervención y los cambios que deban realizarse a la estratega de ejecución. Esta revisión verificará si se está en proceso de alcanzar los objetivos del proyecto mediante las estrategias de ejecución que se están utilizando, con base en el diseño y la ejecución de los componentes del proyecto, y la calidad de la coordinación del proyecto. Servirá como evaluación formativa, lo que significa que estará destinada a mejorar la ejecución del proyecto a partir de la información disponible a la fecha, y extraerá lecciones aprendidas y recomendaciones a ser implementadas durante el resto del plazo del proyecto."*
>
> *MOP: "La cláusula 12.1 Por su propia iniciativa, la FUNDACIÓN, después de consultas internas con sus socios de proyecto, podrá sugerir modificaciones al Manual de Operaciones del Proyecto, para adaptarlo a las nuevas condiciones o circunstancias que puedan presentarse durante la etapa de ejecución. Los cambios sugeridos deberán ser consultados con el personal del Banco encargado de la supervisión del Proyecto. El Banco podrá aceptar el uso de la nueva versión del documento, una vez que el mismo sea aprobado por el Comité Directivo del Proyecto, y remitido oficialmente para su No Objeción."*

Adaptative management during Project execution

The project modified the results matrix in some aspects (*Table 6*), adapting to the circumstances at the time of its implementation to facilitate its compliance. For example, the project considered that the most effective strategy, given the circumstances that made it difficult to access to the territory and the implementation of the activities, was to work with the local population and

communities, in order not only to comply with the planned activities, but also to empower the community and facilitate both their identification with the project and to obtain a benefit additional for the generation of jobs and work with the families and beneficiary women. In the end, agreements were signed with 35 organizations (16 directly with the project and 19 with PPD-UNDP), of which approximately 13 are led by women (36%). In the context of Covid-19, the fact that these organizations were based in the field represented an advantage in advancing project activities.

5.1.6 Monitoring and evaluation

In the design

According to the Technical Cooperation Document (BID 2016) and Operations Manual (BID 2017), the follow-up and monitoring activities will record the progress of the project's processes and milestones, and will allow tracking progress in the achievement of products and results, based on in the Results Matrix. Semi-annual monitoring reports, annual monitoring reports, and annual monitoring of the results matrix, POA, and procurement plan would be carried out. The follow-up and monitoring of the project would be charged to GEF resources, being in charge of the Coordinator of Component 3, together with the General Coordinator of the Project, also financing travel expenses with Technical Cooperation resources. incurred for this activity as part of the execution of Component 3. The executing entity will provide updated information on the financial execution of the project with the necessary periodicity. Monitoring would be carried out according to Bank and GEF policies and procedures. The annual reports would be presented to the Bank, the Steering Committee and relevant stakeholders.

Project monitoring and evaluation, including day-to-day monitoring of project activities, would be the responsibility of the General Coordinator, with the support of the Project Administrative and Financial Coordinator. The General Coordinator would prepare the following reports annually to monitor and evaluate the general progress of the project and compliance with the indicators included in the Results Framework: (i) an Annual Operations Plan (POA) at the beginning of each year of execution of the project; (ii) a semi-annual progress report, towards the middle of each year of project execution; an Annual Project Report, at the end of each year of execution.

Also, a mid-term evaluation would be carried out when 40% of the contribution resources are disbursed, or 30 months after the entry into force of the project, whichever occurs first. The mid-term evaluation would determine the progress towards the established goals and the changes that needed to be made to the execution strategy. In addition, a final evaluation would be carried out in the last three months of project execution with conclusions on the achievement of the results. In the final evaluation, sustainability, lessons learned and recommendations for their application in other similar operations would be studied.

During the execution

The project effectively used the following instruments for the monitoring and evaluation of its activities and results, in accordance with the MOP and without delays according to the planned schedule; that is, all the reports mentioned below were delivered in due time and with the expected quality, confirmed with the interviews carried out and the review of the respective secondary information.

- *Multi-year execution plan (PEP) and follow-up reports (start-up, semi-annual, annual compliance with the work plan).*
- *Annual Operating Plan (POA): based on the PEP and with which planning and monitoring of the activities to be carried out have been carried out.*

- *Results matrix and risk matrix that was updated approximately every six months.*
- *Project Monitoring Report (PMR): which collects information on the progress of the products and results of the project, every six months.*
- *Procurement Plan (PA): updated every six months and provides administrative monitoring of the project's goods and services.*
- *Consulting reports: the contracts have the terms of reference with the Bank's no objection in accordance with the provisions of the MOP.*
- *Project implementation report (PIR) until January 2023.*
- *Technical committees (prior to the executive committees and thematic ones such as ecohydrology, PA, aquatic monitoring, among others) and Steering Committee (one or two a year, depending on the need).*

The instruments described have been commonly used by the project, which has allowed monitoring all activities, financial execution and acquisitions, among others. The annual plans served as a monitoring instrument and to plan the activities to be carried out the following year. The logic was followed that activities that could not be carried out according to the PEP were updated in the PMR (and the POA) and planned to be carried out in subsequent years of the project, according to the bank's procedures.

5.1.7 Relevant stakeholders and project coordination by FN, IDB and partners

In Project design

The highly participatory nature of this project implies the participation of a large number of national, regional and local government agencies with different roles in the basin, so it required a significant coordination effort to ensure successful execution.

The Executing Agency will be Natura Foundation (FN), which is responsible for executing the project and achieving the expected results, considering the technical, economic, environmental and quality standards defined for it. Fundación Natura has a team of specialists for the implementation and with the resources of the project it will hire additional support as necessary. Additionally, alliances will be established with regional institutions (CAR) to ensure a continuous presence in the field and two regional work clusters (Caribe and Magdalena Medio) will be created to monitor the execution of the project.

Due to the multisectoral nature of the project and areas of intervention, a Project Steering Committee was created. It is made up of MADS, CORMAGDALENA, IDEAM and the Adaptation Fund (FA) and is led by Fundación Natura, whose responsibilities include: supervising the comprehensive development of the project, approving the Annual Operating Plans and ensuring inter-institutional coordination, among others. initiatives.

In addition, a Technical Committee of the Project will be created, made up of technical personnel from MADS, IDEAM, CORMAGDALENA, the Adaptation Fund, PNN, TNC and CAR. Depending on the nature of the topics, other organizations may be invited. This committee will be chaired by Fundación Natura. Its main function is to provide technical advice to the project, supporting the creation of action guidelines, proposing modifications and improvements to the activities as necessary and in compliance with the project results.

During the execution

The key stakeholders of the project are broadly described in Table 19 of Annex 4. Regarding the partner entities of the project, MADS, CORMAGDALENA, IDEAM, FA and AUNAP – the latter not included in the design, but it was a key partner in the fishing issue -, according to the

opinion of the majority of those interviewed with knowledge of the subject, they have performed very well, although their response times correspond to their institutional nature.

In order to coordinate the execution and operational issues, the following working meetings have been carried out effectively, namely:

- *Meetings of the Steering Committee: approximately two a year, in which the results of the project are reported, the POA is approved, and policy and project monitoring decisions are made.*
- *Technical Committees, four per year, in which the work of the PCU and the consultants is fed back by the partner entities.*
- *Technical coordination meetings in the initial quarterly period between the PCU and the FN directives and, at the beginning of the pandemic, they were made monthly or bimonthly, in which the state of execution was evaluated and the general work plan was made and adjustments were made. the monthly work plans (UCP and coordinating consultants of each component).*
- *Permanent missions with the IDB, virtually or in person, at least once a year: in which updates are provided on the achievement of objectives, goals and products and operational problems that arise are solved.*
- *Follow-up meetings, every month, of the coordinators of each theme with the consultants in the field and the communities in each of the priority basins.*

The project and the CARs have signed cooperation agreements within the framework of project execution in order to achieve the objectives, products and results proposed more effectively, creating synergies. The list of the main agreements signed is presented in Annex 5.

The involvement of AUNAP during the execution phase of the project was essential, due to the predominant amphibious and water nature of the project's actions and interventions and the social and economic importance of the fishing resource. At the local and regional level, AUNAP participated in decision-making and planning spaces, as well as in the fishing and territorial management roundtables.

The project has coordinated activities with the different actors, as described below.

Institutional articulation at local level

- *The project held meetings with the municipalities at the local level as specific issues had to be worked on, such as management plans, implementation of PM, implementation of Conservation Mosaics and the strengthening of fishing activity.*
- *Dynamic and inter-institutional tables, in order to reach agreements in favor of the conservation of the territory, beyond a particular AP.*

Institutional articulation on a regional scale

- Meetings with the CARs to coordinate the work plans in each of the PAs they manage. Depending on the topic, AUNAP and related Universities were invited.

5.2 Impact

This project is classified in impact as highly satisfactory (HS), since it achieved and exceeded in some cases the proposed result goals and led to a transformational change in the beneficiaries, the institutions and the partners involved, together with the development of ecohydrological models that can be used to monitor the freshwater ecosystems of the Magdalena Basin and could serve as a basis for other basins at the national and international level.

The project did not have impact indicators as such, but it did have result indicators, which were specific, measurable SMART[11] (goals were established), relevant since they responded to development problems (and in the vertical logic to components and products), affordable (ambitious but achievable) and limited to the time of technical cooperation (TC). A more detailed analysis of these indicators is presented below.

According to the interviews carried out during the field and virtual mission, the project achieved a transformational change in the beneficiary groups and partners, not only in terms of adequately valuing the sustainable use of freshwater ecosystems, but also in that conservation measures are profitable (i.e. restoration, investment in the improvement of fishing gear and marketing, handicrafts and tourist activities, among others) and provide alternatives for traditional activities with the greatest impact such as livestock - and traditional agriculture.

According to the interviews carried out, there are other additional, unplanned, more outstanding products/results generated and attributable to the project, through the activities carried out in its two components, among which are the following:

- *It was possible to influence the public policy and work plans of corporations and local and regional governments, contributing to their development plans by including the dimension of sustainable development of freshwater ecosystems.*
- *Strengthening of local and regional organizations, through joint work and increased governance, with the initiative of the Dynamic Roundtables and Inter-institutional Roundtables. Communities have increased their political participation and interventions in the design of development and management plans, strengthening sustainability.*
- *Although the project activities sought to directly influence freshwater ecosystems, there are other benefits related to ecological connectivity and increased bio-diversity in their environments.*
- *Increase in the income of beneficiary families, by diversifying and improving their productive activities, which has resulted in greater family financial stability, for example, by improving their fishing, processing (including cooling) and marketing practices.*
- *Creation of greater cooperation and governance through the interaction between organizations and associations.*
- *Strengthening of family cohesion and unity, by having a greater diversification of activities, which entails a more efficient division of labor.*

The compliance tables - presented below - present - in *italics*, **blue** and with a reduced size - the original comments that appeared in the results matrix of the "CEO Endorsement Request" (GEF 2016). And, with normal handwriting, the comments of the final evaluation, according to the interviews carried out and the information provided.

[11] *SMART: specific, measurable, affordable, relevant and limited in time.*

5.2.1 Project result indicator

The overall project result indicator was widely exceeded and the component result indicators were achieved, five of which exceeded the target.

Table 9 ***Compliance with project result indicators***

RESULT INDICATOR	BASE LINE	GOAL	CURRENT COMPLIANCE	%	COMMENTS
Project objective: contribute to the conservation and sustainable use of biodiversity in the Magdalena basin by protecting priority habitats, improving the health of ecosystems, and strengthening governance and local capacities					
Result 1: Improved representation of freshwater ecosystems in the National System of Protected Areas of Colombia (SINAP)					
Indicator 1.1. Representation of freshwater ecosystems in SINAP (porcentage)	9,54	10,33	14,50	496	*In endorsement:* The identified protected areas were declared At the end of the project *The goal was exceeded* The representativeness of freshwater biomass in SINAP increased, specifically for the Magdalena-Cauca macro-basin, due to the contributions of the project for the declaration of 4 new APRs, which in total represented a 496% increase in freshwater ecosystems in SINAP

Note: Color indicates a compliance alert, based on the information provided.
Color indicates that the goal was exceeded, fulfilling beyond what was expected.
The comments in *italics*, reduced font and **blue** in the last column correspond to the results matrix.

Source: *Project Magdalena-Cauca Vive 2023, interviews 2023.*

- *Result indicator 1.1*: In the macro-watershed, protected areas showed an increase of 44.95%, going from 1,989,977 ha to 3,615,098 ha, of which 200,488 ha were contributed by the new areas of the project. The representativeness of freshwater biomes went from 58,813 ha to 164,388 ha, which is equivalent to 64%. In the number of records, the macro-basin registered an increase of 96%, which is equivalent to an area of 105,575 ha. In the macro-basin, 85 regional Integrated Management Districts were identified, of which 32 do not present a management plan, and 53 present a management plan, among them the four managed by the project within the macro-basin (Proyecto Magdalena-Cauca Vive 2022).

The goal was exceeded, however, according to the interviews carried out with people with knowledge on the subject, the problem now is the financing for its operation.

5.2.2 Result indicators Component 1

- *Result indicator 2.1:* The: goal of 160,000 new hectares of freshwater ecosystems declared as protected areas, was exceeded by 41,609 ha., since for the four Regional Protected Areas (RPA) of the Magadalena-Cauca macro-basin, to which the project contributed to its "declaratory route" process as RPA, and which were worked on and/or managed in conjunction with the corresponding Regional Autonomous Corporations (CAR), which totaled 201,609 ha., as well as, have already been incorporated into the schemes of conservation areas in the country (see https://runap.parquesnacionales.gov.co/): i) Regional District of Integrated Management-DRMI and Cenagoso de Zapatosa Complex RAMSAR Site (140,765 ha. -CORPAMAG-CORPOCESAR); ii) DRMI Cienaga de Barba-coas (32,074 ha.CORANTIOQUIA); iii) DRMI Ciénaga Corrales and El Ocho (12,865 ha.-CORANTIOQUIA); iv) DRMI Forests, Marbles and Pantagoras (15.905 ha.-CORNARE).

Table 10 ***Compliance with component result indicators 1***

RESULT INDICATOR	BASE LINE	GOAL	CURRENT COMPLIANCE	%	COMMENTS
Component 1: Conservation of priority areas					
Resultad 2: Improvement of the conservation of freshwater ecosystems in the Magdalena river basin					
Indicator 2.1 New protected areas declared in the Magdalena River basin (hectares)	0	160.000	201.609	126	***Assumptions**: The political will to declare protected areas is maintained. **Comments**: The declaration will be a prerequisite to finance the implementation of the Management Plan.* At the end of the project *The goal was exceeded* This indicator was modified. The goal was exceeded in 41.609 ha (26%)
Indicator 2.2. Legal instruments for the conservation of freshwater ecosystems adopted by the CARs in mosaic areas (quantity)	0	2	**2**	100	***Assumptions**: Political will to declare Landscape Conservation Mosaics; and, where appropriate, adequate coordination between the competent CARs within the same Mosaic. **Comments**: The Environmental Determinants are directives, guidelines, concepts and norms that allow the adequate recognition of the environmental component in the Territorial Ordering Plans (POT: Territorial Ordering Plan) and the Hydrographic Basin Ordering and Management Plans (POMCA: Plan de Ordering and Management). of the Basin). They are very effective tools for managing environmentally sensitive areas within Landscape Conservation Mosaics.* At the end of the project *The goal was met* This indicator was modified
Indicator 2.3. Ecological connectivity corridors in the area of established conservation mosaics (quantity)	0	2	**2**	100	At the end of the project *The goal was met* This is a new indicator. A total of 33 conservation agreements were signed in Barbacoas and Zapatosa
Indicador 2.4. Number of results matrix products that include a gender approach (quantity)	0	5	5	100	At the end of the project *The goal was met* This is a new indicator. This indicator was included to emphasize work with a gender approach
Result 3: Improving the effectiveness of the management of new and existing protected areas					
Indicator 3.1. Management effectiveness score of the 9 protected areas supported (average score)	35,6	45,6	48,8	107	***Assumptions**: High coordination with the GEF-SINAP project. Intervention continues in the 10 prioritized protected areas.* ***Comments**: The management effectiveness tool will be applied to the 9 protected areas in which the project will intervene (4 existing areas and 5 new ones). Possibilities to compare the results of the original Effectiveness Tracking Tool and the new Management Effectiveness Tracking Tool to be developed within the GEF-SINAP project need to be addressed from the outset.* At the end of the project *Target slightly exceeded*

RESULT INDICATOR	BASE LINE	GOAL	CURRENT COMPLIANCE	%	COMMENTS
					This indicator was modified. Goal changed from average percentage of 50.6 to average score of 45.6

Note: Color indicates a compliance alert, based on the information provided.
Color indicates that the goal was exceeded, fulfilling beyond what was expected.
The comments in *italics*, reduced font and **blue** in the last column correspond to the results matrix.

Source: *Project Magdalena-Cauca Vive 2023, interviews 2023.*

- *Result indicator 2.2*: This "Result" indicator had three moments throughout the development and evolution of the project, until it reached its current compliance and report.
    - *Moment1 (2018-2019)*: For the progress report of the second semester of 2018, the first proposal to modify the indicators of the Results Matrix (PMR) (Magdalena-Cauca Vive 2019 Project) was presented to the IDB, where its modification is proposed and justified. to "Planning proposal prepared to strengthen ecological connectivity in mosaic areas", as well as the measurement unit to "Planning proposal". Once approved, progress continued along these lines of the two planning proposals designed, within the scope of two Conservation Mosaics (Barbacoas and Zapatosa).
    - *Moment 2. (2020-2021*): This indicator is directly related to "Product Indicator 1.2.", for which a modification was also submitted to the IDB, which was adjusted in the Results Matrix (PMR) to "Product 1.2. Designed Regulatory Frameworks". In this way, these two products were developed in parallel, in such a way that, by April 2021, the proposal and justification for the final adjustment of this "Indicator 2.2" (Inter-institutional Agreements with the CAR, City Halls and AUNAP to guarantee management and conservation in the surrounding areas and in the strip of influence outside the limits of the DRMI, an area called Conservation Mosaic-MC). In this regard, the IDB suggested that these modifications could be registered and reported in the next GEF PIR, as minor changes. (Proyecto Magdalena Cauca Vive 2019c).
    - *Moment 3. (2022):* With the above information, and as of November 2022, 100% compliance with "Indicator 2.1." is reported for the two Conservation Mosaics (MC) designed by the project (1. Barbacoas and 2. Zapatosa), completing a first inter-institutional agreement, for MC-Barbacoas, led by CAR CORANTIOQUIA and ratified by the municipalities of Yondó, Puerto Berrio, the National Aquaculture and Fisheries Authority-AUNAP, and the partners of the COR-MAGDALENA project and Nature Foundation; the second inter-institutional agreement for the MC-Zapatosa, worked hand in hand with the two CARs (CORPAMAG and CORPO-CESAR), as well as with the municipalities and AUNAP, involved with the mosaic conservation core area (DRMI-RAMSAR CC-Zapatosa).

According to the interviews carried out, for future projects it should be considered to take advantage of the consultation stage – to declare new PAs – to sign conservation agreements with the communities.

- *Result indicator 2.3*: This new indicator was added to the PMR Results Matrix in the first half of 2019, based on joint work between the IDB and FN, in order to demonstrate the first actions to be implemented within the framework of the two Conservation Mosaics. (1. MC-Barbacoas, y MC-2. Zapatosa).

At the end of the project and in the scope of the MC-Barbacoas and MC-Zapatosa, the line of work on "Conservation-Fishing Agreements" was organized, under a strategy that allowed guaranteeing restoration actions in private properties and communal areas, as well as contributing to the fisheries management of aquatic areas. In total, 33 agreements were formalized. For the MC-Barbacoas, 14 ha of active restoration were implemented, equally distributed in the San Bartolo, Montenegro and Caballo Blanco properties, especially in sectors of water patrol, promoting the generation of connectivity between forest fragments of the properties already mentioned. In the case of MC-Zapatosa, 3.97 ha of active restoration were completed for two sectors of ecological connectivity, related to seven properties and their corresponding Conservation Agreements.

- *Result indicator 2.4*: During the first semester of 2019, this new indicator was incorporated into the PMR Results Matrix, to demonstrate the participation of women in the project. This approach was promoted in five of the project products, corresponding to the formulation processes of three of the Management Plans managed by the project (DRMI Ciénaga de Chiqueros, DRMI Bosques, Mármoles y Pantágoras, and DRMI-RAMSAR CC-Zapatosa). The gender approach was also considered during the management of fishing agreements, conservation agreements, sustainable production processes, and Small Community Initiatives (PIC), the latter, as a synergy achieved with the Small Donations Program (PNUD-PPD-GEF).

  According to the interviews carried out during the field work of the evaluation, the majority of the interviewees agreed that the gender approach used by the project was successful, achieving a high participation of women, both in terms of consultations and participation in activities. training, such as supporting them in their productive activities, among others. With this approach, the inclusion of women and the most vulnerable groups in the benefits derived from the project was promoted; in addition to safe and equitable participation in stakeholder consultation processes without gender bias, thus complying with national laws or international commitments related to gender equality.

- *Result indicator 3.1*: In the "Report of the 1st. Semester 2019" to the IDB, the modification of the value of this indicator is presented and justified, due to the fact that during the development of Component 1, the inclusion within the portfolio was managed both with the IDB and with the Steering Committee of the project. of conservation a Regional Protected Area (APR) in the jurisdiction of the CARDER (DRMI Guásimo), and two APR with CORANTIOQUIA (DRMI Ciénaga de Chiqueros and DRMI Ciénagas de Corrales and El Ocho). Likewise, due to the lack of interest of the CVS, the two RPAs initially programmed (Humedales de Sonso and Humedales de Jamundí) were excluded. For this reason, the project ended up working on 10 APRs, six of which correspond to areas that were evaluated in the 2015 baseline, limiting the possibility that, at the end of the project, the average score of the effectiveness evaluations would increase. handling to 50.6 (average increase of 15 points). As of the second semester of 2019, in the IDB results matrix (PMR), this change is evident, for which, at the end of the project, the average score should reach 45.6 (average increase of 10 points) (Proyecto Magdalena-Cueca Vive 2019b).

  Before starting the project, there was a baseline on the evaluation of the management effectiveness of the year 2015 of the nine APRs initially registered by the approved project, using the Management Effectiveness Tracking Tool (METT), the point average score for that moment was 34.9. Subsequently, the application of the METT for the 10 APRs

worked by the project yielded an average score of 48.8 by the end of 2022, with an average increase of 13.2 points compared to the baseline registered in the PMR-IDB. 35.6 (***Table 11***).

Table 11 ***Project METT results 2015, 2019, 2022***

Average 2015	**34,9**
Average 2019	**32,1**
Average 2022	**48,8**

Source: *Proyecto Magdalena-Cauca Vive 2022b.*

5.2.3 Result indicators Component 2

- *Result indicator 4.1* and *Result indicator 4.2*: During the first semester of 2019, work was done together with the IDB on the justification and management to cancel these two project result indicators, mainly because once the approaches were made to both the local communities and with the fisheries authority (AUNAP), it became evident that it would not be feasible to monitor it, mainly due to the behavior of similar data from the last 10 years, whose trend was downward, regardless of the fisheries management strategy that had been implemented. For this reason, the IDB was asked for a change to better make visible the impact of the actions carried out by the project in the fishing field, especially an activity that involved working closer to groups of local fishermen. In this sense, the Participatory Fisheries Monitoring (MPP) was the tool that made it possible to correct this inconvenience, as stated in the final results of "Indicator 4.3. Annual average of the Catch Per Unit of Effort-CPUE for the group of the 10 most commercially important fish species" (Proyecto Magdalena-Cueca Vive 2019b, Proyecto Magdalena-Cueca Vive 2019c).

Table 12 ***Compliance with component result indicators 2***

RESULT INDICATOR	BASE LINE	GOAL	CURRENT COMPLIANCE	%	COMMENTS
Component 2: Ecosystem health management					
Result 4: Improvement of the populations of threatened fish species in Barbacoas and Zapatosa					
Indicator 4.1: Reduction in total catches of juveniles of *Prochilodus magdalenae* (porcentage)	80	-10 (70)	INDICATOR REMOVED	N/A	***Assumptions: Political will of AUNAP and CAR and cooperation of participating fishermen*** ***Comment: Zapatosa and Barbacoas were chosen to measure the indicator. From 2010 to 2013, there was a 6% (average) decrease in catch sizes for both species. The project hopes to reverse the process and reduce juvenile catches by 10%.*** Comment This indicator was removed
Indicator 4.2: Reduction in total catches of juveniles of Pseudoplatystoma magdaleniatum (porcentaje)	64	-10 (54)	INDICATOR REMOVED	N/A	***Assumptions: Political will of AUNAP and CAR and cooperation of participating fishermen.*** ***Comment: Zapatosa and Barbacoas were chosen to measure the indicator. From 2010 to 2013, there was a 6% (average) decrease in catch sizes for both species. The project hopes to reverse the process and reduce the captures of juveniles by 10%..*** Comment

RESULT INDICATOR	BASE LINE	GOAL	CURRENT COMPLI-ANCE	%	COMMENTS
					This indicator was removed
Indicator 4.3: Annual average of the Catch per Unit of Effort-CPUE for the group of the 10 most commercially important fish species (Kg/día)	4	4	9 (6 a 12)	225	At the end of the project *The goal was exceeded* This is a new indicator
Indicador 4.4. Beneficiaries of initiatives for sustainable fisheries management (broken down in number of Men – Women)	0	300	400	133	At the end of the project *The goal was exceeded* This is a new indicator 400 beneficiaries (156 women and 244 men)

Note: Color indicates a compliance alert, based on the information provided.
Color indicates that the goal was exceeded, fulfilling beyond what was expected.
The comments in *italics*, reduced font and **blue** in the last column correspond to the results matrix.

Source: *Project Magdalena-Cauca Vive 2023, interviews 2023.*

- *Result indicator 4.3*: This new indicator incorporated into the project Results Matrix (PMR) in mid-2019, allowed working with groups of fishermen from the Barbacoas and Zapatosa swamps, specifically in terms of monitoring the fishing supply that those bodies of water they offer to the fisherman in the different hydrological periods of the year (Proyecto Magdalena-Cueca Vive 2019c).

For this project, one of the indirect indicators was used to verify the state and evolution over time of the fish populations that are subject to fishing exploitation, the Catch per Unit of Effort (CPUE), whose application was based on the assumption that these populations remain stable in the Ciénagas de Barbacoas and Zapatosa, with average values of CPUE=4 kg/day (if the CPUE rises, it would be an indicator that something improved, since they caught more with the same effort). In this sense, the result of the MPP carried out during 18 months in the sectors of influence of these two swamps, resulted in averages of 6 to 12 kg/day, depending on the month reported.

- *Result indicator 4.4*: For the result of the beneficiaries of initiatives for sustainable fishing management, a work was carried out based on the alliance with the GEF Small Grants Program (UNDP-PPD), for the implementation of Small Community Initiatives (PIC), which were oriented to community environmental management, with gender equality in the wetlands and swamps of Barbacoas and Zapatosa, reporting at least 400 beneficiaries (156 women and 244 men) (***Table 13***).

Table 13 ***Conservation agreements formalized by the project***

FORMALIZED CONSERVATION AGREEMENTS MOSAICO ZAPATOSA – BARBACOAS						
Quantity	**Properties**	**Object**	**Ha**	**Nº Trees**	**Location**	**Formalized Agreement**
1	SAN JOSE	Active restoration	1,55	1.043	Candelaria – Sempegua – Chimichagua, Cesar	GEF-MCV
2	VILLAALBA	Active restoration	5,64	1.537	Vereda La Inteligencia (El Guamo – Chimichagua), Cesar.	GEF-MCV

FORMALIZED CONSERVATION AGREEMENTS MOSAICO ZAPATOSA – BARBACOAS						
Quantity	**Properties**	**Object**	**Ha**	**Nº Trees**	**Location**	**Formalized Agreement**
3	MILAGROS DE SANTO TOMAS	Active restoration	3,03	1.974	VillaLucy – Chimichagua, Cesar	GEF-MCV
4	ISLA GRADE (VIDA LINDA)	Active restoration	1,03	323	Isla Grande – Chimichagua, Cesar	GEF-MCV
5	EL ORINOCO	Active restoration	6,6	1.140	Laura Mercedes – Chimichagua, Cesar	GEF-MCV
6	LA ESMERALDA	Active restoration	1,274	1.282	Dardanelos 1 – Chimichagua, Cesar	GEF-MCV
7	LAS GLAXIAS	Active restoration	2,1	1.900	El Trébol – Magdalena	GEF-MCV
8	CAMPO ALEGRE	Active restoration	0,92	300	Vereda La Inteligencia (El Guamo – Chimichagua,, Cesar	GEF-MCV
9	SAN MIGUEL	Active restoration	2	2.728	Vereda San Miguel – Tamalameque, Cesar	GEF-MCV – PIC
10	EL BAMBU	Active restoration	0,67	627	Vereda San Miguel – Tamalameque, Cesar	GEF-MCV – PIC
11	LA CRISTALINA	Active restoration	0,49	370	Vereda San Miguel – Tamalameque, Cesar	GEF-MCV – PIC
12	MI RANCHITO	Active restoration	1,23	750	Vereda San Miguel – Tamalameque, Cesar	GEF-MCV – PIC
13	LLUVIA DE BENDICIONES	Active restoration	1,112	750	Vereda San Miguel – Tamalameque, Cesar	GEF-MCV – PIC
14	VILLA REGINA	Active restoration	0,44	215	Belen – El Banco, Magdalena	GEF-MCV – PIC
15	LA JORDANA	Active restoration	1,45	1.400	El trebol – El Banco Magdalena	GEF-MCV – PIC
16	PUERTA DEL CIELO	Active restoration	0,82	1.200	Saloa – Chimichagua,, Cesar	GEF-MCV – PIC
17	CORRAL NEGRO	Active restoration	1	600	Cndelaria – Sempegua – Chimichagua, Cesar	GEF-MCV – PIC
18	LA ESPERANZA	Active restoration	1,76	750	Zapati – Chimichagua, Cesar	GEF-MCV – PIC
19	LA CONEPCION	Active restoration	2	2.303	La estacion – Chimichagua, Cesar	GEF-MCV – PIC
20	SI TE GUSTA	Active restoration	4	3.000	El Carmen – Mandinguilla	GEF-MCV – PIC
21	SAN ANTONIO	Active restoration	3	1.682	Sabana del Indio – Chimichagua, Cesar	GEF-MCV – PIC
22	LA GUAJIRA	Active restoration	2	1.600	Sabana del indio – Chimichagua, Cesar	GEF-MCV – PIC
23	MARIA BONITA	Active restoration	0,28	256	VillaLucy – Chimichagua, Cesar	GEF-MCV – PIC
24	LA VICTORIA	1 ha Silvopastoril	1		Vereda La Inteligencia (El Guamo – Chimichagua, Cesar	GEF-MCV – PIC
TOTAL ZAPATOSA	**24**		**45,396**	**27.730**		**100%**

FORMALIZED CONSERVATION AGREEMENTS MOSAICO ZAPATOSA – BARBACOAS						
Quantity	**Properties**	**Object**	**Ha**	**Nº Trees**	**Location**	**Formalized Agreement**
25	Villas del Rosario	Active restoration	2,53	756	vereda Aguas Blancas, Ciénaga de Chucuri	GEF-MCV-PIC
26	La Florida	Active restoration	0.5	450	Vereda Bocas de Carare, Puerto Parra Santander	GEF-MCV-PIC
27	Guacamayas - Macando	Active restoration	2,59	239	Vereda Estación Malena, Ciénaga Chiqueros, Puerto Berrio Antioquia.	GEF-MCV
28	Monte Azul	Active restoration	1.1	1.245	Vereda Estación Malena, Ciénaga Chiqueros, Puerto Berrio Antioquia.	GEF-MCV
29	El Encanto	Active restoration	1	750	Vereda Estación Malena, Ciénaga Chiqueros, Puerto Berrio Antioquia.	GEF-MCV
30	Clanto	Active restoration	1	500	Vereda Bocas de Carare, Puerto Parra Santander	GEF-MCV-PIC
31	Miguel Pedraza	Active restoration	1	500	Vereda Bocas de Carare, Puerto Parra Santander	GEF-MCV-PIC
32	Hacienda Santa Martha	Active restoration	1,3	2.662	Vereda Riveras de San Juan, Puerto Parra, Santander.	GEF-MCV-PIC-F PRIMATES
33	La Gorgona	Active restoration	3,24	1.942	Vereda Riveras de San Juan, Puerto Parra, Santander.	GEF-MCV-PIC
34	San Bartolo	Active restoration	3,3	1.776	Ciénaga Barbacoas, Yondó, Antioquia	GEF-MCV
35	Monte Negro	Active restoration	3,3	1.576	Ciénaga Barbacoas, Yondó, Antioquia	GEF-MCV
36	Caballo Blanco	Active restoration	3,3	1.704	Ciénaga Barbacoas, Yondó, Antioquia	GEF-MCV
TOTAL BARBCOAS	**12**		**22,56**	**14.100**		
TOTAL BARBCOAS + ZAPATOSA	**36**		**67,956**	**41.830**		

Source: *Proyecto Magdalena-Cauca Vive 2023, interviews 2023.*

In part of these initiatives, the Participatory Fisheries Monitoring-MPP was also implemented, carrying out training days and training pilots in the territory, where 475 local actors linked to the fishing activity (143 women and 332 men) benefited; Of the total number of trained personnel, seven women and seven men were selected to carry out the daily and monthly report of the fishing activity related to the PICs.

5.2.4 Result indicators Component 3

- *Result indicator 5.1*: Due to the work carried out with the Alexander von Humboldt Biological Resources Research Institute (IAvH), a detailed diagnosis was obtained in a first phase on the aquatic monitoring carried out in the Magdalena-Cauca macro-basin, which until 2019 reported 58 initiatives developed by governmental and private entities (Government, Business-Trade Unions, NGOs, Academia, Research Institutes, Communities and International Cooperation). Based on this diagnosis, and 4 regional and one national

workshops, a first battery of 34 biotic-aquatic indicators was defined, and several options where the most relevant indicators could be managed and/or housed in the Environmental Information System of Colombia–SIAC. In a second phase, and in coordination with IDEAM's Hydrology and Ecosystems and Environmental Information Branches, the optimization and digital strengthening of the "Water Quality Module" of the Water Resources Information System-SIRH was consolidated. , where the goal of incorporating five (05) biotic-aquatic indicators in the SIAC was exceeded, now finding eighteen (18) possible indicators to fill out in the SIRH, and which correspond to seven (07) biological groups (Phytoplankton, Zooplanctons, Ficoperiphyton, Macroinvertebrates, Macrophytes, Fish and Riparian Vegetation).

Table 14 ***Compliance with the result indicators of the Component 3***

RESULT INDICATOR	BASE LINE	GOAL	CURRENT COMPLIANCE	%	COMMENTS
Componente 3: Monitoring and evaluation (aquatic biodiversity)					
Resultado 5: SIAC strengthened to monitor freshwater ecosystems and associated biodiversity					
Indicator 5.1. Health indicators of freshwater ecosystems included in the monitoring systems that feed the SIAC (quantity)	0	5	18	360	***Assumptions**: SINA member institutions have the political will to incorporate new indicators into the SIAC.* ***Comments**: The indicator goal is tentative; should be updated after the project ecological monitoring system is designed.* At the end of the project *The goal was exceeded*

Note: Color indicates a compliance alert, based on the information provided.
Color indicates that the goal was exceeded, fulfilling beyond what was expected.
The comments in *italics*, reduced font and **blue** in the last column correspond to the results matrix.

Source: *Project Magdalena-Cauca Vive 2023, interviews 2023.*

5.3 Effectiveness

This project is qualified in effectiveness as highly satisfactory (AS), since it achieved all product goals and exceeded others.

In this section, compliance with product indicators is analyzed, in accordance with the provisions of the Technical Cooperation Agreement. (BID 2017), CEO Endorsement Request (GEF 2016) and MOP (BID 2017).

In these tables, the original comments that appeared in the results matrix are presented in *italics*, semi-transparent and with a reduced size. And, with normal handwriting, the comments of the evaluator, according to the interviews carried out and the information provided.

5.3.1 Effectiveness of products Component 1

All output indicators for this component were met and one exceeded the target.

Table 15 shows the results for each one of the product indicators of Component 1, results obtained in 2017 to 2023.

- *Product indicator 1.1:* Initially, in 2017, the goal was five new Regional Protected Areas (APR), with their corresponding Management Plans (PM). However, during the first two

years (2017-2018), the management with the Regional Autonomous Corporation of Valle del Cauca (CVS), failed to reach an agreement, so the proposed APRs (Humedales de Sonso and Jamundí) had to be replaced by others with a Regional Autonomous Corporation (CAR) interested in participating. In this way, a negotiation was carried out with CORANTIOQUÍA, which made it possible to include the support of the project to complete the declaration route of the DRMI Ciénagas de Corrales and El Ocho, as well as work on the formulation of the PM for the DRMI Ciénaga de Chiqueros. For this reason, during the second semester of 2019, an adjustment of the value of the indicator was negotiated with the IDB, differentiating between what was already being worked on to support the declarations of four APRs and the formulation of five PMs.

During 2020, four technical studies were completed for the new APRs: i. Regional District of Integrated Management-DRMI and Cenagoso de Zapatosa Complex RAMSAR Site (140,765 ha); ii. DRMI Cienaga de Barbacoas (32,074 ha.), iii. DRMI Forests, Marbles and Pantagoras (15,905 ha.), and iv. DRMI Cienaga Corrales and El Ocho (12,865 ha.). And, in June 2022, the efforts and formulation of the five MPs, the final documents had already been delivered to the corresponding CARs: v. DRMI Forests, Marbles and Pantagoras, vi. DRMI Cienaga de Barbacoas, vii. DRMI Cienaga de Chiqueros, viii. Update and Harmonization of the PM for the DRMI-RAMSAR Ciénaga de Ayapel, and ix. Formulation and Harmonization of the PM for the DRMI-RAMSAR Cenagoso de Zapatosa Complexa.

- *Product indicator 1.2:* At the end of 2018, the IDB managed to adjust the statement and the value of the goal of this indicator, due to the difficulties expressed by the CARs to manage a Conservation Mosaic (MC) as an environmental determinant and, to the risk presented for the Cienaga de Ayapel caused by the contingency of a possible rupture of the Hidroituango dam, upstream. For this reason, it was decided by the project's Board of Directors to concentrate the actions of the MCs in the sectors of influence of the DRMI Ciénaga de Barbacoas and DRMI Ciénaga de Zapatosa. Likewise, due to management difficulties with the two CARs of the Coffee Region, the possibility of managing an MC for the La Vieja river basin sector was also ruled out (Proyecto Magdalena-Cauca Vive 2019).

  At the end of 2019, the two MC designs were completed (1. MC-Barbacoas and 2. MC-Zapatosa) and in November 2022 the implementation of actions within it was completed; In both cases, the governance systems were strengthened, improving the participation and decision-making level of the actors involved. For each case, inter-institutional roundtables were organized that ended in the signing of two agreements of will. Specifically, in the MC-Barbacoas, actions to strengthen community nurseries and ecological restoration (Biological Corridor) and; In the MC-Zapatosa, three fronts for the implementation of actions were worked on: strengthening the Artisan Network (Manatí Association), the School of Sustainable Fishing (Chilloa) and the Biological Corridor or Zapatosa Connectivity.

- *Product indicator 1.3*: In 2021, the implementation of actions of five of the nine MPs programmed by the project was completed; the APRs corresponding to the geographical nucleus of the Colombian Coffee Axis, with works carried out jointly with the Regional Autonomous Corporation of Quindío-CRQ in: 1. Soil Conservation District-DCS Barbas-Bremen, 2. Regional Management District Integrated-DRMI Cuenca Alta del Rio Quindío (Salento), and 3. DRMI Páramos and Bosques Altoandinos de Génova, and with that of Risaral-da-CARDER, the actions were concentrated in 4. DRMI Guásimo (La Virginia); with the CVS the works were also closed in the 5. DRMI Ciénaga de Ayapel.

In November 2022, the implementation of the actions of four other MPs prioritized with CORANTIOQUIA were completed, namely: 6. DRMI Ciénaga de Barbacoas and 7. DRMI Ciénega de Chiqueros, 8. DRMI Bosques, Mármoles y Pantágoras (COR-NARE), and 9. DRMI Cenagoso de Zapatillas Complexa (CORPAMAR and CORPOCE-SAR).

As a whole, the main actions implemented in these nine RPAs are synthesized in eight work fronts, varying in each of them according to their particular conditions: i) ecological restoration, ii) livestock conversion, iii) education and environmental awareness, iv) strengthening of governance, v) capacity building, vi) nature tourism, vii) strengthening and/or implementation of community nurseries, and viii) sustainable productive alternatives.

Table 15 ***Compliance with the product indicators Componente 1***

RESULT INDICATOR	BASE-LINE	GOAL	CURRENT COMPLI-ANCE	%	COMMENTS
Component 1: Conservation of priority areas					
1.1 Management Plans and/or technical studies of protected areas developed (quantity)	0	5	9	180	*Assumptions: Protected areas have been officially declared as such or the essential conditions for the declaration are met. The approval process of the Management Plans requires political will, and the administrative act itself involves elements that are not totally under the control of the project; this risk must be properly managed. Comments: The result refers to the new protected areas. The 4 existing protected areas already have an officially approved Management Plan.* At the end of the project *The goal was exceeded*
1.2 Regulatory framework designed (quantity)	0	2	2	100	*Assumptions: (when applicable) Adequate coordination between the competent CARs within the same Mosaic. Intervention continues in prioritized areas.* Comments*: No specific management tool has been defined for mosaics. Regardless of the type of environmental/territorial planning tools that are developed, they must take into account the design of the Mosaic, and generate technical guidelines and the Environmental Determinant to follow in the POT and POMCA.* At the end of the project *Target slightly exceeded* *This indicator was modified. Goal changed from 3 to 2*
1.3 Implemented Action Plans (quantity)	0	9	9	100	*Assumptions: The Management Plans are officially approved by the CARs and include a Program to strengthen the management capacities of protected areas. Co-financing for the implementation of Management Plans continues. Comments: The implementation of the actions of the Management Plans requires that these be officially approved. The supported actions must be consistent with the programming of the Management Plan and will correspond to the Action Plan -for the strengthening of management-. This product includes actions both in existing protected spaces and in new ones* At the end of the project The goal was met

Note: Color indicates a compliance alert, based on the information provided.

Color . indicates that the goal was exceeded, fulfilling beyond what was expected.
The comments in *italics*, reduced font and **blue** in the last column correspond to the results matrix.

Source: *Project Magdalena-Cauca Vive 2023, interviews 2023.*

5.3.2 Effectiveness of products Component 2

The goals of the output indicators of Component 2 were achieved: two were exceeded and one slightly.

Table 16 shows compliance with the product indicators of Component 2, namely

Table 16 ***Compliance with the product indicators of the Component 2***

RESULT INDICATOR	BASE-LINE	GOAL	CURRENT COMPLI-ANCE	%	COMMENTS
Component 2: Ecosystem health management					
2.1.2.1. Governance models designed/implemented (quantity)	0	3	3	100	*Assumptions: The groups of fishermen and institutional actors at the regional and local level maintain their interest and collaborate in the development of the Plans..* *Comments: These interventions to improve fishing resources and reduce pressure on them will be carried out in protected areas and in landscape conservation mosaics designed with an officially approved Management Plan. At those sites, the project can carry out interventions that contribute to fisheries management. The tentatively identified areas are Barbacoas, Zapatosaa; and Ayapel (Mojana System).* At the end of the project *The goal was met* This indicator was modified.
2.2. Pilot interventions implemented (quantity)	0	1	1	100	*Assumptions: The political will of AUNAP and Cormagdalena to lead and co-finance the actions is maintained. The groups of beneficiary fishermen find motivations to participate in the implementation of the model.* *Comments: In Barbacoas there are organized groups of fishermen and they have a collection and initial training center. It is expected to co-finance a market access process and associated sustainability elements* At the end of the project *The goal was met* This indicator was modified
2.3. Private areas under conservation agreements for the recovery of swamps. (ha)	0	300	317	106	*Assumptions: The signatory groups of the conservation agreements maintain their interest in their implementation. The co-financing of the CARs is confirmed.* *Comments: The restoration and conservation actions will be co-financed by the CARs* At the end of the project *The goal was slightly exceeded*
2.4. Eco-Hydrological models that represent strategic hydro-systems for conservation developed	0	3	3	100	*Assumptions: IDEAM's alliance and political will to lead the modeling process is maintained. The key aspects of the functioning of the hydrosystems and the variables to be addressed in the models are conceptualized and agreed upon..* *Comments: The areas tentatively identified for modeling are Zapatosa (hydrological regime), Ayapel (sedimentation); and Río La Vieja (water flow).* At the end of the project *The goal was met*

RESULT INDICATOR	BASE-LINE	GOAL	CURRENT COMPLI-ANCE	%	COMMENTS
					This indicator was modified.
2.5. Regulatory framework designed	0	2	3	150	*Assumptions*: IDEAM's alliance and political will to technically lead the modeling process is maintained. Comments: Two technical studies will be carried out: (i) to generate technical guidelines on how to apply the results of the models in environmental and territorial planning plans (at least one at the local level -POT-, one at the sub-basin level -POMCA- and one at the basin level -Strategic Plan of the Magdalena Basin-); and (ii) evaluate the replicability of the information from the models in other areas of the basin. At the end of the project *The goal was exceeded* This indicator was modified.
2.6. Trained people	0	30	130	433	*Assumptions*: The people chosen by the institutions for training meet the requirements and have adequate background. Comments: Officials from national (MADS, ANLA, etc.), regional (CAR) and local (Municipalities, etc.) level institutions are expected to be trained. At the end of the project *The goal was exceeded* This indicator was modified.

Note: Color indicates a compliance alert, based on the information provided.
Color indicates that the goal was exceeded, fulfilling beyond what was expected.
The comments in *italics*, reduced font and **blue** in the last column correspond to the results matrix.

Source: *Project Magdalena-Cauca Vive 2023, interviews 2023.*

- *Product indicator 2.1*: In the first half of 2019, the modification to the wording of this indicator was negotiated with the IDB, due to the complexity in its preparation and adoption by the fishing authority. At the same time, the same fishing communities and interested local entities expressed the need to implement actions in the territories to improve the conditions of fisheries and fishermen in a participatory manner, so that available resources are used more efficiently. and not invest in studies or plans without tangible benefits for them (Magdalena-Cauca Vive 2019).

  For the three proposed governance models, which are translated into agreements related to fisheries management and articulated through territorial management instruments (Annex 6), two are from the Ciénaga de Zapatosa and one from Barbacoas. In November 2022, the agreement generated by the Bocas de Barbacoas fishing community was delivered for review and approval by the National Aquaculture and Fisheries Authority (AUNAP). The two agreements for the Zapatosa swamp were formalized with the municipalities linked to the DRMI-RAMSAR C.C. Zapatosa and the AUNAP, hoping that the replacement and continuity of the actions undertaken within the framework of the locally agreed thematic tables will be guaranteed

- *Product indicator 2.2*: At the beginning of 2019, with the approval of the IDB, this indicator was modified (Proyecto Magdalena-Cauca Vive 2019), changing the geographical sector of its implementation to the Ciénaga de Zapatosa, justified mainly by the difficulties and conflicts evidenced between groups of fishermen in the sectors of influence of the Ciénaga de Barbacoas.

  The implemented intervention pilot was completed at the end of 2021, as a result of the characterization of the commercialization chain of the most important fishing products of

the municipalities of El Banco and Chimichagua in the DRMI-RAMSAR Complejo Cenagoso de Zapatosa, allowing the formulation and implementation of a strengthening plan, under the value chain approach, including criteria of quality, environment, socio-economics and a fairer fish market in the region. The improvement was concentrated in three of the critical points in the chain; i) Conditions and cold chain; ii) Quality and good handling practices; iii) Collection, transportation and management of fairer prices.

- *Product indicator 2.3*: The actions aimed at the areas under conservation agreements for the recovery of swamps were completed in November 2022. The main line of work and implementation was Ecological Restoration (ER). As a whole, the "active" restoration with direct sowing in arrangements designed for each specific sector, and the "passive" restoration with fences and enclosures for a natural recovery-succession area, which allowed a total of 318 hectares of agreed sowing designs. two with the owners or users of the territory.

  In the middle Magdalena intervention core, with the DRMI Ciénaga de Barba-coas and the corridor of the Ciénagas de Carare and Chucurí, 214 ha were impacted with the ER, with a little more than 31,000 trees planted. For the core of Lower Magdalena, specifically within the DRMI-RAMSAR Complejo Cenagoso de la Zapatosa, as well as in the area of the Zapatosa Conservation Mosaic, a total of 104 ha. impacted by the RE, and close to 65,500 trees planted. Within the scope of these two work nuclei, sixteen Small Community Initiatives (PIC) were included within the previous results, to which the project contributed from a technical and financial point of view, not only for the line of work of the ER, but also in improving their productive activities, governance, youth and gender equity.

- *Product indicator 2.4*: Based on the first work carried out during 2018, related to the diagnosis and approaches of hydrometeorological and ecological modeling in the three windows proposed by the project, it was agreed with the IDB to adjust the indicator's statement, from the perspective of integrate the physical and biotic components in a single prospective analysis of hydrosystems, allowing the analysis of a specific aquatic ecosystem under the ecohydrology approach (Magdalena-Cauca Vive 2019).

  By the end of 2021, the three ecohydrological models had been completed for the DRMI-RAMSAR windows of the Ayapel and Zapatosa swamps, with calibrated hydrological and hydrodynamic analyzes and generating agricultural and conservation trend scenarios. The trophic models for these two windows of Ayapel and Zapatosa were also delivered configured, parameterized, balanced and running with their scenario simulations for 2030 and 2050. For the La Vieja river window, the refined hydrological model was delivered, with agricultural and conservation trend scenarios. In all cases, from the hydrological and hydrodynamic modeling, the scenarios that were run were within the framework of climate change, land use and coverage, and water demand. Finally, for the three windows, there are also socioeconomic models, projecting water demand scenarios by productive sectors: agriculture and livestock for Ayapel and Zapatosa and the "coffee scenario" for the La Vieja river basin.

  The Ciénaga de Zapatosa was declared on the UNESCO list of demonstrative site (Annex 7).

- *Product indicator 2.5*: During the first semester of 2019 and in common agreement with the IDB, the statement of this indicator was synthesized under the title "Regulatory Framework", which allowed proposals for guidelines for the use, management and conservation of the hydrosystems of the three analyzed windows, under a basin approach.

These guidelines were the result of the work groups with local and regional entities (governors, mayors, and environmental authorities, among others), for the three windows where the hydrological, hydrodynamic, ecotrophic, and socioeconomic modeling was applied. These works and analyzes were crossed with the results of the hydrological, hydrodynamic, ecotrophic and socioeconomic modeling and resulted in fourteen large groups of criteria, of which and depending on the discussions carried out in each window, for each criterion were defined. their corresponding guidelines: 1. Land use and environmental planning of the territory, 2. Strategic direction (policies and instruments), 3. Agreement on territorial planning (environmental determinants), 4. Governance and governability, 5. Mining , 6. Basic sanitation, 7. Risk management, 8. Solid waste management, 9. Sedimentation, 10. Loss of biodiversity and ecosystem services, 11. Indiscriminate fishing-da-overfishing, 12. Sustainable economic alternatives , 13. Capacity and transparency in the exercise of environmental authority and territorial entities, 14. Expansion of the agricultural and livestock frontier.

- *Product indicator 2.6:* During the first semester of 2019, with the approval of the IDB, the statement of this indicator was synthesized under the title of "Trained people". This goal of training people, transfer of results and knowledge acquired on the management of ecosystem health, in local, regional and national instances, is one of those that has been exceeded, completing 130 people certified through three diplomas that allowed not not only train technical and academic personnel, but also community groups in the project's territories of influence. The graduates were organized jointly with the University of Quindío, for the work nucleus of the Coffee Region, and with the Jorge Tadeo Lozano University, for the nucleus of Bajo Magdalena-Cauca. The three modules developed in each diploma covered the following topics: 1. FUNDAMENTALS (Hydrology, Ecology, Hydraulics, and Geographic Information System); 2. MODELING (Modeling Protocol, Mathematical Bases, Hydrological Modeling, Hydraulic Modeling, and Eco-Hydrological Modeling); 3. Case Study (GEF Magdalena-Cauca Project, for its corresponding windows, with its models, scenarios, and simulations-projections).

5.3.3 Effectiveness of products Component 3

All the goals of the product indicators of the project were achieved Component 3.

Table 17 shows compliance with the product indicators of Component 3, namely

Table 17 ***Compliance with the product indicators of Component 3***

RESULT INDICATOR	BASE-LINE	GOAL	CURRENT COMPLI-ANCE	%	COMMENTS
Component 3: Monitoring and evaluation (aquatic biodiversity)					
3.1. Diagnostics and assessments completed (quantity)	0	1	1	100	Results matrix: *Assumptions*: SINA member institutions will cooperate with their monitoring system and show willingness to host the project's monitoring system. Comments: The project will evaluate existing SIAC monitoring systems and develop a proposal for a system to monitor the health of freshwater ecosystems. This system could include indicators to be measured in a specific intervention area of the project (for example, Barbecues).. At the end of the project *The goal was exceeded*

RESULT INDICATOR	BASE-LINE	GOAL	CURRENT COMPLI-ANCE	%	COMMENTS
					This indicator was modified.
3.3. Ecosystem health monitoring system implemented (quantity)	0	1	1	100	*Assumptions*: National and regional institutions contribute with their counterparts in data collection. Comments: Data collection activities will be co-financed. At the end of the project *The goal was met.*
3.4. Awareness campaigns designed/implemented. (quantity)	0	1	1	100	*Assumptions*: The social and political conditions for disseminating project activities remain stable, both at the basin level and at the national level. Comments: As part of the communication and dissemination activities, a national meeting/forum is planned in the last year of the project. At the end of the project *The goal was met* This indicator was met.
3.5. Intermediate and final evaluation carried out	0	2	2	100	*Assumptions*: Availability of baseline data at the beginning of the project. Ecological surveillance system working correctly. Comments: The impact assessment will be partially based on data from the freshwater ecosystem health monitoring system and will focus on sustainable fisheries intervention.. At the end of the project *The goal was met*

Note: Color indicates a compliance alert, based on the information provided.
Color indicates that the goal was exceeded, fulfilling beyond what was expected.
The comments in *italics*, reduced font and **blue** in the last column correspond to the results matrix.

Source: *Project Magdalena-Cauca Vive 2023, interviews 2023.*

- *Product indicator 3.1*: In the current project monitoring matrix (PMR-BID), this indicator is summarized as "Diagnostics and evaluations completed". The diagnosis and evaluation of monitoring processes related to biodiversity and aquatic ecosystems of the Magdalena-Cauca macro-basin, were completed between 2018-2019, through a joint effort with the Alexander von Humboldt Biological Resources Research Institute (IAvH), where 58 initiatives focused on monitoring water resources were identified, and to a lesser extent towards monitoring aquatic biodiversity. In this sense, the four workshops (Medellín, Pereira, Santa Martha and Bogotá), with experts and institutions involved with aquatic ecosystems, prioritized 52 possible aquatic indicators out of almost 250 identified from the set of 58 evaluated initiatives. Based on these results, and together with the partner entities of the project, headed by IDEAM and the Directorate of Forests, Biodiversity and Ecosystem Services (DBBSE-MADS), the action route was designed and developed to strengthen of the Environmental Information System of Colombia (SIAC), projecting the improvement and optimization of the Water Resources Information System (SIRH-IDEAM), specifically in the water quality module.
- *Product indicator 3.3*: The implemented monitoring and evaluation system was completed towards the end of 2021, strengthening the SIAC, through five work fronts: 1. IT optimization and strengthening of the water quality module of the Water Resources Information System-SIRH, through the inclusion of eighteen (18) biotic-aquatic indicators for monitoring freshwater ecosystems; 2. Aquatic monitoring pilot in the DRMI-RAMSAR Cenagoso de Zapatosa Complex, testing protocols, analysis and generation of results for the 18

biotic-aquatic indicators; 3. Strengthening of the capacities of the National and Regional Environmental Authorities for the monitoring of aquatic ecosystems and the use of the HRIS; 4. Contributions to the construction of the Protocol for Monitoring and Follow-up of the State of the Country's Aquatic Ecosystems, generating a specific chapter for the Magdalena-Cauca macro-basin; 5. Generation of taxonomic reference lists for the hydrobiological groups housed in the SIRH, in coordination with the Biological Information System of Colombia. The 18 biotic-aquatic indicators that can now be completed in the SIRH correspond to seven biological groups (phytoplankton, zooplankton, ficoperiphyton, macroinvertebrates, macrophytes, fish, and riverside vegetation).

- *Product indicator 3.4*: The awareness campaigns designed and implemented for the GEF Magdalena-Cauca Vive project refer to the communication strategy developed during its term, which ended in November 2022, completing the four face-to-face local-regional socialization and closure events. (Armenia, Salento, Barbacoas and Zapatosa), and the final event in the city of Bogotá.

  In this sense, the work and actions of the project around the communication strategy were framed in three main axes: i) Focal Action, directed both to partners and allies as well as to the areas of intervention, oriented throughout the execution of the project to its recognition and dissemination through local and regional media, as well as the strengthening of communication groups supported by the Barbacoas and Zapatosa Conservation Mosaics. At the national level, more than 14 outlets were carried out in written and digital media. ii) Editorial production, to document and transmit the experience and knowledge generated by the project; In this sense, the realization of the book of amphibian histories, the eco-hydrology and aquatic monitoring primers, the Manatee Management Plan (Ciénaga de Ayapel) are highlighted, pending deliveries during the first semester of 2023 of the catalogs of hydrobiological species, the technical ecohydrology book and the technical-informative publication of the project. iii) Mass dissemination, executed communication plans for the nine areas of intervention, and worked together with the corresponding CARs; likewise, the microsite of the project that since 2021 allows to visualize both the history and the actions of the project, and which will remain as a legacy of the same linked for several years to the website of Fundación Natura, the IDB and the partners. Permanent activity on social networks, reporting 180 publications, with impact rates for Instagram and Facebook that exceeded 75,000 unique users, and two virtual events with massive dissemination. Finally, the web series of the project already allows us to have nine high-quality audiovisual pieces, one for each regional protected area worked on, as well as a documentary, "Hijos de la Ciénaga", which transmits the message and the call to better use, management and conservation of water resources and their aquatic ecosystems in the Magda-lena-Cauca macro-basin.

- *Product indicator 3.5*: In 2020, the Mid-Term Evaluation was satisfactorily completed, as well as its corresponding crash plan, applying the adjustments and corrective measures that allowed the project to be completed successfully. Due to the extension approved by the IDB for the completion of the project in January 2023, the Final Evaluation of the project will be given precisely in January 2023.

5.4 Efficiency: comparison of physical achievements and budget/execution

*This project is qualified in efficiency as **highly satisfactory (HS)** because it achieved - and exceeded in some cases - the planned results with good budget management, adapting the time to the context, especially related to the delays caused by the restrictions imposed by the COVID-19 pandemic and changes in authorities.*

The budget and budget execution of the project is shown in Table 18, which has generally been executed according to planning, without changing the amount allocated to the total project of US$6,363,600 granted by the GEF. However, it is worth highlighting some aspects, namely

- *All additional funds (matching) were in-kind and none in cash and were delivered 100% (Table 19).*
- *The project has used 99% of the GEF resources; the remainder may be executed before the end of the project on January 31, 2023.*
- *Funds assigned to products within the same component were transferred, but not between components.*
- *Some of the planned products had a delay, mainly during the Covid-19 pandemic, but were achieved during the years 2021-2022, according to the planned budget (Annex 8).*

Table 18 ***Comparison between the budget planned in the MOP and executed by the project as of December 31, 2022 (US$)***

PRODUCT	PLANNED ORIGINAL BUDGET 2017-2022			EXECUTED UNTIL DECEMBER 31 2022					
	GEF/BID	ADDI-TIONAL RE-SOURCES	TOTAL	GEF/BID	%	ADDI-TIONAL RE-SOURCES	%	TOTAL	%
1.1 Management Plans and/or technical studies of protected areas developed	615.364	1.350.000	1.965.364	644.362	105%	7.127.598,00	528%	7.771.960	395,45%
1.2 Regulatory framework designed	400.000	327.598	727.598	368.577	92%		0%	368.577	50,66%
1.3 Implemented Action Plans	1.433.236	5.450.000	6.883.236	1.405.834	98%		0%	1.405.834	20,42%
Total Componente 1	***2.448.600***	***7.127.598***	***9.576.198***	***2.418.773***	99%	***7.127.598***		***9.546.371***	***99,69%***
2.1 Governance models designed/implemented	300.000	3.442.886	3.742.886	272.197	91%	195.335	6%	467.532	12,49%
2.2 Pilot interventions implemented	60.000	320.000	380.000	56.791	95%		0%	56.791	14,94%
2.3 Private areas under conservation agreements for the recovery of swamps	630.000	4.500.000	5.130.000	598.166	95%	201.846	4%	800.012	15,59%
2.4 Ecohydrological models that represent developed strategic hydro-systems for conservation	1.185.000	8.850.620	10.035.620	1.223.434	103%	16.716.325	189%	17.939.759	178,76%
2.5 Regulatory framework designed	45.000		45.000	47.807	106%			47.807	106,24%
2.6 Trained people	80.000		80.000	69.259	87%			69.259	86,57%
Total Component 2	**2.300.000**	***17.113.506***	***19.413.506***	**2.267.653**	99%	**17.113.506**	***100%***	***19.381.159***	***99,83%***
3.1 Diagnostics and assessments completed	550.000		550.000	561.220	102%		!	561.220	102,04%
3.3 Ecosystem health monitoring system implemented	600.000	758.896	1.358.896	577.957	96%	758.896	100%	1.336.853	98,38%
3.4 Awareness campaigns designed/implemented	100.000		100.000	122.248	122%		#¡DIV/0!	122.248,12	122,25%
3.5 Intermediate and final evaluation carried out	50.000		50.000	29.649	59%		#¡DIV/0!	29.649,20	59,30%
Total Component 3	**1.300.000**	**758.896**	**2.058.896**	**1.291.074**	99%	**758.896**	***100%***	***2.049.970***	***99,57%***

PRODUCT	PLANNED ORIGINAL BUDGET 2017-2022			EXECUTED UNTIL DECEMBER 31 2022					
	GEF/BID	ADDI-TIONAL RE-SOURCES	TOTAL	GEF/BID	%	ADDI-TIONAL RE-SOURCES	%	TOTAL	%
Project administration	255.000	0	255.000	248.363	97%	0	N/A	248.363	97,40%
Auditoría	60.000	0	60.000	47.772	80%	0	N/A	47.772	79,62%
TOTAL DEL PROYECTO	**6.363.600**	**25.000.000**	**31.363.600**	**6.273.635**	**99%**	**25.000.000**	**100%**	**31.273.635**	**99,71%**

Note: Color indicates a compliance alert, based on the information provided.
Color indicates that the goal was exceeded, fulfilling beyond what was expected.
The comments in *italics*, reduced font and **blue** in the last column correspond to the results matrix.

Source: *BID 2017, Project Magdalena-Cauca Vive 2023, interviews 2023.*

Table ***19*** ***Sources and amounts of co-financing (as of December 31, 2022)***

CO-FINANCING SOURCES [1]	NAME OF CO-FUNDER	TYPE OF CO-FINANCING [2]	CONFIRMED/ APPROVED	ADDITIONAL RESOURCES CERTIFIED AT MID-TERM OF THE PROJECT	ADDITIONAL RESOURCES CERTIFIED TO THE EMT	ADDITIONAL RESOURCES CERTIFIED AT PROJECT CLOSURE [3]	ADDITIONAL RESOURCES CERTIFIED AT THE CLOSING OF THE PROJECT
			(US$)	(US$)	(%)	(US$)	(%)
National government	MADS - Fondo Adaptación	In kind	10.075.368.	18.028.276	178,930	0	0
		In cash	806.773	0	0	0	0
National government	IDEAM[12]	In kind	5.231.365	4.810.251	91,950	0	0
Local government	CORMAGDALENA[13]	In kind	2.841.104	2.161.473	76,080	0	0
		In cash	758.896				
Local government	CORNARE	In kind	1.631.764				
Local government	CVS	In kind	1.044.104				
		In cash	1.000				
Local government	CVC	In kind	344.000				
Local government	CORPAMAG	In kind	87.736				
		In cash	240.000				
Local government	CORPOCESAR	In kind	150.000				
		In cash	500.000				
Local government	CORANTIOQUIA	In kind	144.890				
		In cash	24.000				
National government	CARSUCRE	In kind	58.000				
		In cash	62.000				
		TOTAL	**25.000.000**	**25.000.000**	**100%**		

Note: *Color indicates an alert in the achievement of the goal. [1] Co-financing sources may include: Bilateral Aid Agencies, Foundations, FMMA Agency, Local Governments, National Government, Civil Society Organizations, other multilateral agencies and the Private Sector, among others..*
[2] Type of co-financing can include: donation, soft loan, hard loan, guarantee and in kind, among others.
(3) Figures correspond to execution until July 30, 2020. These figures are preliminary since payments will be made until February 28, 2021.

Source: *BID 2017, Proyecto Magdalena-Cauca Vive 2023, interviews 2022.*

12 *National Institute of Hydrology and Meteorology.*
13 *Regional Autonomous Corporation of Magdalena.*

5.5 Sustainability

*This project is classified in sustainability as **probable (P)**, since most of the activities initiated by the project were resumed with the CAR's own resources or with the FN and Ecopetrol project. Additionally, there are ecohydrological models to monitor the health of the freshwater ecosystems of the Magdalena basin and there was a transformational change in the beneficiary population and partner institutions/organizations that brings benefits related to development. sustainable.*

The objective of the Magdalena-Cuenca Vive project was "to contribute to the conservation and sustainable use of biodiversity in the Magdalena basin by protecting priority habitats, improving the health of ecosystems, and strengthening governance and ca -local capacities", so this technical cooperation used the following strategies to promote sustainability (Magdalena Cauca-Vive 2022, BID 2017, BID 2016, BID 2013).

This chapter will analyze the updated risks described in *Table 8*. This project was affected by the closures caused by the pandemic (restrictions to go out into the field), but this risk was mitigated, due to the fact that it had the support of local grassroots organizations located at the project activity sites.

5.5.1 Social and institutional sustainability

The updated risks were subdivided into risks directly associated with the competencies of Fundación Natura and directly to the project, namely, the following:

- *Low appropriation of the methodologies; however, due to the induction sessions, there were no problems with the implementation of the methodologies used by the project.*
- *High staff turnover: Recruitment was improved through hiring based on short lists, by recommendation.*
- *Communities or the private sector are not adequately involved in the project: an innovative communication strategy was developed, but one aspect that had a decisive influence, according to the interviews carried out, was the hiring of local personnel.*
- *Intensification of the armed or social conflict and implementation of the peace agreements: the characteristics of the populations became known and with the development of a protocol for entering the communities, the risk was mitigated and the work with the communities was productive.*
- *The changes in the authorities of the CARs, governments and institutions were mitigated through measures to raise awareness of the new authorities about the project, although some previously acquired commitments had to be renegotiated with the new authorities, in accordance with the updated priorities.*

The project, in general terms, was well accepted by the different stakeholders and managed to implement the planning of activities, results and desired impacts. The project has generated a wide range of benefits:

a) Increased environmental and social awareness related to sustainability and capacity building in civil society and in local institutions and organizations.

b) Direct local benefits, referring to environmental and ecosystem benefits.

- *The project has directly benefited the local inhabitants and their families, who implemented pilot restoration and environmental benefit measures, agreed to be financed through the project.*
- *The fishing component and the productive initiatives promoted by it were related to food security, income increase, resource management and ecosystem health in the long term.*

- *The project promoted the application of responsible artisanal fishing criteria, trained fishermen in information capture methods and its analysis, and achieved its own proposals for zoning and fishing management.*
- *The information generated by the project is a fundamental input to guide the fisheries management process for Zapatosa and Barbacoas, under the leadership of AUNAP.*
- *The pilot interventions have provided valuable information for the design of alternative approaches to scale up the intervention.*
- *Undertook gender-sensitive practices, which were designed to contribute to watershed management objectives.*
- *The activities promoted by the project resulted in a better adaptation capacity of the communities to environmental and social challenges, since the planning and investment activities have been carried out participatively.*

c) Direct regional benefits, those that improve the living conditions of people outside the project intervention area, namely:

- *Development of a methodology and models that will serve to carry out ecohydrological monitoring in the future.*
- *TNC's APPMiPEZ, a participatory fishing monitoring method applied in Barbacoas and Zapatosa, is a monitoring model that can be scaled up and applied in other areas of the Magdalena basin and which will continue to provide information.*
- *Through the project, regional environmental authorities have access to a proven methodological approach and information on areas of great interest from the point of view of freshwater ecosystems.*
- *The project designed, proposed and implemented instances of dialogue and participation to ensure broad and effective governance, in accordance with the characteristics and history of the processes in each of the intervened nuclei, which will continue to function.*
- *The project has benefited regional and local agencies and the knowledge of officials regarding freshwater ecosystems and PA and territorial planning.*
- *The institutional capacity for the follow-up and monitoring of aquatic ecosystems was strengthened, through 14 bioindicators to measure the state of aquatic resources and populations.*

It is worth noting that Natura Foundation is making efforts to seek the necessary financing to continue the actions initiated by this project. (Annex 9).

5.5.2 Ecological sustainability

The project implemented the following measures to reduce environmental risk:

1) *Green purchases to apply the principles of the circular economy and biosafety, which is transmitted to the partners and beneficiaries of the project.*

2) *New PAs were declared and management plans for priority areas were developed in order to reduce environmental deterioration due to activities such as extensive cattle ranching, mining, deforestation, expansion of the agricultural frontier, and dumping of industrial and domestic waste and effluents.*

3) *In the nuclei of Ayapel and Zapatosa, the harmonization of the management plan was developed to meet the objectives of the protected area such as the DRMI, and the RAMSAR site in order to have a single shared management instrument.*

4) *The activities of the project in the Ciénaga de Ayapel were partially suspended during 2018-2019, due to the danger of seepage in the Hidroituango Dam, and they were resumed and finished during 2020-2022.*

Additionally, the project has brought the following benefits for ecological sustainability:

1) *The project has fostered sustainability for the production of environmental services in the basins, through natural restoration and revegetation activities, and conservation of key ecosystems, and has fostered awareness and the conversion of production systems to more environment friendly.*
2) *The contributions of the project in terms of conservation and protected areas provide arguments and results for the "environmental determinants" used by the CARs, which can guide the decisions of use of freshwater ecosystems and their environment by municipalities. The methodology and results have been shared with a wide audience at the national level.*
3) *The generation of reliable and verified information about key indicators for monitoring these ecosystems.*
4) *Decision makers have also benefited from the pilot and demonstrative nature of the interventions. The implementation of productive measures has exemplified the variety of sustainability measures and has highlighted those with great benefits for society.*
5) *The beneficiary producers of the project signed agreements, where they commit to provide maintenance to the restored areas, among others.*
6) *The project served as a methodological exercise and contribution to the country, in terms of the management of Protected Areas that overlap with conservation figures in the same geographic sectors. A "Harmonization" route was also proposed between what requires a Management Plan for a Regional District of Integrated Management-DRMI, with what requires a Management Plan for an international conservation figure, such as the "RAMSAR Site".*

5.5.3 Financial sustainability

The financial sustainability risk of the project operation was mitigated by respecting the budget assigned to each of its components.

The objectives of the Project led to highlighting the role of ecosystem services and recognizing the importance of biodiversity for the different economic sectors and human well-being.

Although one of the main instruments to achieve the objective - of the project - of improving the conservation and management of freshwater ecosystems was the creation of new protected areas and better management of the existing ones, in some key areas it was not possible to advance. with a declaration process due to the social and economic dynamics, for which restoration and regeneration efforts were made in order to obtain biological corridors in accordance with the dynamics of the existing populations.

The activities of the project with the communities in the intervention areas, with the support of the UNDP small grants program, were oriented not only to increase environmental resilience, but also to promote the financial sustainability of the supported activities, raising awareness among the population about the importance of maintaining a balance in the use and extraction of environmental services.

The problem for local communities is that their income has been declining while natural resources are being degraded, particularly in fishing communities. Households in these communities are trying to increase their income and reduce their economic uncertainty. Fishing represents a key livelihood option and an important source of protein for the local population, as many people in rural areas depend seasonally or occasionally on fishing-related activities; however, these important resources are threatened by mismanagement and continued overexploitation.

Despite this problem, local budget allocations are rarely directed at conserving natural resources, and weak governance undermines many initiatives. Investment in effective management and governance of resources and maintenance of ecosystem health is the main foundation and a prerequisite for supporting and enhancing small-scale fisheries livelihoods. In this context, the socioeconomic benefits generated by the investments and actions of the project have been significant. First, any effort aimed at highlighting the role of biodiversity and thoughtful land use in a participatory process will produce important socioeconomic benefits. The declaration of more than 160,000 hectares as protected areas and the development and implementation of their Management Plans will generate multiple benefits in the short and long term, both direct and indirect. This, combined with the promotion of sustainable fishing, will increase the food security and protein consumption of local populations that are economically vulnerable, generating important social benefits.

Protecting these resources will also result in better health for freshwater ecosystems that produce food for many local populations. In addition, the implementation of biological corridors will allow generating benefits to biodiversity, preserving critical habitats. And, by linking ongoing catalytic processes, the project is guaranteeing the generation of additional benefits with a low investment.

Equally important is the positive impact that the project had in the post-conflict context. It has traditionally been observed that once the armed groups disappear, an intensive process of colonization results in illegal extractive activities. The creation of new protected areas in problem areas has increased governance and allowed inclusive sustainable development among local communities.

This approach has effectively integrated marginalized groups into the community, enabling them to participate in the process of managing access and supply of resources to enhance freshwater ecosystems and ultimately increase their sense of belonging and value in communities. local communities.

The implementation of an equitable gender perspective in the design, monitoring and evaluation of new and existing protected areas in freshwater ecosystems, supported by the project, is a key implementation issue that will have a positive impact on the social fabric of communities. who live in those areas.

6 LESSONS, CONCLUSIONS AND RECOMMENDATIONS

This chapter is developed firstly by identifying the lessons learned from the project, for the dimensions of design and relevance, effectiveness and efficiency, impact, and sustainability and, from this evidence, deducing the conclusions and suggesting relevant recommendations.

6.1 Regarding design and relevance

1 Theory of change:

- *LL:* The causal paths identified in the project design theory of change are not rigid and must be assessed to obtain the desired results in their implementation.
- *Conclusion*: Several years elapsed between the design and implementation of the project, so the planning of the activities was effectively reviewed and adjusted during its operation. (Paragraph **¡Error! No se encuentra el origen de la referencia.**).
- *Recommendation*: The causal paths must be in constant review and periodic evaluation, before the start and during the operation, in order to adjust them to the prevailing conditions to achieve the objectives of the project.

2 Identification of the problems to be solved:

- *LL:* The participation of the relevant actors in the identification of the development problems to be solved is the initial step for the success of the project, together with adequate indicators to measure its progress towards the proposed objectives.
- *Conclusion*: This project carried out an effective diagnosis and clearly identified the problems it intended to solve in a participatory process with the project partners; however, no impact indicators were defined for monitoring (Table 5).
- *Recommendation*: Project design should identify, additionally and few in number, key impact indicators to monitor progress towards its objective.

3 Adaptive management and support in the territory:

- *LL:* The adaptive and participatory management of the project is relevant to achieve the proposed objectives.
- *Conclusion*: The decision to hire local staff/organizations and women's organizations to implement the planned activities, promoted an environment of trust, ownership by the communities, and a transformational change in the beneficiaries, the local population and the institutions/partner organizations. In addition, it was key to give continuity to activities during the restrictions related to the pandemic (Table 13).
- *Recommendation*: It is necessary to prioritize the work and hiring of personnel and local-based organizations in order to build trust, reduce risks during implementation and ownership of activities, which is the driver of transformational change and sustainable development that is sought to be achieved with the project.

4 Validation of methodologies:

- *LL:* The procedures and (scientific) methodologies developed and used must be validated with the experts and the users or actors directly involved.
- *Conclusion*: The project was constantly carrying out consultations with experts, academia and community actors, in order to validate the methodologies and carry out an appropriation process.
- *Recommendation*: A continuous process of feedback and validation of the activities to be implemented must be planned in order to carry out adaptive management and develop useful instruments that can be put into practice once the project activities are closed.

6.2 Regarding the effectiveness and efficiency

5 Changes in the results matrix:

- *LL*: The project must make the necessary changes on time to adapt to reality during its implementation.
- *Conclusion*: During the evaluations of different projects, it is common to find some that did not make the necessary timely changes in the result and product indicators to finish properly. This project did make the necessary changes in a timely manner to realistically meet the proposed objectives and goals (*Table 6*).
- *Recommendation*: Projects must carry out technical and executive reviews during their implementation in order to adapt planning and goals to changes in the context.

6 The risk matrix:

- *LL*: The risk matrix should be used as a dynamic planning tool in the operation of the project.
- *Conclusion*: This project reviewed and adapted the risk matrix periodically in order to adapt its operation and mitigate the risks that materialized. (*Table 8*).
- *Recommendation*: The risk matrix must be reviewed and adapted at least every six months in changing and more unstable contexts.

7 Virtual media:

- *LL*: Projects must continuously develop and put into practice the virtual means of communication, in order to reach the beneficiaries more continuously and lighten the decision-making process with the partner entities.
- *Conclusion*: The project was forced to promote virtual media due to the pandemic, which opened up the possibility of achieving its objectives with the use of other complementary media. However, there is a limitation of connectivity in the beneficiary communities.
- *Recommendation*: Projects must promote digital media, not only to promote their own activities, but as a complement to the productive activities of the communities, especially in relation to the commercialization of products.

6.3 Regarding impact and sustainability

8 <u>Ecohydrological models:</u>

- *<u>LL</u>*: Ecohydrological models are an innovation attributable to this project, which are used as a more accurate simulation and planning tool in search of sustainable development.
- *<u>Conclusion</u>*: The project developed ecohydrological models (including indicators) that served to carry out a more precise monitoring of the Magdalena basin, which provides useful information for sustainable planning.
- *<u>Recommendation</u>*: Ecohydrological models must be constantly evolving in search of greater precision, in order to serve for adequate planning and decision making.

9 <u>Governance:</u>

- *<u>LL</u>*: The identification and consolidation of legitimate instances of joint decision-making for the management of protected areas, their buffer zones and complementary strategies, are essential for sustainability once the project ends.
- *<u>Conclusion</u>*: This project developed dynamic and inter-institutional tables, with the participation of the different public, NGO and private actors present in the territory, in order to find points of agreement to achieve sustainable development. (Paragraph **¡Error! No se encuentra el origen de la referencia.**).
- *<u>Recommendation</u>*: The projects must involve in a participatory way the different actors with incidence in the territories, in order not to duplicate actions and seek synergies to achieve the objectives more efficiently and effectively.

10 <u>Sustainability of the activities initiated by the project:</u>

- *<u>LL</u>*: The involvement of locally based organizations and institutions results in awareness and appropriation of the activities carried out by the project, which provide continuity after its completion (Table 13).
- *<u>Conclusion</u>*: According to the interviewees, the activities initiated by this project will continue with financing, for example, from the CARs involved and in other cases from local or regional governments (Paragraph **¡Error! No se encuentra el origen de la referencia.**).
- *<u>Recommendation</u>*: The execution of the projects must include a product related to the design of projects for the search for financing that give continuity to the activities started.

11 <u>Development plans, action plans and management plans:</u>

- *<u>LL</u>*: Management plans must be incorporated into action and development plans at local, regional and national levels.
- *<u>Conclusion</u>*: As long as the management plans are included in the institutional action plans and those of different organizations, the probability of their implementation is greater.

- *Recommendation*: The project must set out the management plans and community needs in the different development and action plans at the local, regional and national levels.

12 Co-financing commitments:

- *LL*: The co-financing goals must be clearly stated from the beginning of the operation (design).
- *Conclusion*: The goals to be met with the co-financing linked to this project were not clearly defined (Table *19*).
- *Recommendation*: The goals to be met with the co-financing funds must be clear from the design, to help meet the proposed objectives and promote the sustainability of the activities initiated by the project.

13 Public nature of project products:

- *LL*: It is important that the products produced in this project are available to the general public and published electronically.
- *Conclusion*: The products achieved with the project must be an input for other organizations/institutions that seek sustainable development and the provision of environmental services.
- *Recommendation*: All products reached should be published on the WEB.

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8 ANNEXES

Annex 1:

INTERVIEW QUESTIONNAIRE

FE *"Sustainable Management and Conservation of Biodiversity in the Magdalena River Basin"* (Magdalena-Cauca Vive)

Interviewee (Name, contact, organization, position):

_____

Date: _____. Interview method (phone, person, etc.): _____

INTRODUCTION
The IDB is carrying out the FE of the project Sustainable Management and Conservation of Biodiversity in the Magdalena River Basin. The idea is to carry out a critical evaluation of the performance obtained, providing a complete and systematic analysis from the design of the Project, the implementation process, and the obtaining of the products, results and possible impacts.
What has been your role/role in the development of the project? (date, period)
I. RELEVANCE
1. Who are the main actors of the project? What has been your role? How were they related?
2. How does the project relate to the main objectives of the area of interest and to environmental and development priorities at local, regional and national levels?
3. Was the problem well identified at the beginning? (relevant background) Has the design and implementation of the project been adequate to the national reality and existing capacities? explain
4. Did the problems that the project targeted get better or worse? reason?
5. Was there consistency between the needs of the stakeholders vs. MADS-GEF-IDB? Between the internal logic of the project and the expected products/results? Between the design and its implementation approach? Collaboration and complementarity of the Project with partners and local actors: commitments and responsibilities?
6. In the execution of the project, what internal and external factors influenced to meet the planned objectives? What changes were necessary to make with respect to what was proposed (technical, financial, economic and institutional) and what were the reasons for said changes to guarantee the achievement of the objectives? o Were any important adjustments made to maintain the relevance of the project?
7. Lessons learned?
II. EFFECTIVENESS
8. What project components/outputs were achieved? What was the baseline? Planned? Which products were fully achieved? Which were partially achieved? Which were not achieved? Schedule?

9. Did the established indicators describe well the progress in the expected and planned products? Lessons learned?
10. What were the main risks (and assumptions) that affected the effective development of the project? Were they well identified? Have they been mitigated? How? LL?
11. Were links with institutions or organizations fostered?
12. What other unplanned achievements did the project have? Strengths and weaknesses (OAA)?
13. Was the objective achieved? In hindsight, what would you have done differently? What went well and what didn't go well? Gender strategy?
14. To take into account in future agreements, what learning was obtained after this execution of the project?
III. EFFICIENCY
15. Did the expenses of each component/activity/product correspond to the estimates in the budget and were they sufficient? Was it necessary to make adjustments (in deadlines, resources, etc.)?
16. How adequate was the time allocated for the execution of each of the products/components of the project?
17. What key issues arose? Strengths and weaknesses of financial execution (OAA)?
18. If you had more financial resources for the project right now, what would you do?
19. How could the project have been executed more efficiently? Lessons learnt?
IV. IMPACT
20. What innovative experiences, processes, methodologies or services have emerged or been adopted? Have they been successful? What activities have fostered innovation?
21. What are the impacts or potential impacts of the Project (environment, income level, socioeconomic issues)?
22. Did the project contribute to obtaining any unforeseen impact? Under what context and implementation conditions would the project have achieved the proposed impacts?
23. How was the project able to build on its successes and learn from its weaknesses? Learned lessons?
V. SUSTAINABILITY
24. Is there a sustainability strategy? What are the key activities? How are they financed?

Annex 2:

AGENDA AND LIST OF PEOPLE AND ORGANIZATIONS INTERVIEWED

Agenda for the Field Visit of the Final Evaluator to the Incidence Areas of the GEF Magdalena-Cauca ViVe Project

Objective: Interact by the Final Evaluation consultancy with national, regional and local actors, with whom the GEF Magdalena-Cauca VIVE Project worked and consolidated its results and products

Contract duration: November 1 to January 15, 2023 (Consultant Julio Guzmán)

Dates / Regions: **1. November 26th:** Costa Rica – Bogotá – Medellín – Río Claro
2. November 27th: DRMI Bosques, Mármoles y Pantágoras
3. November 28th: Medellín – Valledupar – El Banco (DRMI C.C. Zapatosa)
4. November 29-30: DRMI-RAMSAR Complejo Cenagoso de la Zapatosa
5. December 01: El Banco – Valledupar – Bogotá
6. December 02: Bogotá: Entrevistas Socios, BID, AUNAP y Directivas F. Natura **7. December 02:** Bogotá – Costa Rica

Participants: Julio Guzmán (Final Evaluator), Carlos Alberto Vieira y Juan Carlos Alonso (Project Coordinator).

November 1. 26: Costa Rica – Bogotá – Medellín – Río Claro

Saturday November 26: Costa Rica – Bogotá – Medellín – Río Claro			
Time	**Activity**	**Scope**	**Participants**
1:50 – 5:00 am	Travel San José de Costa Rica – Bogotá (AVIANCA)	Air Transport	**Julio Guzmán**
7:45 – 9:00 am	Travel Bogotá – Medellín (Aeropt. Río Negro) (AVIANCA)	Air Transport	**Julio Guzmán**
9:00 – 11:00 am	Travel Medellín (Aerp. Río Negro) – Santuário (CORNARE)	Terrestrial transport	**Julio Guzmán** Juan Carlos Alonso
11:00 – 12:30 pm	Meeting • CORNARE • Colaboradores proyecto	Interviews with the Environmental Authority and Project Collaborators	**Julio Guzmán** David Echeverri – CORNARE Claudia Juliana Hernández Juan Camilo Rojas Juan Carlos Alonso
12:30 – 2:00 pm	Lunch		

November 1. 26: Costa Rica – Bogotá – Medellín – Río Claro

Saturday November 26th: Costa Rica – Bogotá – Medellín – Río Claro			
Time	**Activity**	**Scope**	**Participants**
2:00 – 4:00 pm	Travel Santuário (CORNARE) – Reserva Ecológica Río Claro	Terrestrial transport (*Área del DRMI Bosques, Mármoles y Pantágoras*)	**Julio Guzmán** David Echeverri – CORNARE Claudia Juliana Hernández Juan Camilo Rojas Juan Carlos Alonso
Alojamiento Reserva Ecológica Río Claro			

November 2. 27 / DRMI Bosques, Mármoles y Pantágoras

Sunday November 27: DRMI Bosques, Mármoles y Pantágoras			
Time	**Activity**	**Scope**	**Participants**
5:00 – 7:00 am	Breakfast		
8:00 – 10:00 am	Desplazamiento La Vereda la Hinojosa, Municipio de San Francisco. Interview with Experiencia en Meliponicultura y Apicultura, Reserva Los Monos,	Terrestrial transport (*Área del DRMI Bosques, Mármoles y Pantágoras*)	**Julio Guzmán** Project Beneficiaries Claudia Juliana Hernández Juan Camilo Rojas Juan Carlos Alonso
10:00 – 1:30 pm	Transport to La Danta, Sonsón • Área Restauración Ecológica 1. Reserva Finca el Prado – Vereda La Mesa. • Experiencia Ecoturística. Reserva Finca el Prado – Vereda La Mesa.	Interviews project beneficiaries Field trip	**Julio Guzmán** Project Beneficiaries Claudia Juliana Hernández Juan Camilo Rojas Juan Carlos Alonso
1:30 – 2:30 pm	Lunch EcoHotel Experiencia Viva La Danta		
2:00 – 3:30 pm	Transport Visita Escuela Artesanal Turística.	Terrestrial transport	**Julio Guzmán** Project Beneficiaries Claudia Juliana Hernández Juan Camilo Rojas Juan Carlos Alonso
3:30 – 5:30 pm	Reuniones • Área Restauración Ecológica 2. CAICA, Doradal, Puerto Triunfo.	Interviews project beneficiaries Field visit	**Julio Guzmán** Project Beneficiaries Claudia Juliana Hernández Juan Camilo Rojas Juan Carlos Alonso
Accommodation Reserva Ecológica Río Claro			

November 3. 28: Medellín – Valledupar – El Banco (DRMI-RAMSAR C.C. Zapatosa)

Monday December 28th: Medellín – Valledupar – El Banco (DRMI-RAMSAR C.C. Zapatosa)			
Time	**Activity**	**Scope**	**Participants**
5:00 – 10:00 am	Transport Reserva Ecológica Río Claro – Medellín (Aerp. Río Negro)	Terrestrial transport	**Julio Guzmán** Juan Carlos Alonso

11:00 – 3:00 pm	Transport Medellín (Arp. Río Negro) – Valledupar	Aerial transport (*Escala Bogotá*)	**Julio Guzmán** Carlos Alberto Vieira
3:00 – 8:00 pm	Transport Valledupar – El Banco	Terrestrial transport (*Área del DRMI-RAMSAR Complejo Cenagoso Zapatosa*)	**Julio Guzmán** Carlos Alberto Vieira
Alojamiento El Banco (Magdalena)			

4. November 29-30: DRMI-RAMSAR Complejo Cenagoso de la Zapatosa

Tuesday November 29th: DRMI-RAMSAR Complejo Cenagoso de la Zapatosa			
Time	**Activity**	**Scope**	**Participants**
8:00 – 10.00 am 10.00 - 12:00 pm	**Meetings with El Banco (Magdalena):** Team meeting GEF-MCV en territorio (Colaboradores proyecto). • Presentación resumen de resultados del GEF-MCV • Entrevistas y conversación con evaluador **Territorial Management Tables Meeting** • Alcaldías El Banco, Tamalameque y Chimichagua • AUNAP (El Banco, Chimichagua) • Corpocesar • Líderes locales	Dialogue Team of collaborators project. Presentation summary results of the GEF-MCV project. Round table and personal conversations between the evaluator and attendees. Exchange experience of instance of Territorial Governance. Round table, or personal interviews.	Julio Guzmán Carlos Alberto Vieira Juan Carlos Alonso Carlos Vieira, Erick Jiménez, Manuel Vertel, Viviana López, Danyth Fandiño, Luis Moreno, José David Torres, julio Cesar Cardona, Rubén Torres. Delegados de alcaldías, CAR y AUNAP miembros de las mesas de gestión territorial en Zapatosa Líderes: Luz Dary Segovia, Deibis Martínez, Erlys Hernández y Ruth Sabaleta.
12:00 – 1:30 pm	Lunch in El Banco		
1.30 – 4:00 pm	Corregimiento del Guamo. *Visit to cutting pasture and silvo-pastoral experiences* – El guamo Asocarey. Visit community nursery Asociación Afro (Erlys Hernández).	Socialization of advances in the experience and some results and exchange of experiences with other communities in the swamp.	Julio Guzmán Carlos Vieira Julio César Cardona José Torres Viviana López

			Erick Jiménez Manuel Vertel Rubén torres
4:00 – 5:30 pm	Visit to properties in the process of restoration, as a result of the conservation agreements established in the connectivity matrix : Vereda Villa Lucy Finca Milagro de Santo Tomás. Opcional: visita a Puerto de Chimichagua (visita evaluador)	Connectivity and Restoration Matrix Zone	
Alojamiento El Banco (Magdalena)			

Wednesday November 30th: DRMI-RAMSAR Complejo Cenagoso de la Zapatosa			
Time	**Activity**	**Scope**	**Participants**
6.30 – 9:00 am	Visit to the interventions of the project in the Corregimiento de La Mata (Municipio Chimichagua -Cesar): Women Nicuro fish composers.	Knowledge of the experience of Women Fish Composers with the plan to strengthen fishing marketing.	Julio Guzmán Carlos Vieira Erick Jiménez Luis Moreno
9:30 – 1:00 m	Visit to Fundación Manatí en Antequera. PIC about crafts and the use of buchón. Activity MPP	Dialogue with the people of the PIC about the progress and support of the project. Explanation of the Participatory Fisheries Monitoring process - MPP	
1:00 – 2:00 pm	Lunch		
2:00 – 3:30 pm	Visit nurseries in Tamalameque: Puerto Boca Asopestapboc.	Review with owners of achievements, progress of interventions.	Julio Guzmán Carlos Vieira Erick Jiménez Julio César cardona José Torres
3:30 – 5:00 pm	Visit restoration area Asopiscultam (Ruth)	Learn about the planting process and participatory processes on private land by the PICs, and the conditions of the nursery.	
Alojamiento El Banco (Magdalena)			

5. December 1st: El Banco – Valledupar – Bogotá

Thursday December 1st: El Banco - Valledupar - Bogotá			
Time	**Activity**	**Scope**	**Participants**

8:00 – 12:30 pm	Transport El Banco – Valledupar	Terrestrial transport	**Julio Guzmán** Carlos Alberto Vieira
12:30 – 4:00 pm	Lunch Valledupar (Almuerzo)		
6:00 – 8:00 pm	Transport Valledupar – Bogotá (AVIANCA)	Transporte Aéreo	**Julio Guzmán**
Accommodation Bogotá			

6. December 2nd: Bogotá: Partner Interviews, BID, AUNAP y Directivas F. Natura

Friday December 2nd: Bogotá: Entrevistas Socios, BID, AUNAP y Directivas F. Natura			
Time	**Activity**	**Scope**	**Participants**
7:30 – 9:30 am	Meeting – Working Lunch Directivas F. Natura: • Directora Clara Solano • Subdirectora Nancy Vargas • Coordinador Proyecto	Interview with directors of F. Natura / Preliminary analysis of the final evaluation of the project	**Julio Guzmán** Clara Solano Nancy Vargas
10:00 – 12:30 pm	Meeting – Interviews • MADS • BID	Interviews MADS BID	**Julio Guzmán** Yaisa Bejarano Pto. Focal GEF (MADS) Linda Irene Gómez DGIRH (MADS) Michael Collins y Olga Lucia Bautista (BID)
12:30 – 2:00 pm	Almuerzo Bogotá		
2:00 – 6:00 pm	Meeting – Interviews • IDEAM • Fondo Adaptación-FA • CORMAGDALENA • AUNAP	Interviews IDEAm Fondo Adaptación-FA CORMAGDALENA AUNAP	**Julio Guzmán** Fabio Bernal (IDEAM) Jorge Alberto Perea Leonardo Garcia (FA) Diana Vargas (CORMAGDALENA) Claudia Liliana Sánchez (AUNAP)
Alojamiento Bogotá			

7. December 2nd: Bogotá – Costa Rica

Friday December 2nd: Bogotá – Costa Rica			
Time	**Activity**	**Scope**	**Participants**
10:50 pm	Bogotá – Costa Rica (AVIANCA)	Transporte Aéreo	**Julio Guzmán**

Annex 3:

LINKS TO PUBLICATIONS MADE BY THE PROJECT

- Communications - News
https://natura.org.co/minisitio-cauca-vive/comunicaciones/

- Communications – Audiovisual Gallery
https://natura.org.co/minisitio-cauca-vive/galeria-audiovisual/

- Communications – Amphibian Stories
https://natura.org.co/minisitio-cauca-vive/galeria-audiovisual/historias-anfibias/

- Communications – Technical-Scientific Production
https://natura.org.co/minisitio-cauca-vive/comunicaciones/publicaciones-y-produccion-cientifica/

- Link Photos
https://natura.org.co/minisitio-cauca-vive/galeria-audiovisual/

Web links or links are included for each of the videos published on YouTube and that are part of the "web series", in which the results and achievements are summarized for each of the Regional Protected Areas worked. obtained through the project:

Integrated Management District - DMI Guásimo:
https://youtu.be/RRtQPqfEPok

Soil Conservation District - DCS Barbas Bremen:
https://youtu.be/k3nqQ3hGoOI

Regional Integrated Management District - DRMI Cuenca Alta del río Quindío:
https://youtu.be/z70xrxZll8k

Regional Integrated Management District - DRMI Páramos y Bosques Altoandinos de Génova: https://youtu.be/g1gGjWzyb5M

Regional Integrated Management District - DRMI Bosques Mármoles y Pantágoras:
https://youtu.be/zGtQY7AwA90

Regional Integrated Management District - DRMI Ciénaga de Chiqueros:
https://youtu.be/Vqqc2xirX0g

Regional Integrated Management District - DRMI Ciénaga de Barbacoas:
https://youtu.be/G9JlgNGWd7E

Regional Integrated Management District - DRMI Complejo Cenagoso de Zapatosa:
https://youtu.be/ZqGDwbL45Lo

Regional Integrated Management District - DRMI Complejo de Humedales de Ayapel:
https://youtu.be/MnE7BYnCIfw

Annex 4:

KEY ACTORS OF THE PROJECT

Table ***20*** ***KEY ACTORS OF THE PROJECT***

KEY ACTOR	ROLE	ABILITY TO EXECUTE THE ROLE	EXPLANATION
Ministry of the Environment and Sustainable Development (MADS)	MADS is the highest environmental authority in the country, responsible for guiding the environmental sector and regulating environmental planning and defining policies and regulations. It provides conceptual and technical leadership to the project through its Climate Change Division. MADS is the Operational Focal Point of the SCCF. MADS is the main government institution benefiting from the proposed project. MADS will share the main role of providing political and technical guidance during the execution of the project. MADS will ensure that project activities and results make a significant contribution to the sustainability of government interventions in the area. In terms of implementation, it is a crucial actor in the process of creating new protected areas, developing policies and regulations, and updating land management and watershed plans.	E	The relationship with the other offices, such as the Directorate of Forests, Biodiversity and Ecosystem Services, was coordinated from the Office of International Affairs, everything related to the PA and MC and; with the Directorate of Integral Management of Water Resources, matters related to ecosystem health management and monitoring and evaluation of aquatic biodiversity. He promoted spaces for national and regional entities to learn about the project and become aware of the problem. There was a lot of commitment to the project
Institute of Hydrology, Meteorology and Environmental Studies (IDEAM)	IDEAM will participate in the development and implementation of hydrological models. Will participate in the development and implementation of hydrological models.	E	One of the partners of the project and had a very active participation during the execution of the project Participated in the CD and TC and other instances Provided support and guidance during the development of the ecohydrological models, contributing technically, and together with FN, to the ecohydrological modeling process through the National Modeling Center-CNM, Laboratory of Environmental Studies, Subdirectorates of Hydrology and Ecosystems and Environmental Information, accompanying the process of strengthening the SIAC in the monitoring of aquatic ecosystems
CORMAGDALENA	CORMAGDALENA will share the role of providing guidance for project implementation, ensuring that project results are in line with regional priorities and incorporated into regional and local policies and initiatives..	E	Provided support to the FN on issues associated with sustainable use, preservation of the environment, ichthyological (fishery) resources, monitoring of aquatic ecosystems, and governance
Fondo Adaptación (FA)	Entity attached to the Ministry of Finance and Public Credit of the Colombian Government, whose purpose is the identification, structuring and management of projects, as well as provision and transfer of resources at the national level, for the recovery, construction and reconstruction of transport infrastructure. , telecommunications, environment, wetlands, agriculture, health, among others	E	With inputs and studies related to the basins of Bajo San Jorge, Guatapurí, Bajo Cesar-Ciénaga de Zapatosa and the Cauca River obtained in the formulation processes of the Basin Management and Ordering Plans (POMCA); Likewise, it provided basic information on issues of hydrological and hydrodynamic modeling of the La Mojana region.
Department of	The National Aquaculture and Fisheries Authority will actively participate in activities related to fisheries management	E	He drew the link bridges with the local AUNAP offices, which allowed the par-

KEY ACTOR	ROLE	ABILITY TO EXECUTE THE ROLE	EXPLANATION
agriculture /AUNAP			ticipation of local officials in the Barbacoas and Zapatosa sectors. They were key for the respective PM and for the direction of the guidelines for management, use and conservation of the fishing resource. The fishing agreements were delivered to the AUNAP as an input for the Regulation of the activity in the middle and lower Magdalena sectors.
Regional Autonomous Corporations (CAR)	The CARs are the environmental authorities responsible for the implementation of environmental policies, plans, programs and projects within their respective jurisdictions. Provide technical support for the implementation of project activities	E	We worked with 7 CARs: CORANTIOQUIA, CARDER, CORNARE, CRQ, CVS, CORPAMAG, CORPOCESAR. Its role was to coordinate and execute jointly with FN the technical and operational aspects, related to the areas to declare, the PM to formulate and the implementation of those PM
Municipal Environmental Authorities	Represented in the secretariats of environment or agriculture depending on the case, involved in the declarations, formulation of PM and its implementation	G	Participation of the mayors and their government team in the different instances. Without such participation it would have been difficult to achieve the results
Civil society organizations (OSC)	Civil society in the prioritized areas/municipalities is organized into multiple organizations, including women's groups, dealing with the protection of water resources, the management of natural resources, the protection of the environment, and the support and promotion of productive activities	E	They participated in the execution of some work fronts of the project, mainly those related to fishing, restoration and sustainable productive activities.
Non-governmental organizations (ONG)	Several NGOs work in the area of incidence of the project and have extensive experience in conservation and management of natural resources and in development. They provided technical, operational, logistical and community engagement support for the implementation of activities at the local level (i.e. restoration, ecosystem connectivity, fishing, etc.)	E	Through the agreements signed within the framework of the Project with the grassroots organizations. Restoration, ecosystem connectivity and fishing activities were implemented, among others
Alexander Von Humboldt Institute	Its role was based on support and advice for data, information and diagnosis, related to aquatic biodiversity and monitoring of ecosystems in the Magdalena-Cauca macro-watershed.	E	The specific work was the diagnosis and proposal of an aquatic monitoring system for the macro-basin
Fundación Natura (FN)	FN will act as executing agency for the project, being responsible for operational and administrative management. The government's choice of FN as executing agency is driven by the need to efficiently coordinate project activities among numerous national, regional, and local entities. In addition, FN brings a long history of experience in conservation, but also in modeling and monitoring. Therefore, FN also acted as a guide for decision making in setting priorities for conservation sites, both freshwater and terrestrial.	E	FN worked as planned.

KEY ACTOR	ROLE	ABILITY TO EXECUTE THE ROLE	EXPLANATION
Inter-American Development Bank	The IDB is the implementing agency for the project and is responsible for overall supervision and supervision of project execution. It will provide orientation, institutional support, fiduciary supervision, technical and administrative assistance, as well as theoretical and practical knowledge at an international level for the effective implementation of the project.	E	He was accompanied at all times from the main office in the USA, as well as from the representation in Colombia. There was adequate support to face the challenges during the execution of the project The IDB participated in different instances such as supervision missions and periodic meetings, to support the monitoring of the project. Guided and supported in all aspects for the proper fulfillment of the project goals

Note: E= excelente G= Good R= regular B= bad.

Color indicates a compliance alert, based on the information provided.

Source: *Progress reports and interviews 2022-2023, BID 2013.*

Annex 5:

COOPERATION AGREEMENTS SIGNED BY FN IN THE FRAMEWORK OF EXECUTION OF THE PROJECT

Table 21 ***Agreements signed with organizations/institutions within the framework of the project with GEF funds***

AGREEMENT SIGNED WITH:	AGREEMENT Nº	OBJECT	START DATE	FINAL DATE	DURATION (YEARS)	AMOUNT IN COP	AMOUNT IN US$
1. MADS Ministry of Environment and Sustainable Development of Colombia	N/A	Jointly develop actions in the different components of THE PROJECT which is co-financed by GEF	25-11-2016	01-01-2022	5.5	N/A	N/A
2. ADAPTACIÓN FUND	022/2016	Join efforts to contribute to the conservation and sustainable use of biodiversity in the Magdalena River basin, through the implementation of actions within the framework of the components of the project "Sustainable management and conservation of biodiversity in the Magdalena River Basin	28-11-2016	31-12-2022	6	$48.235.528.249 (Additional in-kind resources)	US$18.028.266 (Additional in-kind resources)
3. CORMAGDALENA Regional Autonomous Corporation of the Rio Grande-de la Magdalena	1-0026-2016	Join efforts between the Regional Autonomous Corporation of the Río Grande de la Magdalena - CORMAGDALENA and Fundación Natura in order to execute the "Project for the Sustainable Management and Conservation of Biodiversity in the Magdalena River Basin	22-12-2016	16-01-2023	6	$4.504.158.476 (Additional in-kind resources)	US$2.161.482 (Additional in-kind resources)
4. IDEAM Institute of Hydrology, Meteorology and Environmental Studies	N/A	Jointly develop actions in the different components of the PROJECT, which is co-financed by the GEF	4-10-2016	16-01-2023	6.2	$13.078.412.000 (Additional in-kind resources)	US4.810.251 (Additional in-kind resources)
5. CRQ Regional Autonomous Corporation of Quindío	001-2018	Join technical, administrative and economic efforts that allow the implementation of actions tending to the execution of the prioritized activities and determined by mutual agreement by the parties, of the management plan of the Regional District of Integrated Management Páramos and Forests. ques Altoandinos de Génova, of the management plan of the Regional District for Integrated Management of the Upper Quindío de Salento River Basin and of the management plan of the Barbas Bremen Soil Conservation District, which are under the jurisdiction of the CRQ and are located in the Magdalena – Cauca basin	24-09-18	10-12-2021	3.1	$475.000.000	US$157.966

AGREEMENT SIGNED WITH:	AGREEMENT Nº	OBJECT	START DATE	FINAL DATE	DURATION (YEARS)	AMOUNT IN COP	AMOUNT IN US$
6. CARDER Regional Autonomous Corporation of Risaralda	N/A	Join technical, administrative and economic efforts that allow the implementation of actions tending to the execution of the prioritized activities of the Management Plan of the Guásimo Regional Integrated Management District, which is located in the Magdalena-Cauca basin in the jurisdiction of THE CORPORATION	18-09-18	18-12-2021	3.1	N/A	N/A
7. CORANTIOQUIA Regional Autonomous Corporation of Antioquia	1812-129	Join technical, administrative and economic efforts that allow the implementation of actions tending to the formulation and execution of the prioritized activities of the Management Plan of the Regional District of Integrated Management Ciénaga de Barbacoas, of the Regional District of Integrated Management Ciénaga de Chiqueros , as well as the declaration of the Cienaga de Corrales and El Ocho protected area, which are located in the Magdalena - Cauca River basin under the jurisdiction of THE CORPORATION	21-12-18	21-01-2023	5	$221.592.892	US$68.248
8. CVS Regional Autonomous Corporation of Los Valles del Sinú y San Jorge	Memorandum of Understanding	Generate a joint and coordinated work strategy between CVS and FUNDACIÓN NATURA to implement the prioritized actions Updated Management Plan of the DRMI of the Ayapel Wetlands Complex, thus promoting coordination and articulation of activities between CVS and FUNDACIÓN NATURA. Likewise, generate spaces jointly, for the review and delivery of the final document of the Harmonized Management Plan between protection figures DRMI and RAMSAR Site of the wetland complex of the Ciénaga de Ayapel	28-01-22	30-11-2022	11 meses	N/A	N/A
9. CORNARE Regional Autonomous Corporation of the Negro and Nare River Basins	Collaboration agreement No.001	Join technical, administrative and economic efforts for the declaration, the elaboration of the management plan and the implementation of actions of a priority area for conservation located in the middle part of the Claro River sub-basin, in a way that allows contributing to the conservation of aquatic ecosystems and their biodiversity in	30-06-2018	30-03-2022	3.75	N/A	N/A

AGREEMENT SIGNED WITH:	AGREEMENT Nº	OBJECT	START DATE	FINAL DATE	DURATION (YEARS)	AMOUNT IN COP	AMOUNT IN US$
		the Magdalena River basin, specifically in the jurisdiction of CORNARE					
10. CORNARE Regional Autonomous Corporation of the Negro and Nare River Basins	Association Agreement	Develop the implementation of activities of the management plan of the Regional District for Integrated Management of Forests, Marbles and Pantagoras DRMI-BMP, in the municipalities of San Luis, Son-son, San Francisco and Puerto Triunfo, for the year 2021	09-07-2021	09-07-2022	1	$150.000.000	US$38.780
11. CORPAMAG Regional Autonomous Corporation of Magdalena **11. CORPOCESAR** Regional Autonomous Corporation of Cesar	Memorandum of Understanding	Work together on the prioritization of activities to support the process of declaring a protected area located in the Río Bajo Cesar-Ciénaga de Zapatosa basin	13-07-18	17-01-2023	4.5	N/A	N/A
12. ALMA FOUNDATION	Framework agreement	Combine technical, administrative, logistical and financial efforts between NATURA and ALMA to develop joint actions that allow improving environmental conditions, the sustainability of natural resources and the quality of life of communities in Colombian territory, settled in sites of interest common, among other places in the Magdalena-Cauca macro-basin, the Amazon, and others that are considered by the parties	3-04-2019	2-04-2024	5	N/A	N/A
12. ALMA FOUNDATION	Specific Agreement	Combine technical, administrative, logistical and financial efforts between NATURA and ALMA to develop joint actions for ecological restoration, fishing improvement, use, management and monitoring of ecosystems with a focus on gender equity in the Magdalena-Cauca macro-basin, with emphasis in the Cenagozo de Zapatosa Complex and its conservation mosaic, within the framework of the components of the Sustainable Majeo project and conservation of biodiversity in the Magdalena River basin	30-05-2019	29-05-2022	3	$371.440.000	US$110.046
13. BIODIVERSA FOUNDATION	Framework agreement	Unite technical, administrative, logistical and financial efforts between NATURA and Fundación Biodiversa to develop joint actions that improve	7-06-2020	7-06-2022	2	N/A	N/A

AGREEMENT SIGNED WITH:	AGREE-MENT Nº	OBJECT	START DATE	FINAL DATE	DURA-TION (YEARS)	AMOUNT IN COP	AMOUNT IN US$
		environmental conditions, the sustainability of natural resources and the quality of life of communities in Colombian territory, settled in sites of common interest, especially in the Magdalena-Cauca macro-basin and others that are considered by the parties					
13. BIODIVERSA FOUNDATION	Specific Agreement	Combine technical, administrative, logistical and financial efforts between NATURA and FUNDACIÓN BIODIVERSA to develop joint actions that improve environmental conditions, the sustainability of natural resources and the quality of life of the communities in the Colombian territory, settled in sites of common interest, especially in the Magda-lena - Cauca macro-watershed, with emphasis on the areas corresponding to the conservation mosaic of Barbacoas, which includes the DRMI Ciénaga de Barbacoas, the DRMI Ciénaga de Chiqueros and the circulating ecosystems in Antioquia and Santander, within the framework of the components of the project "Sustainable Management and Conservation of Biodiversity in the Magdalena River Basin	11-08-2020	7-06-2022	1.9	$2.618.400.000	US$774.053
14. LAS MELLIZAS FOUNDATION	Framework agreement	Join technical, administrative, logistical and financial efforts between Fundación Natura and Fundación LAS MELLIZAS to develop joint actions that improve environmental conditions, the sustainability of natural resources and the quality of life of communities in Colombian territory.	16-06-2020	16-06-2022	2	N/A	N/A
14. LAS MELLIZAS FOUNDATION	Specific Agreement	Joining technical, administrative, logistical and financial efforts between NATURA and Fundación Las Mellizas to develop joint actions that improve environmental conditions, the sustainability of natural resources and the quality of life of communities in Colombian territory	5-08-2020	5-08-2021	1	$100.510.000	US$29.135
15. PROYECTO PRIMATES FOUNDATION	Framework agreement	Unite technical, administrative, logistical and financial efforts between Natura and Fundación Primates to develop joint actions that improve environmental conditions, the sustainability of	18-09-2020	18-09-2022	2	N/A	N/A

AGREEMENT SIGNED WITH:	AGREEMENT Nº	OBJECT	START DATE	FINAL DATE	DURATION (YEARS)	AMOUNT IN COP	AMOUNT IN US$
		natural resources and the quality of life of communities in Colombian territory					
15. PROYECTO PRIMATES FOUNDATION	Specific Agreement	Unife technical, administrative, logistical and financial efforts between NATURA and Fundación Primates to develop joint actions that improve environmental conditions, the sustainability of natural resources and the quality of life of the communities in the Colombian territory, settled in sites of common interest, especially in the Magda-lena - Cauca macro-watershed, with emphasis on areas of influence of the Ciénaga La San Juana and the San Juan River, within the framework of the Barbacoas conservation mosaic that is developed as part of the project	7-01-2021	7-01-2022	1	$25.200.000	US$7.351
16. OMACHA FOUNDATION	Specific Agreement	Combine technical, administrative, logistical and financial efforts between NATURA and FUNDACIÓN OMACHA for the implementation of actions framed and prioritized in the Management Plan of the Regional District of Integrated Management (DRMI) Ciénaga de Ayapel, regulated by the Regional Autonomous Corporation of the Sinú and San Jorge Valleys (CVS), in coordination with the Management and Conservation Plan for the Antillean manatee in the Ayapel Swamp Wetland Complex	1-02-2021	30-01-2022	1	$210.000.000	US$57.940
17. AUNAP National Aquaculture and Fisheries Authority	Memorandum of Understanding	Collaborate jointly to contribute to the use, management and conservation of the fishing resource in the Magdalena-Cauca basin, within the sectors prioritized by both parties, which will be associated with wetlands, aquatic ecosystems and their water-land transition	08-10-2019	08-10-2022	3	N/A	N/A

Source: *Proyecto Magdalena-Cauca Vive 2023.*

Annex 6:

REQUEST TO MODIFY 3 INDICATORS OF THE GEF Mad-Cauca PROJECT

FW: ATN/FM-15981-CO / FNBM-2021-255 Solicitud Modificar 3 Indicadores Proyecto_GEF Mag.-Cauc.

Bautista Martinez, Olga Lucia <OLGABA@IADB.ORG>
Jue 6/05/2021 3:18 PM

Para: Juan Carlos Alonso Gonzalez <jalonso@natura.org.co>

CC: Olga Patricia Sandoval Ibagon <osandoval@natura.org.co>

Hola Juan Caros,

Ya he recibido varios comentarios al documento de ajuste d ellos indicadores y me gustaría que fueras revisando por lo pronto estos y de ser posible hablemos mañana en algún momento.

Gracias,
Olga

From: Killmer, Annette Bettina <ANNETTEK@iadb.org>
Sent: Thursday, May 6, 2021 10:27 AM
To: Bautista Martinez, Olga Lucia <OLGABA@IADB.ORG>; Salazar Echavarria, Carlos <CARLOSSA@iadb.org>
Cc: Rojas Castano, Carlos Fernando <CARLOSROJAS@IADB.ORG>; Ortega Rada, Alexandra <ALEXANDRAO@iadb.org>; Silva, Jane de Souza <JANES@iadb.org>; Margolis, David Lawrence <dmargolis@IADB.ORG>
Subject: RE: ATN/FM-15981-CO / FNBM-2021-255 Solicitud Modificar 3 Indicadores Proyecto_GEF Mag.-Cauc.

Dear Olga and Carlos,

In terms of procedure, I agree with Jane and David: (1) the proposed changes are squarely within the amendments TL may make according to the OA-421; (2) any changes made should be registered in Convergence (Changes to the Matrix) and reported in the next PIR to the GEF (as minor amendments).

That said, from a technical perspective, I'd encourage you to discuss the proposed changes with your counterparts at the Ministry for the following reasons:

1. Results Indicator 2.2. Adopting legal instruments and signing inter-institutional agreements with respect to ecosystem conservation are two very different things, including in their effectiveness. It would be perfectly **fine to add a NEW results** indicator that refers to the inter-institutional agreements, but the latter do not substitute the former and hence the **original indicator should be maintained**. [If the team opts for adding a NEW result indicator, please ensure that it follows the SMART criteria, which is currently not the case.]

   Furthermore, considering the justification provided, it is also worth noting that there may be a misunderstanding by MinAmb as to what the legal instruments refer to. Going back to the TC document: *Para los mosaicos de conservación se apoyará el diseño de instrumentos de planificación territorial para la gestión e implementación de acciones estratégicas basadas en criterios de paisaje, conectividad y biodiversidad. Estas acciones serán la base para la identificación de determinantes ambientales (zonas núcleo de los mosaicos) para el ordenamiento territorial, que son de cumplimiento obligatorio para el Plan de Ordenamiento y Manejo de Cuenca Hidrográfica (POMCAS) y el Plan de Ordenamiento Territorial (POT)*". I understand that the current results indicator was constructed in close alignment with Colombian Law, especially as relates to the "determinantes ambientales".

2. The product indicator 2.1 is a "standard indicator" of the IDB for Technical Cooperations. The **system will not let you change that indicator** at the level of the Results Matrix, although you could add an

explanatory comment (currently, the comment in Convergence for that indicator is ""Iniciativas comunitarias de manejo pesquero diseñadas e implementadas", which could be adjusted without problems). If the team opts to adjust the comment, I recommend you strengthen the description, as it is currently not clear what the deliverable will be – and being clear on that will be essential to determining whether the TC delivered the product or not.)

3. Likewise for product indicator 2.3, the best way to include the proposed change defining the private areas is in the comments section, as the additional detail provides a definition of a term, rather than being an essential part of the indicator itself. The addition of the *instrumentos de gestion territorial* is confusing in that it makes the product indicator harder to verify [what defines whether a conservation agreement is articulated with land planning instruments?]. Again, please ensure that any adjustments in indicators are such that the indicator is SMART and the deliverable is clearly identifiable by a third-party based on the information in the results matrix.

Thank you for consulting with us. Best wishes,
Annette

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FNBM-2021-255
(Haga referencia este número en su respuesta)

Bogotá D.C., abril 27 de 2021

Doctor
CARLOS SALAZAR
Especialista Senior en Sostenibilidad
BANCO INTERAMERICANO DE DESARROLLO
Representación en Colombia
Bogotá D.C.

Referencia: ATN/FM - 15981-CO "Manejo Sostenible y Conservación de la Biodiversidad en la Cuenca del Río Magdalena", Solicitud de modificación a indicadores matriz de resultados y de productos del proyecto.

Apreciado Doctor Salazar:

De manera atenta solicitamos su revisión, aprobación y posterior trámite interno en el Banco para modificar en su descripción tres (03) de los indicadores de seguimiento establecidos en la matriz de resultados y de productos del proyecto de la referencia.

I. Argumentos en los que se basa la presente solicitud

Como el proyecto de la referencia entró en su fase final, se viene realizando tanto desde la Evaluación de Medio Término (EMT), como con ejercicios internos del equipo de trabajo, una identificación de aspectos críticos que requieren de una atención especial para su fortalecimiento, siempre orientados a cumplir con los resultados y metas establecidas para diciembre de 2021.

Algunos de los ajustes identificados como claves se relacionan con Indicadores de Resultados y de Productos, donde las modificaciones buscan ampliar el rango de acción de las intervenciones del proyecto logrando así un mayor alcance e impacto del resultado obtenido. Esto se refiere por ejemplo, a la flexibilidad que se pueda tener en el momento de no limitar las actividades de restauración o la definición de acuerdos de conservación a áreas circunscritas exclusivamente a áreas privadas, a figuras de conservación formal u otra definición que limite las posibilidades de integrar otras estrategias de conservación u otras figuras de propiedad y tenencia de la tierra, todas con alto potencial para sumar al número de hectáreas con resultados concretos de restauración o de conservación esperados por el proyecto.

En este sentido, uno de los principales indicadores de ejecución del proyecto como el número de hectáreas en conservación, restauradas o mejoradas, es transversal a todos los escenarios de intervención y aplica desde las hectáreas declaradas como DRMI, desde la lógica de los acuerdos de conservación en áreas privadas que aplica a los corredores y matrices de conectividad ecológica, así como desde las hectáreas que resulten de la restauración de las zonas identificadas por las comunidades en el marco de las Pequeñas Iniciativas Comunitarias (PIC), e incluso, involucra las hectáreas de cuerpo de agua y áreas de las ciénagas bajo acuerdos de pesca. Es en esta visión integral territorial complementaria que es posible mejorar la lógica de integración y de articulación entre las intervenciones del proyecto.

Bajo estos argumentos es que se basa la presente solicitud, buscando mejorar el alcance y el impacto de algunos de los componentes del proyecto, motivos por los cuales ponemos a consideración del BID la revisión, aprobación y posterior trámite interno en el Banco para modificar en su descripción tres (03) de los indicadores de seguimiento establecidos en la matriz de resultados y de productos del proyecto. Se expone a continuación para cada caso el enunciado original, la propuesta de modificación o complemento y su correspondiente justificación, en algunos casos atendiendo recomendaciones y sugerencias producto de la EMT realizada entre octubre y diciembre de 2020:

II. Indicadores a modificar en su descripción

1. Indicador de Resultado 2.2.

Enunciado original: Instrumentos legales para la conservación de ecosistemas acuáticos adoptados por las CARs en las zonas de mosaicos (*Legal instruments for the conservation of freshwater ecosystems in mosaic areas adopted by CARs*).

Propuesta de "modificación" al enunciado del Indicador de Resultado 2.2: Acuerdos interinstitucionales con las CAR, Alcaldías y AUNAP para garantizar la gestión y la conservación en las áreas aledañas y en la franja de influencia externa a los límites del DRMI, área denominada Mosaico de Conservación (MC).

Esta solicitud de ajuste se sustenta en la dificultad para que las Corporaciones Autónomas Regionales (CAR) "adopten" la figura de Mosaico de Conservación (MC) como "instrumento legal" para la gestión del territorio en su jurisdicción. El principal argumento de las CAR se centra en que esta figura de conservación no se encuentra dentro de la normatividad colombiana, lo que las llevaría a no contar con el sustento jurídico para ejercer sus competencias en la gestión de los usos del suelo y los recursos naturales en un área delimitada.

En consecuencia, se propone la modificación del enunciado a acuerdos entre actores interinstitucionales más relevantes con competencias en la gestión de los territorios aledaños al DRMI (CARs, Alcaldías, AUNAP[1]), que permitan la incorporación de las acciones en esta franja de Mosaico en el marco del instrumento de gestión del Plan de Manejo Ambiental del Área Protegida núcleo. De esta forma se amplía el rango de acción a la zona de amortiguación y se aborda el reto de la conservación y uso sostenible de manera más regional, permitiendo incluso la puesta en marcha de "Otras Medidas Efectivas de Conservación-OMEC- en el Mosaico.

[1]AUNAP: Autoridad Nacional de Acuicultura y Pesca

Estos acuerdos interinstitucionales están en concordancia y se sustentan con los puntos claves manifestados en el proyecto donde se estipula que los MC deben ser definidos y delimitados de manera conjunta con los actores clave, así como el desarrollo de modelos de gobernanza, desde la premisa que los MC aumentan la eficiencia en los esfuerzos de conservación y uso sostenible de la biodiversidad y la preservación de hábitats críticos.

2. *Indicador de producto 2.1.*

Enunciado original del Indicador de Producto 2.1: Modelos de gobernanza diseñados / implementados (*Governance models designed / implemented*).

Propuesta de "cambio" al enunciado del Indicador de Producto 2.1: Acuerdos relacionados al manejo pesquero, articulados a través de los instrumentos de gestión territorial (PM DRMI-Municipios).

El argumento que justifica esta solicitud de cambio, se basa en que la gobernanza en la pesca es un elemento más de los procesos e instancias de toma de decisiones, en este caso frente al manejo de un recurso específico. La complejidad de la toma de decisiones para la gestión territorial y sus recursos, obliga a abordar el tema desde niveles más locales y simples donde los acuerdos entre personas, personas e instituciones, entre instituciones o entre sectores y gremios y autoridades sea más efectiva.

Adicionalmente y por lo trabajado por el proyecto hasta la fecha, la pesca en las ciénagas de Zapatosa y Barbacoas es la actividad más importante desde el punto de vista de la seguridad alimentaria, oportunidad de ingresos y retos para la conservación y restauración de los ecosistemas acuáticos que soportan los bienes y servicios que ofrece la biodiversidad acuática en estas regiones. Por ello, el tema de los Acuerdos Pesqueros se propone manejar desde la concertación y negociación intersectorial y gremial, como de las políticas y planes de desarrollo de las entidades territoriales como municipios y sus planes de desarrollo o desde los DRMI[2] y sus planes de manejo.

En este sentido, las Pequeñas Iniciativas Comunitaria-PIC son el enlace directo entre los pescadores y los demás actores institucionales y autoridades, y sus instrumentos de gestión y planificación, que permitirían generar en el corto plazo, la sostenibilidad de las acciones de conservación, una gobernanza conjunta y una co-responsabilidad compartida. Aquí es donde la posibilidad de ir más allá en los compromisos de los pescadores a través de acciones más colectivas vía normativa y resolución municipal con la AUNAP es fundamental para garantizar que las acciones y acuerdos sean sostenibles, y a cargo de la autoridad competente. Por lo expuesto anteriormente, el enunciado más adecuado para el Indicador de Producto 2.1., sería el de "Acuerdos relacionados al manejo pesquero, articulados a través de los instrumentos de gestión territorial"

[2]DRMI: Distrito Regional de Manejo Integrado – Área Protegida Regional –

Annex 7:

DECLARATION OF LA CIÉNAGA AS A UNESCO DEMONSTRATIVE SITE

United Nations
Educational, Scientific and
Cultural Organization

Organisation
des Nations Unies
pour l'éducation,
la science et la culture

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División de Ciencias del Agua
Sector de Ciencias Naturales

Beatriz Hernández
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Magdalena Cauca VIVE
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20 de febrero de 2020

Ref.: SC/HYD/2020/26

Estimada Señora Hernández:

Me es muy grato reconocer la participación de Colombia en el Programa de Ecohidrología del Programa Hidrológico Intergubernamental (PHI) de la UNESCO, incluyendo en las Jornadas de Ecohidrología - Ecuador 2019, que desarrolláramos en ese país el año pasado.

Quisiera hacer referencia a la propuesta remitida al Programa de Ecohidrología del PHI por parte del Proyecto GEF Magdalena Cauca - VIVE para el sitio conocido como el Complejo Cenagoso Zapatosa (CCZ), y presentada durante las Jornadas de Ecohidrología referidas, en septiembre de 2019.

En ese contexto, me complace informar que el Comité Científico Asesor del Programa de Ecohidrología ha evaluado la propuesta referida y ha constatado que cumple satisfactoriamente con los requisitos requeridos para su aprobación. Por tanto, comunicamos que el sitio **Complejo Cenagoso Zapatosa** pasa a formar parte de la red mundial de sitios demostrativos de ecohidrología del PHI de la UNESCO. Para oficializar el nombramiento y darle visibilidad internacional, agradecemos nos hagan llegar a la brevedad posible una ficha técnica (ya predeterminada), para poder incluir la información en la plataforma web: ecohydrology-ihp.org/demosites/.

Ya que se trata de un proyecto que está en una etapa inicial, nos gustaría estar informados de los resultados que se vayan obteniendo y solicitamos que por favor nos envíen un informe de los resultados alcanzados hasta el mes de agosto de 2020. Los mismos podrán ser presentados por algún representante que ustedes dispongan en la conferencia "HydroEco", que se llevará a cabo en Faro, Portugal, en septiembre de 2020.

Es importante informarle que los sitios demostrativos de la red mundial realizan actualizaciones periódicas de su información técnica. Por ello, le invitamos a desarrollar un avance en el análisis de la situación ecohidrológica actual del CCZ y a que se implemente un sistema de monitoreo continuo para que se generen los datos necesarios para actualizar la información que aparecerá en la plataforma web anteriormente mencionada.

Los sitios demostrativos han sido concebidos para promover la amplia divulgación del concepto de ecohidrología como una herramienta para el manejo sostenible de los recursos hídricos, y adicionalmente para el desarrollo de investigación científica, por lo que le invitamos a que se preparen publicaciones de carácter científico con la información acumulada y que se vaya generando. Recomendamos especialmente que se considere a la Revista *Ecohydrology and*

7, place de Fontenoy
75732 Paris Cedex 15, France
Tél. : +33 (0)1 45 68 03 40
www.unesco.org/science/water

Hydrobiology (https://www.journals.elsevier.com/ecohydrology-and-hydrobiology) para futuras publicaciones.

Le invitamos a compartir esta información con los diferentes actores involucrados en la gestión del Complejo Cenagoso Zapatosa y del sitio demostrativo, y de esta forma ayudar a la socialización del concepto de ecohidrología.

Quedamos a su disposición por consultas o información adicional, y para colaborar con el sitio demostrativo de ecohidrología Complejo Cenagoso Zapatosa.

Atentos saludos,

Giuseppe Arduino

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Annex 8:

PLANNED AND ACHIEVED PRODUCTS VS. PLANNED AND EXECUTED BUDGET (AS OF DECEMBER 31, 2022)

Table 22 ***Planned and achieved products vs. planned and executed budget (as of December 31, 2022)***

Product	Total cost (US$)	Planned vs. Cur-rent/Real	2017	2018	2019	2020	2021	2022	Endo f project/ progress to date
Component 1: Conservation of priority areas in the Magdalena River basin (US$)									
1.1 Management Plans and/or technical studies of protected areas developed	Quantity	P		1	2	2			5
		C				5	3	1	9
	US$	P	44.651	393.073	589.609	510.995	392.306	34.730	1.965.364
		C	*1.024*	*30.588*	*7.339.374*	*172.378*	*181.455*	*47.142*	*7.771.960*
1.2 Regulatory framework designed	Quantity	P		1	2				3
		C				2			2
	US$	P	-	145.520	218.279	189.175	161.766	12.857	727.597
		C		-	*29.991*	*67.949*	*230.901*	*39.736*	*368.577*
1.3 Implemented Action Plans	Quantity	P		1	2	3	3		9
		C					5	4	9
	US$	P	250.334	1.376.647	2.064.971	1.789.641	1.280.009	121.634	6.883.236
		C	*63.444*	*175.098*	*206.238*	*206.976*	*484.729*	*332.794*	*1.405.834*
TOTAL	***US$***	***P***	***294.985,00***	***1.915.240,00***	***2.872.859,00***	***2.489.811,00***	***1.834.081,00***	***169.221,00***	***9.576.197,00***
		C	***64.468,32***	***205.685,04***	***7.575.602,95***	***447.302,50***	***897.084,06***	***419.672,27***	***9.546.371,15***
Component 2: Ecosystem health management (US$)									
2.1 Governance models de-signed/implemented	Quantity	P			1	1	1		3
		C					1	2	3
	US$	P		748.577	1.122.866	973.150	832.152	66.141	3.742.886
		C		-	*207.026*	*91.200*	*114.232*	*55.075*	*467.532*
2.2 Pilot interventions imple-mented	Quantity	P					1		1
		C						1	1
	US$	P		76.000	114.000	98.800	84.485	6.715	380.000
		C		-		*1.546*	*49.829*	*5.417*	*56.791*

Product	Total cost (US$)	Planned vs. Cur-rent/Real	2017	2018	2019	2020	2021	2022	Endo f project/ progress to date
2.3 Private areas under conservation agreements for the recovery of swamps	Hectares	P			50	150	100		300
		C				39,3	30,22	247,48	317
	US$	P		1.026.000	1.539.000	1.333.800	1.140.548	90.652	5.130.000
		C		*26.650*	*266.773*	*97.966*	*319.677*	*88.944*	*800.012*
2.4 Hydrology models that represent developed strategic hydro-systems for conservation	Quantity	P		3					3
		C					2	1	3
	US$	P	546.963	2.007.124	3.010.686	2.609.261	1.684.246	177.340	10.035.620
		C	*10.517*	*110.574*	*17.105.241*	*363.003*	*337.646*	*12.778*	*17.939.759*
2.5 Regulatory framework designed	Quantity	P			1	1			2
		C					1	1	2
	US$	P					22.500	22.500	45.000
		C					*47.807*		*47.807*
2.6 Trained people	Quantity	P				30			30
		C					13	117	130
	US$	P		16.000	24.000	20.800	17.786	1.414	80.000
		C					*63.648*	*5.610*	*69.259*
TOTAL	***US$***	***P***	***546.963***	***3.873.701***	***5.810.552***	***5.035.811***	***3.781.717***	***364.762***	***19.413.506***
		A	***10.517***	***137.224***	***17.579.041***	***553.715***	***932.839***	***167.824***	***19.381.159***
Component 3: Monitoring and evaluation - Aquatic Biodiversity (US$)									
3.1 Diagnostics and assessments completed	Quantity	P			1				1
		C			1				1
	US$	P	16.212	110.000	165.000	143.000	106.069	9.719	550.000
		C	*12.640*	*173.579*	*154.482*	*74.079*	*131.616*	*14.823*	*561.220*
3.3 Ecosystem health monitoring system implemented	Quantity	P					1		1
		C						1	1

Product	Total cost (US$)	Planned vs. Cur-rent/Real	2017	2018	2019	2020	2021	2022	Endo f project/ progress to date
	US$	P					1.058.897	300.000	1.358.897
		C		*11.752*	*33.032*	*795.439*	*343.448*	*153.182*	*1.336.853*
3.4 Awareness campaigns designed/implemented	Quantity	P					1		1
		C						1	1
	US$	P	31.582	20.000	20.484	16.484	9.683	1.767	100.000
		C	*47.552*	*23.836*	*10.244*	*400*	*3.295*	*36.921*	*122.248*
3.5 Intermediate and final evaluation carried out	Quantity	P			1		1		2
		C				1		1	2
	US$	P		10.000	15.000	13.000	11.116	884	50.000
		C	-		-	*14.980*	*6.869*	*7.801*	*29.649*
TOTAL	***US$***	***P***	***47.794***	***140.000***	***200.484***	***172.484***	***1.185.765***	***312.370***	***2.058.897***
		C	***60.192***	***209.167***	***197.758***	***884.898***	***485.229***	***212.727***	***2.049.970***
Project management	US$	P	38.467	51.000	66.256	56.056	38.715	4.506	255.000
		C	*29.642*	*31.691*	*30.146*	*30.102*	*74.773*	*52.009*	*248.363*
Audits	US$	P		12.000	12.000	12.000	12.000	12.000	60.000
		A	-	*11.801*	*6.466*	*6.041*	*5.938*	*17.526*	*47.772*
TOTAL PROJECT COST	***US$***	***P***	***928.209***	***5.991.941***	***8.962.151***	***7.766.162***	***6.852.278***	***862.859***	***31.363.600***
		C	***164.819***	***595.568***	***25.389.014***	***1.922.058***	***2.395.864***	***869.757***	***31.273.636***

Source: *Proyecto Magdalena-Cauca Vive 2023.*

Annex 9:

DETAIL OF THE MONITORING PROJECTS TO BE SUBMITTED TO PRIORITIZED FUNDING SOURCES

Below is a list of the proposals in the design phase to follow up on this project.:

Projects for Financing Search

- "Conservation and sustainable use of the fishing resource in the middle and lower Magdalena, in the area of influence of the DRMI Barbacoas and DRMI-RAMSAR swampy complex of Zapatosa". Conversations with the IDB.

- "Implementation of a legitimate, participatory and effective decision-making model for the Governance of conservation scenarios in the Zapatosa conservation mosaic". In negotiation with F. Santo Domingo

- "Sustainable productive enterprises for comprehensive rural development in Magdalena Medio". Approach to the line of inclusive entrepreneurship of Ecopetrol.

Ongoing projects

- CO2/Wetlands; Nature Agreement – Ecopetrol

Projects in the formulation process

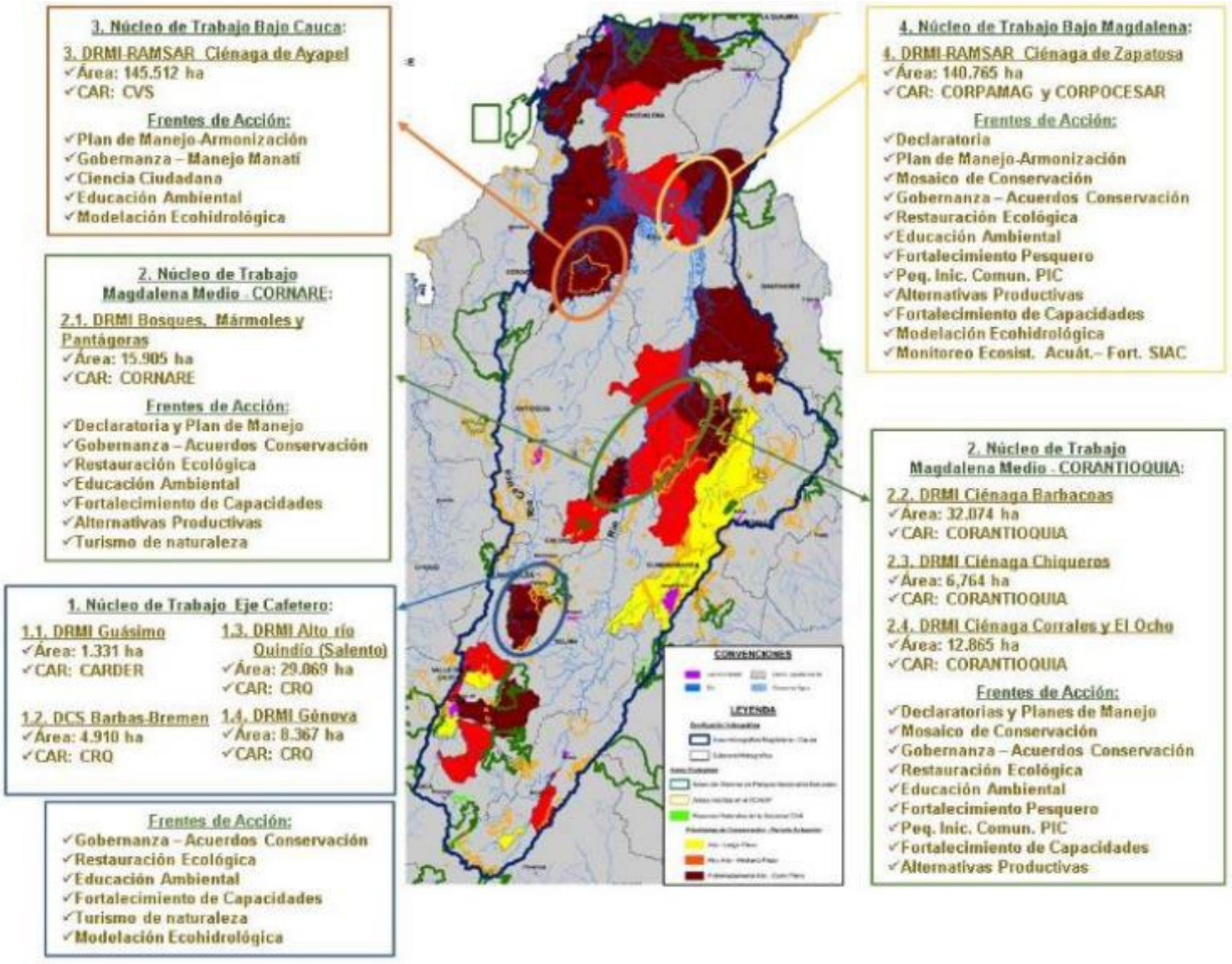
- "Sustainable productive ventures for comprehensive rural development in the Cenagoso de Zapatosa Complex, under Magdalena". For general management.

- "Recovery of the environmental quality of the municipalities of the Cesar Life Corridor and revitalization of an economy based on the sustainable use of biodiversity". MADS initiative with the possibility of Fundación Natura participating.

Annex 10:

MAP OF THE AREAS OF INTERVENTION OF THE PROJECT AND PHOTOGRAPHS OF ITS ACTIVITIES

Map 2 ***Geographical scope and scope of the Magdalena-Cauca Vive Project***



Source: *Proyecto Magdalena-Cauca Vive 2023.*

Photo 1 ***Entrance to the DRMI Bosques, Mármoles y Pantágoras, through the Río Claro Reserve sector, and interaction with the mining sector of karstic materials (limestone)***

Photo 2 ***Ecotourism experience. Reserve Finca el Prado – Vereda La Mesa. DRMI Forests, Marbles and Pantagoras***

Photo 3 ***Interview with a member of the DRMI Forests, Marbles and Pantagoras Dynamization Team***

Photo 4 ***Road to the entrepreneurship of marble artisans, Corregimiento de La Danta, municipality of Sonson***

Photo 5 ***Interview would benefit ecological restoration process, Corregimiento La Danta. DRMI Forests, Marbles and Pantagoras***

Photo 6 ***Meeting at El Banco with the mayors, community leaders and technical team of the project in the territory - Núcleo de Zapatosa***

Photo 7 ***Visit to the facilities of the Manatí Foundation. Production of organic fertilizer with processing of the buchón, Corregimiento de Antequera, Municipality of Tamalameque. shoesa***

Photo 8 ***Production of handmade paper from the processing of the buchón. Manatee Foundation. Township of Antequera- Municipality of Tamalameque***

Photo 9 ***With the technical team visiting the Manatí Foundation, in the company of officials from the Tamalameque mayor's office***

Photo 10 ***Visit to the ASOCAREY Association, planting grass and silvopastoral techniques***

Photo 11 ***Visit to the ASOPESCARE experience with the silvopastoral management proposal and pasture planting areas to reduce pressure from cattle on the beaches***

Photo 12 ***Visit to the Santo Tomás beneficiary farm, in Villa Lucy, Chimichagua, corresponding to the connectivity corridor***

Photo 13 ***Visit to the Santo Tomás farm, in Villa Lucy, Chimichagua, property of Mr. Rangel Dangond, corresponding to the connectivity corridor***

Photo 14 ***<u>Visit with a beneficiary of the ASOPISCULTAM association to the restoration property, Predio San Miguel, village of San Miguel, Tamalameque Cesar</u>***

Photo 15 ***<u>Meeting with the women "composers" of Nicuro in the corregimiento de la Mata, Municipality of Chimichagua</u>***

Photo 16 ***Women "Composers" of Nicuro from the Corregimiento de la Mata. Chimichagua Municipality***

Photo 17 ***Meeting with a group of compositors and buyers of Nicuro in La Mata***

Photo 18 ***Visit to women "Composers" in the process of cleaning Nicuro***

Photo 19 ***Visit to women "Composers" in the process of Women "composers" of Nicuro from the corregimiento de la Mata. Chimichagua Municipality***