

**Performance Assessment Report of the UNEP/GEF Project “Agricultural
Biodiversity Conservation and Man and Biosphere Reserves in Cuba:
Bridging managed and Natural Landscapes” (GEF ID 4158)
(2013 - 2019)**





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Agricultural Biodiversity Conservation and Man and Biosphere Reserves in Cuba: Bridging managed and Natural Landscapes

GEF ID 4158

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Ms. Pauline Marima, Evaluation Officer with UNEP's Evaluation Office, served as Task Manager for the Final Performance Assessment, providing guidance, supervision and support to the consultant so as to ensure compliance with the Terms of Reference and UNEP evaluation guidelines.

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About the Evaluation

Joint Evaluation: No

Report Language: English

Evaluation Type: Performance Assessment

Brief Description: According to the UNEP Evaluation Manual (2023), UNEP is held accountable for the quality and delivery of its work through evaluations and other performance assessments. An in-depth terminal evaluation of this project in Cuba (GEF5158) was attempted in 2021 and 2022; in both instances the evaluation process was aborted. As a standard terminal evaluation could not take place, the Evaluation Office has conducted a performance assessment of the project, to allow for a formal completion of the project cycle. A desk-based, and primarily document-based, performance assessment of the project has been undertaken with the objective of: (a) examining project records and providing an analysis of its delivery against the approved Results Framework i.e., project performance in delivering programmed Outputs and progress in achieving the expected Outcomes and global Objective(s) (including an assessment of the associated project milestones /indicators /targets); (b) analysing supplementary data (e.g., from remote interviews, email correspondence, other) through communication with representatives from Bioversity International and UNEP who will represent the Implementing Agency and Executing Agency, respectively; (c) prescribing recommended actions and/or identifying lessons of operational relevance for future project formulation and implementation, especially for planned and/or ongoing UNEP interventions in Cuba; and (d) preparing a Performance Assessment Report that captures the findings stemming from (a) - (c) above, to satisfy the need for learning and accountability, and to the extent feasible under the present circumstances.

Key words: Cuba, Agrobiodiversity, Man and Biosphere Reserves

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Abbreviations

ABD	Agricultural Biodiversity
ACTAF	Cuban Association of Agricultural and Forest Technicians
ANAP	National Association of Small Farmers
CBD	Convention on Biological Diversity
CBM	Community-based biodiversity management
CGIAR	Consultative Group on International Agricultural Research
CITMA	Ministry of Environment Science and Technology
CNAP	National Center for Protected Areas
COBARB	Conservación de la biodiversidad agrícola en reservas de la biosfera de Cuba
CRPs	CGIAR Research Programmes
DEPI	Division of Environmental Policy Implementation
EA	Executing Agency
EOU	Evaluation and Oversight Unit
FAO	Food and Agriculture Organization of the United Nations
FPA	Final Performance Assessment
GEF	Global Environment Facility
IDRC	International Development Research Centre
LoA.	Letter of Agreement
IMIS	Integrated Management Information System
INIFAT	National Institute for Fundamental Research on Tropical Agriculture
MAB	Man and the Biosphere
M&E	Monitoring and Evaluation
MINAG	Ministry of Agriculture
MINTUR	Ministry of Tourism
MTE	Mid-Term Evaluation
MTS	Medium-Term Strategy
NBSAP	National Biodiversity Strategy and Action Plan
NGO	Non-Governmental Organization
PIR	Project Implementation Review
PPG	Project Preparation Grant
TE	Terminal Evaluation
TOC	Theory of Change
UNDP.	United Nations Development Programme
UNEP	United Nations Evaluation Programme
UNESCO	United Nations Organization for Education, Science and Culture

Project General Information

GEF Project ID:	4158		
Implementing Agency:	UNEP	Executing Agency:	Bioversity International
Relevant SDG(s) and indicator(s):	SDG 2 (Target 2.4 on sustainable agriculture and indicator 2.4.1 on portion of agricultural area under sustainable production; Target 2.5 on maintenance of genetic diversity and indicator 2.5.1 on Number of plant and animal genetic resources for food and agriculture secured in either medium- or long-term conservation facilities); SDG12 (Target 12.B on sustainable tourism and indicator 12.B.1 on Number of sustainable tourism strategies or policies and implemented action plans with agreed monitoring and evaluation tools); SDG15 (Target 15.9 on integration of ecosystems and biodiversity values into national and local planning and indicator 15.9.1 on progress towards national targets established in accordance with Aichi Biodiversity Target 2)		
GEF Core Indicator Targets (identify these for projects approved prior to GEF-7)	GEF4 Biodiversity Strategic Objective 1 (SO1): to catalyze sustainability of protected area (PA) systems and its Strategic Programme 3 SP3: Strengthening terrestrial PA networks. The project will also contribute to GEF4 Biodiversity Strategic Objective 2 (SO2) to mainstream biodiversity in production landscapes/seascapes and sectors and its Strategic Programme 5. SP5: Fostering markets for biodiversity goods and services.		
Sub-programme:	Healthy and Productive Ecosystems	Expected Accomplishment(s):	EA (a): The health and productivity of marine, freshwater and terrestrial ecosystems are institutionalized in education, monitoring and cross-sector and transboundary collaboration frameworks at the national and international levels. Indicator (i) Increase in the number of countries and groups of countries that improve their cross-sector and transboundary collaboration frameworks for marine and terrestrial ecosystems.
UNEP approval date:	17 January 2013	Programme of Work Output(s):	
GEF approval date:	December 2012	Project type:	FSP
GEF Operational Programme #:	BD	Focal Area(s):	Biodiversity
Project Partners	Instituto de Investigaciones Fundamentales en Agricultura Tropical (INIFAT), Cuba	GEF Strategic Priority:	BD1; BD2; SP3; SP5
Expected start date:	December 2012	Actual start date:	17 March 2013

Planned completion date:	31 May 2018	Actual operational completion date:	30 April 2019	
Planned project budget at approval:	\$4,148,208	Actual total expenditures reported as of 30 June 2019:	\$1,332,141	
GEF grant allocation:	\$1,368,182	GEF grant expenditures reported as of [date]:		
Project Preparation Grant - GEF financing:	\$100,000	Project Preparation Grant - co-financing:	\$150,000	
Expected Medium-Size Project/Full-Size Project co-financing:	\$2,780,026	Secured Medium-Size Project/Full-Size Project co-financing as of 30 April 2019:	\$ 4,423,353	
Date of first disbursement:	28 February 2013	Planned date of financial closure:	October 2020	
No. of formal project revisions:	2	Date of last approved project revision:	12/04/2019	
No. of Steering Committee meetings:	6	Date of last/next Steering Committee meeting:	Last 18 January 2019:	Next:
Mid-term Review/ Evaluation (planned date):	December 2017	Mid-term Review/ Evaluation (actual date):	January to April 2017	
Terminal Evaluation (planned date):	March 2021	Terminal Evaluation (actual date):		
Coverage - Country(ies):	Cuba	Coverage - Region(s):	Latin America and the Caribbean	
Dates of previous project phases:	N/A	Status of future project phases:	N/A	
IMIS number:	4158-GFL- 5060-2715- 4C72	Actual expenditures entered in IMIS as of 31 December 2019*:	\$ 400,543.00	

EXECUTIVE SUMMARY

1. This section summarizes the main findings of the Final Performance Assessment (FPA) of UNEP-GEF project *Agricultural Biodiversity Conservation and Man and Biosphere Reserves in Cuba: Bridging managed and Natural Landscapes* (GEF ID 4158). The project was implemented from 2013 to 2019 in Cuba's MAB Reserves of Sierra del Rosario and Cuchillas del Toa, with the objective of conserving diversity within and around protected areas by mainstreaming agricultural biodiversity into the management of Cuba's MAB Reserve System. The project was approved for a five-year period with a total budget of US\$ 4,148,208, consisting of a US\$ 1,368,182 grant from GEF and US\$ 2,780,026 in co-financing from the main project partners.

2. The Final Performance Assessment was desk-based and relied largely on the review of project documentation and other available information. This modality was chosen due to unexpected difficulties which prevented the implementation of an in-depth Terminal Project Evaluation, complete with site visits and access to national stakeholders. This Assessment has the stated objectives of examining project records and providing an analysis of the delivery of the approved Results Framework, and formulating lessons and recommendations with operational relevance for future projects.

3. Project performance was assessed in relation to the following criteria: Strategic relevance, quality of project design, effectiveness and likelihood of impact, efficiency, and sustainability. Contributing factors to performance were also considered: Preparation and readiness, management and supervision, responsiveness to human rights and gender, environmental and social safeguards, country ownership, communications, and public awareness. Project performance was then rated for the various criteria and assigned weighted scores based on UNEP's evaluation guidelines (Figure 15).

The principal findings are summarized below:

4. *Strategic Relevance:* "Agricultural Biodiversity Conservation and Man and Biosphere Reserves in Cuba" was relevant to new policy directions in biodiversity conservation and protected area management. The project offered a vehicle to pilot and validate approaches for agrobiodiversity conservation and landscape management; recuperation and dissemination of underutilized food crops and wild crop relatives; recognition of traditional knowledge and farming systems. Several of its initiatives supported policy priorities of the national environmental strategy and biodiversity conservation action plans. The project was additionally relevant to government food security objectives that encouraged broader private production and commercialization and supplied seeds to the national programme for urban and suburban agriculture.

5. Above all, the project was relevant to Cuba's over-arching need for access to the external knowledge of the international scientific and conservation communities. The project facilitated spaces for dialogue, collaboration and learning that connected national and international institutional stakeholders and catalysed their cooperation. This enabled the implementation of initiatives such as those mentioned above, with technical guidance from Bioersity and other partners. Project objectives and components were aligned with Ecosystems Management priorities under UNEP's 2014-2017 Medium-Term Strategy, and with GEF IV's strategic objectives of biodiversity mainstreaming at landscape scale and sustainable commercialization of biodiversity goods and services.

6. *Quality of Project Design:* Project design was Satisfactory and benefitted from the technical capacities and prior collaboration between Biodiversity and the Cuban government co-executing partners. The project was based on an integrated and multi-tiered approach, with components devoted to agrobiodiversity research and dissemination, agrobiodiversity mainstreaming in protected area management, farmer extension, and livelihood improvements through benefit-sharing and commercialization of certified agricultural products. Project components and stakeholders were articulated by a Project Management Unit, and supported by over-arching capacity building, monitoring and communication strategies. The project's integrated design combined different types and levels of intervention, which enabled it to address a broader spectrum of challenges and opportunities. This enhanced the project's potential for generating transformational change processes.

7. *Effectiveness:* Overall project effectiveness was assessed as Moderately Satisfactory. The project demonstrated satisfactory levels of output delivery, and Moderately Satisfactory achievement of the expected outcomes. Agrobiodiversity was integrated into Cuba's national strategy for protected

areas and into the management plans of both MAB reserves, with a strong capacity development dimension (Outcome 2). There were advances in registration of new plant species, the reproduction and distribution of seed varieties, and extension of sustainable agricultural practices to farmers under the first Outcome, yet the extent to which these initiatives met or exceeded their target indicators is unclear. Improvements to local livelihoods and incomes from benefit-sharing and commercialization initiatives (Outcome 3) were not documented or quantified; capturing such improvements would likely have required post-project monitoring using different methodological instruments. A participatory certification mechanism for organic produce was designed and put in place, yet its level of utilization or impact are not known. The establishment of market outlets for local agricultural products faced various obstacles, and the progress achieved appeared to be modest in relation to performance targets (and local expectations). Given the limited scale of local participation in these initiatives, it is probable that this Outcome was only partially achieved. The likelihood of project impact is considered to be moderately low as a result of the COVID-19 pandemic that followed the project and restricted institutional presence in the Reserves; and its repercussion on the national economy (affecting the budgets and operational capabilities of government co-executing agencies and other national institutional partners).

8. *Financial Management:* The project showed low expenditure levels during the approved implementation period,¹ with an accumulated unspent balance that was used to finance a one year no-cost extension. By the end of the project extension, expenditure delivery had improved significantly and absorbed 97% of the GEF contribution. In spite of co-financing reductions and delays in their disbursement, project finances were well managed. Co-financing gaps were filled and unspent funds re-programmed by annual budget revisions. Financial reporting was conducted in accordance with UNEP guidelines. The project's effective financial management was highlighted by external audit reports that were contracted on an annual basis.

9. *Efficiency:* The project appears to have been cost-effective in its approach. Implementation was led by a compact PMU team that contracted external consultants and institutions (through Letters of Agreement) for specific deliverables on an as-needed basis. The technical staff of the Project Management Unit were provided by INIFAT. However, expenditure and output delivery were unsatisfactory for most of the approved period, requiring a one-year extension. Low delivery was attributed to externalities – slow international procurement, cumbersome banking and currency exchange processes, staff turnover within national partner institutions – that were outside the project's control. Administrative closure was delayed by almost two years due to the COVID-19 pandemic. During the initial period, there were delays in approving budget revisions and disbursements due to the transition of financial accounting (IMIS to Umoja) within UNEP. Efficiency was one of the project's weaker aspects and received an unsatisfactory performance rating.

10. *Monitoring and Reporting:* The project combined implementation monitoring, led by the PMU, with technical monitoring of field deliverables by project partners and contracted institutions. The project's design included a monitoring component that absorbed over a quarter of the GEF contribution, and was guided by a detailed and well-budgeted Monitoring Plan with clearly defined roles. Provisions for the *ex-post* impact monitoring were not included, which may have prevented the final measurement of results against their performance targets. However, this omission was influenced by corporate practice – project budgets are administratively closed within a year after the completion of implementation activities - and did not represent an oversight on the part of the project.

11. Six-monthly progress reports and annual Project Implementation Reviews (PIRs) were well documented and offered insight into the status of implementation. Substantive findings were disseminated nationally and shared with the global MAB Reserve network. However, quantified data for several outcome indicators were lacking in the final reporting. A Mid-Term Evaluation was conducted in 2017 in accordance with UNEP guidelines. Conversely, the mandatory Terminal Evaluation was not held despite UNEP's extensive (and unsuccessful) efforts to reach the Cuban government authorities. This was a major setback to an otherwise satisfactory M&E performance, given the methodological limitations of the Final Performance Assessment (which did not enable direct access to project partners and stakeholders or site visits). As a result, the project's monitoring and reporting performance was rated as Moderately Unsatisfactory.

¹ Low expenditure delivery was aggravated by slow procurement, currency exchange and banking processes that are influenced by the US economic embargo. The project was extended by two years without additional funding.

12. *Sustainability:* The likelihood of sustainability could not be reliably assessed despite the (more than) four years that have lapsed since the project's completion. Institutional sustainability is Moderately Likely with the inclusion of agrobiodiversity in CNAP's national strategy for protected areas and both MAB management plans. However, financial and socio-political sustainability were possibly undermined by the COVID-19 pandemic and its impact on Cuba's economy. This was reflected in reduced tourist visitation to the Reserves, lower market demand for the products being offered, and the reduced capacity of national executing agencies to provide continued field support with limited resources.

13. *Contributing Factors:* Project performance benefited from Satisfactory levels of preparation and readiness, in particular for the first and second components which benefitted from the earlier work of the executing agencies. The project engaged government institutions, NGOs, academics and researchers in the implementation of field activities and capacity development initiatives. Stakeholder participation and cooperation were Highly Satisfactory, as evidenced by the project's institutional arrangements that included Project Steering and Technical Advisory Committees. Participation was driven by a strong sense of country ownership and institutional commitment throughout the project cycle.

14. Community participation was focused on the implementation of field activities, with limited engagement in strategic project management, planning or strategic oversight. Responsiveness to gender and human rights were not directly addressed although women fully participated in project activities. Project implementation, and the socialization of lessons and results, were supported by a robust communications strategy that gave visibility to the project and enabled the dissemination and publication of experiences through different media (including the Earthscan/Routledge series on "Issues in Agricultural Biodiversity").

15. The following conclusions, lessons and recommendations were drawn from the analysis of the evaluation criteria and resulting findings:

Conclusions:

16. The project broke new ground by demonstrating approaches to biodiversity conservation and protected area management that were innovative to the Cuban context. The project played a strategic role by supporting Cuba's access to global knowledge, and by generating spaces for dialogue, exchange and collaboration with recognized technical and scientific institutions. This was key a driver of performance, combined with the technical competence and institutional commitment of project partners.

17. The project's main contributions were to the research, inventorying and conservation of indigenous and underutilized crops, and wild crop relatives (Outcome 1). This led to an important increase in the number of registered plant species and conservation/reproduction of genetic material. At policy level, agrobiodiversity was successfully incorporated within the national protected area strategy of CNAP and both MAB management plans (Outcome 2). Project impacts and sustainability were likely to have been undermined by the COVID-19 pandemic and its repercussions on Cuba's economy and the operational capacity of government partner institutions.

18. The Final Performance Assessment concludes that the project demonstrated Moderately Satisfactory levels of overall performance, based on the findings and ratings assigned to the various evaluation criteria.

Lessons Learned:

Innovation carries inherent risks. The partial achievement of project outputs or outcomes that promote new concepts or practices may not signify inadequate performance. Adaptive management is key in such situations. However, the risks associated with innovation need to be understood in advance and remedial measures built into the project's design (or expectations adjusted).

The generation of baseline knowledge at the design or inception phase is fundamental to guide project planning and implementation. Activities supporting data collection and baseline assessments were included in the project Results Framework and contributed to the design of work plans and deliverables. Access of national institutions to knowledge and approaches for agrobiodiversity conservation from recognized international organizations, universities and other partner institutions is a key driver of

change. Change is also driven by levels of technical competence and commitment of project partners (national and international) to the implementation process.

Recommendations:

Local expectations need to be managed on the basis of realistic assumptions, particularly when vulnerable communities are involved. This recommendation is particularly relevant for initiatives that propose livelihood improvements and income generation. Not doing so carries the risk of undermining the trust that was built over the course of the project and discouraging local collaboration with future conservation initiatives.

Project design processes and preparatory grants (i.e. PPGs) need to look beyond the formulation or socialization of project documents and include baseline studies that offer insight into underlying issues – and assumptions - that influence effectiveness and impact.

- Implementation timelines should be based on a realistic assessment of the change processes that are being sought. Standard project timeframes are often insufficient to consolidate results or generate the necessary enabling conditions for impacts to occur. This is particularly important for food transformation and biodiversity conservation initiatives that are conditioned by seasonal or biological cycles and may require longer gestation periods to have impact.
- The factors that contributed to successful inter-agency collaboration should be studied and if feasible, replicated on a broader scale to support the *One UN* and *Delivering as One* corporate policy that historically have had limited success.

1 INTRODUCTION

19. “Agricultural Biodiversity Conservation and Man and Biosphere Reserves in Cuba: Bridging managed and Natural Landscapes” (hereafter referred to as “the project”), was implemented between 2013 and 2019 with the objective of conserving diversity within and around protected areas, by mainstreaming agricultural biodiversity in the management of Cuba’s MAB Reserve System. The project was approved in March 2012 for five-years with a total budget of US\$ 4,148,208 that consisted of a US\$ 1,368,182 grant from GEF and US\$ 2,780,026 in co-financing from the main project partners.

20. The project was managed and coordinated by UNEP in the designated GEF implementing agency, through the Ecosystems Division [formerly the Division of Environmental Policy Implementation - DEPI]. Bioversity International was selected to be the project’s executing agency, based on its scientific capacity and prior cooperation experience in the country. Cuba’s Ministry of Agriculture (MINAG) and Ministry of Science, Technology and Environment (CITMA) served as national co-executing agencies, through the National Institute for Fundamental Research on Tropical Agriculture (INIFAT) and National Center for Protected Areas (CNAP). The project also provided opportunities for UN inter-agency collaboration with the participation of UNESCO (through its global MaB Reserve programme), the UN University’s Institute of Advanced Studies, and FAO’s Land & Water Division.

21. The project was aligned to UNEP’s 2014-2017 Medium Term Strategy (MTS). There were linkages with Targets 2: “Biodiversity values integrated” and 11: “Protected areas increased and improved” under the Expected Accomplishment (EA) of “Enabling Environment.” There was also relevance with the Sub-programme on Ecosystem Management aims of (i) supporting farmers in developing diversified and resilient eco-agriculture systems that provide critical ecosystem services, (ii) minimizing dependency on external inputs such as chemical fertilizers, pesticides and blue irrigation, and (iii) supporting green technologies for small-scale famers.² The project indirectly supported the EA of “Mainstreamed environmental sustainability” under Environmental Governance Sub-programme.

22. An independent Mid-Term Evaluation was conducted in 2017. In addition, external financial audits were done each year during the project’s implementation. An in-depth Terminal Evaluation was required by UNEP evaluation policies and was attempted in 2021 and 2022. In both instances the evaluation process was aborted on account of sub-optimal collaboration from the project partners in the country, rendering it impossible to carry out an in-depth and evidence-based assessment of project performance. As an alternative, the decision was made to have a Final Performance Assessment (FPA) that is based on the desk review of the project’s documentation. The Assessment has the following objectives:

- Examine project records and provide an analysis of project delivery against the approved Results Framework
- Analyze supplementary data from websites, email correspondence, and remote interviews with Bioversity International and UNEP focal points;
- Identify recommended actions and lessons of operational relevance for future project formulation and implementation, especially in relation to UNEP’s interventions in Cuba.

23. The intended audiences of this Assessment are the main international and national project partners: GEF, UNEP’s Law Division (formerly Division for Environmental Policy Implementation - DEPI), Bioversity International, UNESCO’s MaB programme, FAO’s Land & Water Division, the Cuban government’s *Instituto de Investigaciones^(SEP) Fundamentales en Agricultura Tropical* (INIFAT), *Centro Nacional de Areas Protegidas* (CNAP), and participating community organizations from the Reserves.

² (http://www.grida.no/_res/site/file/publications/FoodCrisis_lores.pdf: p 8).

2 EVALUATION METHODS

24. The Final Performance Assessment was based on the desk review of project documents, website data and other available information. This lacked the depth or insight that can be gained from direct stakeholder interviews and visits to project sites. Project performance was assessed according to the criteria of strategic relevance, quality of project design, effectiveness, likelihood of impact and sustainability, and a set of contributing factors: Preparation and readiness, quality of project management and supervision, responsiveness to human rights and gender, environmental and social safeguards, country ownership and driven-ness, and communications and public awareness.

25. The desk review considered project reports, website data and other inputs that had relevance to the assessment criteria. The approved project document and Results Framework, six-monthly progress reports, annual Project Implementation Review reports, the Mid-Term Evaluation and Final Project Reports, and technical reports from contracted institutions. Annual audits and expenditure reports were also considered in the assessment of financial management and budget delivery. However, the final results that were achieved against various output and outcome targets were not quantified (or the data were not available); this made it difficult to understand the extent by which performance targets were reached (or exceeded). Ethics, human rights or gender issues were not directly addressed in the project's design or implementation, although some of the main beneficiary groups were isolated farming communities within the Sierra del Rosario and Cuchillas del Toa Reserves.

26. Supplementary data was obtained from website articles uploaded by the PMU and Biodiversity International, and from online interviews with Bioversity's former Project Coordinator and UNEP's Task Manager. The inability to reach national partners or other participants prevents the triangulation of data from different sources or focus groups³. It also limits the backing of findings with evidence-based data. Although project activities terminated four years ago, there is no way of knowing the extent to which results were sustained or have led to impacts.

27. The result is a flat analytic landscape: Practically all input received was based on the project narrative or that of its partners. The Assessment did not review documented inputs or other feedback from project target groups or beneficiaries within the Reserves. As a several of the Assessment questions could not be reliably answered. Some of the findings and performance ratings in the report are therefore tentative (in some cases inferred) and open to discussion.

28. Several of the questions asked by the Assessment were not adequately covered in the documentation and would have required stakeholder interviews to systematize the perceptions of different focus groups, in addition to field visit to the project sites. Several of the findings in this report therefore are therefore inferred on the basis of the available information (with its gaps) and not direct interaction or observation. As a result, some of the corresponding texts have been extended in order to explain the rationale behind these findings.

³ These were: international implementing/ executing organizations, government co-executing agencies, other public and private partners, and farmers from the Reserves.

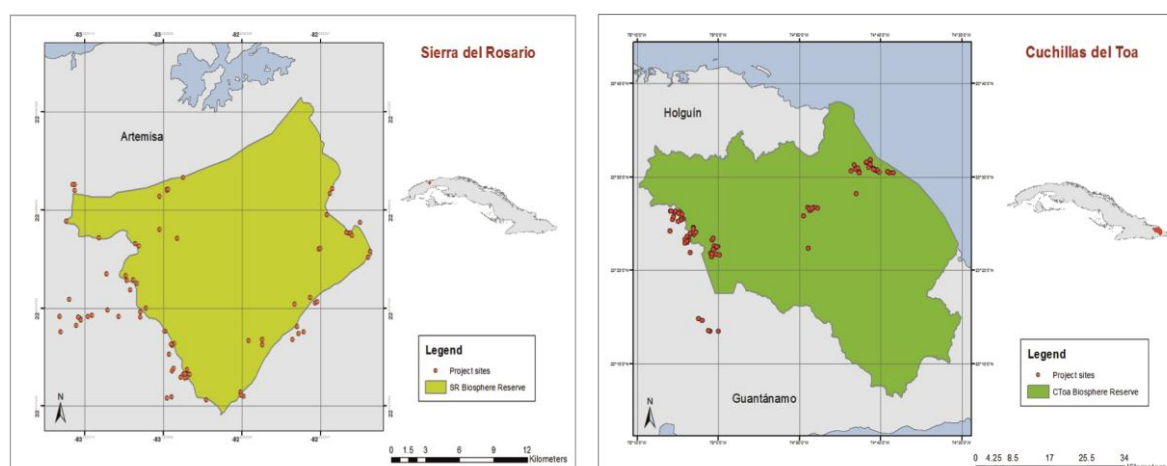
3 THE PROJECT

3.1 Context

29. The project was conceived to address gaps in knowledge and sustainable management of Cuba's agrobiodiversity, within its Man and Biosphere (MAB) Reserves. The project was designed with the objective of conserving diversity within and around protected areas, by mainstreaming agricultural biodiversity into the management of Cuba's MAB Reserve System. Implementation took place in two of Cuba's six biosphere reserves (*Sierra del Rosario* and *Cuchillas del Toa*, mapped below) that were selected for their value in genetic material and endangered edible plant species.

30. The project's problem statement emphasized the lack of knowledge and tools available to Reserve managers for including agrobiodiversity within protected area conservation and management, and promoting environmentally sustainable agricultural practices. The traditional *canuco* farming systems practiced by communities within the Reserves were considered to be sustainable, yet had not been documented nor considered within Reserve Management Plans. Local knowledge of wild edible plants, their value or genetic composition were not understood, and they had no influence on protected area institutions or their management policies. As stated in the project document, the main issue facing MaB Reserves was how to manage both natural and bio-cultural production landscapes as part of a single conservation or management plan for the protected area.⁴

Figure 1. Project Sites



31. Major external challenges – conflicts, natural disasters, political upheaval – were not faced by the project. At one point the Reserves were hit by a hurricane that brought strong winds, rains and flooding, yet affected farmers were reported to have recuperated with little damage to their crops or livelihoods. There were other challenges – geographic isolation, poor road access, lack of cold storage or transport, slow marketing chains – that influenced the implementation of the third project component.

3.2 Results Framework

32. The project Results Framework was constituted by five project components, two of which were devoted to project management and monitoring. The main project components supported mainstreaming mechanisms to integrate high levels of agrobiodiversity within MaB buffer and transition zones (Component 1); improved protected area management and capacity building (Component 2); and improved livelihoods from increased benefit flow within protected areas (Component 3).

⁴ Terms of Reference, pg. 3

33. The Theory of Change analysis in Chapter 5 indicates that many of the project outputs were mutually reinforcing and sequentially placed on causal pathways that led to their expected outcomes. This is consistent with the project’s integrated approach, as reflected in the expected outcomes of higher crop biodiversity, improved Reserve management and better rural livelihoods. The inclusion of mutually-reinforcing project components and outcomes improved the likelihood of triggering the change processes.

34. Some design aspects were comparatively weaker and might have benefitted from earlier and more in-depth consideration. The third project component appeared ambiguous in its benefit-sharing, income generation and commercialization dimensions. This might have benefitted from an early strategic vision, validated by the relevant stakeholder groups. This could have helped to anticipate some of the marketing and access constraints that influenced progress towards the third outcome. The Theory of Change analysis proposes reconstructed outcomes and outputs to give more clarity to these aspects.

Table 1. Project Results Framework: Objectives, Outcomes and Outputs

Development Objective:

To contribute to the conservation of the diversity within and around protected areas in ways that improve the livelihoods of rural communities and sustain ecosystem functions in and around the MaB reserves.

Immediate Objective: To conserve the diversity within and around protected areas through mainstreaming agricultural biodiversity into the management of the Cuban MAB Reserve System

Expected Outputs	Expected Outcomes
Component 1: Mainstreaming mechanisms that integrate high levels of agrobiodiversity into MaB buffer and transition zones	
Output 1.1 Assessment of the existing agricultural biodiversity and its role and use in protected areas	Outcome 1 Increased agricultural biodiversity in the buffer and transition zones of the 2 project MaB Reserves
Output 1.2 Increased use of traditional varieties and wild species	
Output 1.3 Local seed systems are maintained and planting material of traditional varieties is distributed to farmers in project MaB Reserves	
Component 2. Improved protected area management systems and capacity building	
Output 2.1 Agricultural biodiversity management actions are integrated and applied in the management plans of the project MaB Reserves system	Outcome 2 Improved management of Cuban Man and Biosphere (MaB) Reserve system through enhanced leadership and decision-making capacity of all stakeholders.
Output 2.2 National policy-makers and provincial and local officials make informed decisions regarding conservation and sustainable use of agricultural biodiversity to improve the sustainability of the National System of Protected Areas	
Output 2.3 Government Institutions put in place capacity building programmes	
Output 2.4 Information on agricultural biodiversity conservation in project MaB Reserves is made available to the global MaB network coordinated by UNESCO	
Component 3: Improved livelihoods from increased benefit flow within protected areas	
Output 3.1 Identify and strengthen income generation and other benefits from agricultural biodiversity management	Outcome 3 Improved livelihoods of communities living in and around the project MaB Reserves through benefit sharing mechanisms that support the sustainable use of agricultural biodiversity
Output 3.2 Methodologies and tools for national participatory certification schemes that support sustainable agricultural biodiversity management practices and products	

3.3 Stakeholders

35. The project provided a successful case study of inter-institutional, national and international cooperation. Much of the cooperation was focused on agrobiodiversity research and genetic issues that included a robust capacity development component. The project brought together government agencies, scientific institutions, universities and NGOs. The main international and national stakeholders were on the project Steering Committee and Technical Advisory Committee. The project Steering Committee was responsible for policy decisions on the implementation of the project, management decisions by consensus, and periodic reviews. However, its composition outside of the main implementing and executing institutions is not defined in the project document.

36. There were also presentations and exchanges on the certification of organic products. The project provided a framework for inter-agency collaboration between UNEP, UNESCO and FAO that was considered to be fruitful at different stages of the project cycle. The main stakeholder groups and their role in the project are described below:

Table 2. Project Stakeholders and their Roles

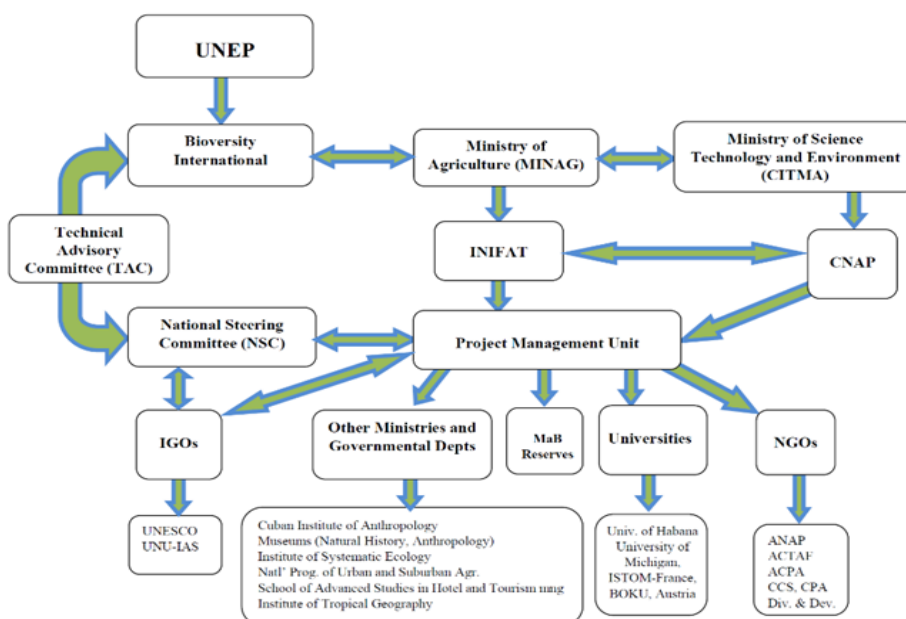
Focus Group	Type of Involvement
International Agencies	
UNEP Land and Water Division	GEF Implementing Agency responsible for overall project management and implementation
Bioversity International	International Executing Agency (BI)
UNESCO	Provision of scientific and technical expertise, research assistance and training (BI, UNESCO, UNU)
United Nations University- Institute of Advances Studies of Sustainability (UNU-IAS)	Support to national agencies
National Executing Partners	
Ministry of Agriculture (MINAG)	Main national counterpart institutions responsible for project execution and coordination. Executing agency functions of CITMA and MINAG are assigned to CNAP and INIFAT.
Ministry of Science, Technology and Environment (CITMA)	
Ministry of Tourism (MINTUR)	
Instituto de Investigaciones Fundamentales en Agricultura Tropical (INIFAT)	
Centro Nacional de Areas Protegidas (CNAP)	
Advisory Bodies	
National Project Steering Committee	Strategic guidance, coordination support and oversight of the project
National Association of Rural Development (ANDR)	
Scientific, Research and Education Institutions	
Instituto de Investigaciones Fundamentales en Agricultura Tropical (INIFAT)	Participation in project consultations, seminars, conferences and workshops
Centro Nacional de Areas Protegidas(CNAP)	Design and delivery of training activities
Museo Nacional	Support to development of outreach materials and dissemination of results in peer-reviewed scientific publications.
National Genebanks	
University of Michigan	
ISTOM, France	
BOKU, Austria	
HAFL, Switzerland	
Communities in MaB Reserves	
Participating rural communities and farmers within the MAB Reserves of Sierra del Rosario and Cuchillas del Toa.	Implementation of agrobiodiversity and sustainable agricultural activities.

Focus Group	Type of Involvement
	Participation in the design of annual work plans and project monitoring/oversight

3.4 Project implementation structure and partners

37. Most of the stakeholders supported project implementation at different levels. UNEP was the designated GEF Implementing Agency for the project. Bioersity International was selected as Executing Agency, in collaboration with the Ministries of Agriculture (MINAG) and Science, Technology and Environment (CITMA), which co-executed the project through the National Institute for Fundamental Research on Tropical Agriculture (INIFAT) and National Center for Protected Areas (CNAP).

Figure 2. Project Structure and Organizational Flow Chart



Source: Project document

38. Bioersity International was responsible for overall execution and provided scientific and technical guidance to the co-executing agencies; a Project Director was assigned for this purpose. Additional expertise was made available from Biodiversity’s headquarters in Rome and regional office for the Americas. A Project Management Unit (PMU) was created with a National Project Coordinator and technical staff assigned by INIFAT. The PMU managed overall implementation and coordination activities, providing the link between project sites and Bioersity International, partner institutions and agencies and local authorities, disseminating and sharing experiences, and giving national and international visibility to the project.

39. The project’s structure and organizational arrangements were multi-tiered. Partners were brought together to support project governance and oversight under the Steering Committee, and provide scientific-technical guidance through the Technical Advisory Committee. Both Committees met annually and appear to have contributed to project planning and implementation based on the meeting agendas and reports that were reviewed.⁵

⁵ Their role and contributions are considered under section 5.8.3 “Stakeholder Participation and Cooperation”

3.5 Changes in design during implementation

40. Changes were not made to the outcomes, outputs or indicators of the approved Results Framework. There were annual budget revisions in accordance with UNEP’s financial management guidelines. These revisions served to adjust budget lines for project activities and re-programme unspent balances into the following year, yet did not lead to changes of the project’s design. Project work plans and budget allocations were revised to accommodate a no-cost extension until October 2019, without changes to expected deliverables or the Results Framework.

41. Methodological adjustments were made to the first project component. The Nature Index methodology could not be applied as intended, due to the range of biodiversity within the Reserves and the heterogeneity of farms in the core and buffer zones. It was replaced by simpler and more accessible approach that relies on farmer self-assessment. These changes were part of an adaptive management process and did not require changes to the project’s design.

3.6 Project financing

42. A total project budget of USD 4,148,208 was approved, represented by a GEF grant of USD 1,368,182.00 and USD 2,7780,026 in co-financing commitments (Table 4) from project partners. Both were distributed across the various components (Table 3). Approximately 57% of the total budget was allocated to the three technical components and their expected outcomes. This was a low ratio that may have been influenced by high overhead costs and the geographic isolation of project sites. The implementation budget was distributed between the first three components and their outcomes in a balanced manner, with approximately one-third of the combined allocation going to each component (Figure 3).

Table 3. Budget Allocations by Project Component (USD)

	Baseline	Alternative	Increment	GEF	Co-financing
Component 1 Mainstreaming mechanisms	332,494	1,600,039	1,267,545	454,391	813,154
Component 2 Improved protected area management	320,586	1,372,536	1,051,950	400,906	651,044
Component 3 Improved livelihoods	225,219	1,227,693	1,002,474	294,885	707,589
Component 4 M&E	0	373,313	373,313	111,200	262,113
Component 5 Project Management	0	452,926	452,926	106,800	346,126
TOTAL	878,299	5,026,507	4,148,208	1,368,182	2,780,026

Source: Project Document

Figure 3. Budget Distribution between Project Components

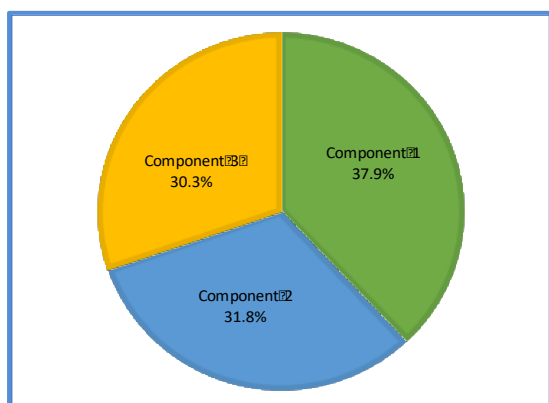


Table 4. Co-financing by Project Component and Funding Source

Name of Co-financier (source)	Classification	Cash	In Kind
Component 1		285,150	528,004
INIFAT	Nat. Gov. EA	51,303	266,191
Bioversity	EA	173,847	191,813
UNESCO	UN Agency	0	40,000
INIFAT PGR&PB Department	University	30,000	
FAO	Multilateral Agency	30,000	30,000
Component 2		226,205	424,839
INIFAT	Nat. Gov. EA	49,590	255,996
Bioversity	EA	103,106	128,843
UNESCO	Multilateral Agency	0	40,000
Pronaturaleza	NGO	53,509	0
INIFAT PGR&PB Department	University	20,000	0
Component 3		266,165	441,424
INIFAT	Nat. Gov. EA	35,694	174,525
Bioversity	EA	146,962	151,899
UNESCO	Multilateral Agency	0	40,000
Pronaturaleza	NGO	53,509	0
FAO	Multilateral Agency	30,000	30,000
Diversity & Development	NGO	0	45,000
Component 4		55,117	206,996
INIFAT	Nat. Gov. EA	2,916	70,000
Bioversity	EA	52,201	96,996
UNESCO	Multilateral Agency	0	40,000
Component 5		28,299	317,827
INIFAT	Nat. Gov. EA	5,813	115,000
Bioversity	EA	22,486	162,827
UNESCO	Multilateral Agency	0	40,000
TOTAL		860,936	1919,090

Source: Project Document

4 THEORY OF CHANGE AT EVALUATION

43. A Theory of Change (ToC) model was not formulated during the project's design, and has been developed in this Section as a tool for analysing the project's structure and causal logic. The reconstructed ToC builds on the Results Framework and proposes revised outputs and outcomes that draw on the retrospective insight of the final project reports and reflections of the interviewed Bioersity and UNEP focal points.

44. The project objectives foresaw impacts in the conservation of biodiversity and ecosystem services in and around the MAB Reserves, and in improved rural livelihoods and incomes through sustainable agrobiodiversity management. This would be achieved through the mainstreaming of agricultural biodiversity into the management plans of the Cuban MAB Reserve system. The project's problem statement and justification stress the lack of institutional knowledge of agrobiodiversity within the Reserves or how to sustainably manage it. There was also the expressed need to understand the interaction of traditional farming systems with biodiversity, and document local knowledge of plants.

45. The project's intervention logic and sequence of causal linkages were coherent. Its design was inter-disciplinary and combined agronomic research, biodiversity conservation and benefit-sharing, and product value chains. This allowed the project to have a wider range of intervention, through components and deliverables that were mutually supportive. From a Theory of Change perspective, these dynamics were reflected in three causal pathways (or results chains) that enhanced the project's capacity to generate change processes.

46. The **first pathway** enabled the production of baseline knowledge for the three project components with scientific research, field assessments and data collection (Outputs 1.1, 2.4, 3.1) by the national co-executing institutions and Bioersity International. The knowledge and insight that were gained provided the project team with an in-depth understanding of baseline conditions, priority needs and challenges at the different project sites. This understanding of the project environment would inform the design of implementation strategies and work plans for the specific components.

47. A **second pathway** systematized the knowledge gained into strategies, methodologies and capacity building programs to guide the three project components. This pathway produced methods and tools for participatory certification (Output 3.2), a capacity building programme for government (Output 3.3), sought the inclusion of agrobiodiversity in MAB management plans (Output 2.1), disseminated improved farming practices and selected plant and seed varieties for distribution to farmers (Outputs 1.3, 1.2). These outputs set technical and methodological parameters that guided much of the project's implementation. The second pathway also moved MAB management towards a more integrated vision by linking agrobiodiversity conservation to local development, benefit-sharing and the sustainable commercialization of quality agricultural products (Outputs 3.1-4)

48. The **third pathway** enabled the appropriation and application of new knowledge and practices by key stakeholders. In the ToC diagram, this pathway connects outputs that are at the higher end of causal pathway and represent the cumulative effect of previous actions. Traditional varieties and wild species are increasingly used (Output 1.2); agrobiodiversity management actions are integrated and applied in MAB plans (Output 2.1); national policymakers and local officials make informed decisions (Output 2.2); and agreements are reached for the marketing of local agricultural products and benefit-sharing initiatives (Reconstructed Output 3.4). Several of these outputs are enablers of project outcomes and provide entry points towards reaching the Intermediate States that precede full impact.

49. The third project outcome addressed local expectations by improving rural livelihoods and incomes through benefit-sharing initiatives and sustainable commercialization of agricultural products. However, Output 3.1 was ambiguous and lacked specificity, perhaps due to uncertainties on how to approach the marketing and commercialization aspects that were innovative for the national context.⁶ Hence Reconstructed Outputs 3.3 and 3.4 were added to reinforce the clarity and tangibility of this component.

⁶ This seems to have been the most difficult component to achieve. The Final Project Report mentions that "...The current marketing and trading systems in Cuba do not allow for quality recognition of agricultural products. All products are collected on farm by the state cooperatives and there is no mechanism to trace their origin once they reach the markets or enter the state distribution system" (p. 7).

50. The ToC analysis identifies **two Intermediate States** that precede the intended impacts (**Impact 1:** Agrobiodiversity is conserved and sustainably managed within the Cuban MaB Reserve System; and **Impact 2:** Rural communities within MaB Reserves have improved income and livelihoods through sustainable agrobiodiversity management) that should be reached in order to achieve the project's objective (i.e. to mainstream agricultural biodiversity into the management of the Cuban Man and Biosphere Reserve system):

- Intermediate State 1. Agricultural biodiversity is mainstreamed into the management of Cuba's Man and Biosphere (MAB) Reserve system with the potential for replicating/scaling up of results to other Biosphere Reserves.
- Intermediate State 2. Certified food and fruit products are sustainably cultivated and commercialized, producing additional income and strengthening food security in communities within MAB Reserves.

51. Based on this analysis, some elements of the Results Framework were reconstructed to improve the project's causal logic (Table 5). These are included in the Theory of Change diagram (Figure 4) that illustrates the project's causal pathways, output-to-outcome linkages and intermediate states, as well as its drivers and external assumptions.

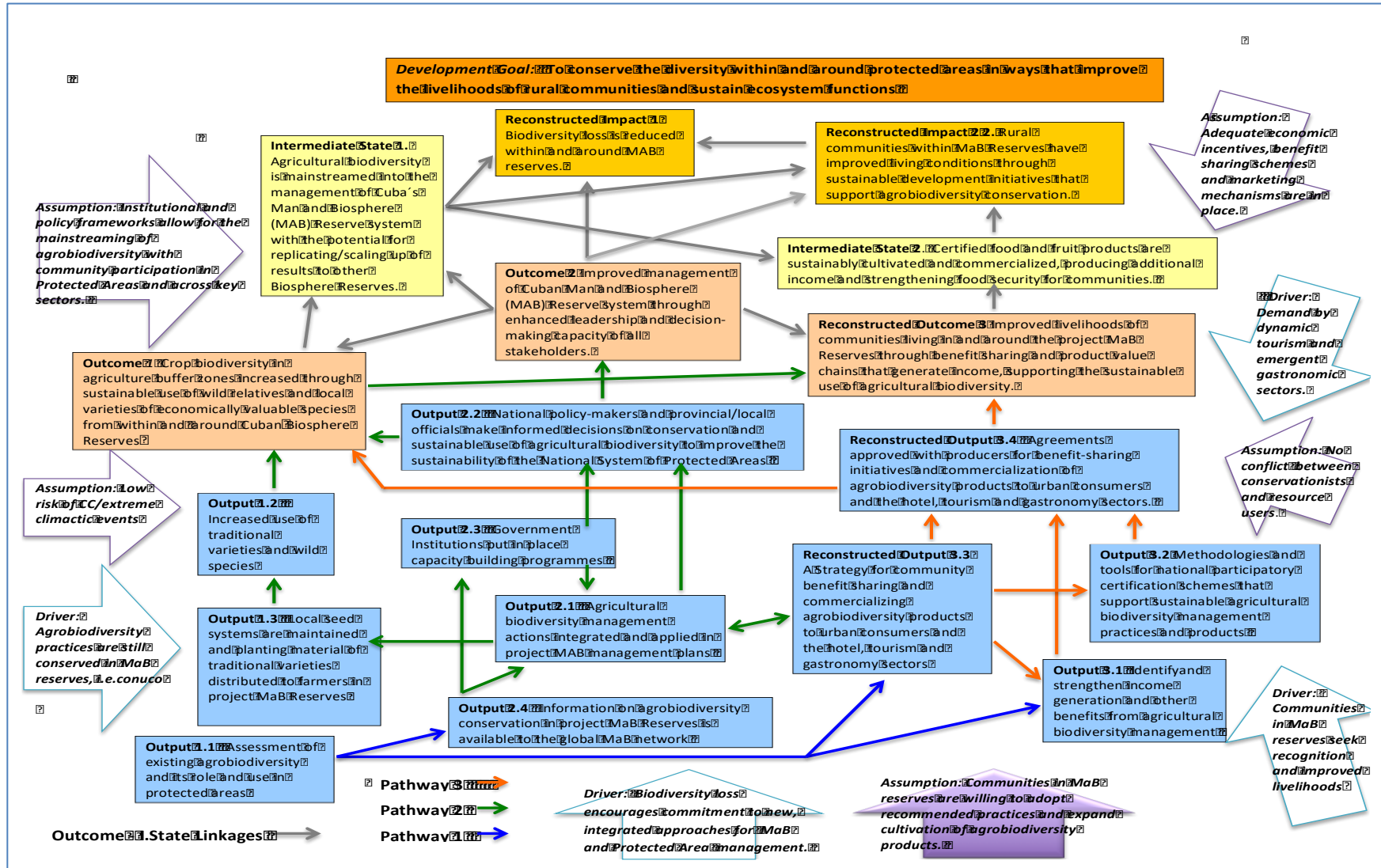
Table 5. Reconstructed Results Framework

Results in project document	Results in reconstructed ToC	Remarks / Justification for reformulation:
Long-term Impacts		
Project Objective: Mainstream agricultural biodiversity into the management of the Cuban Man and Biosphere Reserve system.	<p>Impact 1. Agrobiodiversity is conserved and sustainably managed within the Cuban MaB Reserve System.</p> <p>Impact 2. Rural communities within MaB Reserves have improved income and livelihoods through sustainable agrobiodiversity management.</p>	The reconstructed project objective has been expanded to include the impact of biodiversity conservation on livelihood improvements (as described in the project’s development goal).
Intermediate States		
	<p>Intermediate State 1. Agricultural biodiversity is mainstreamed into the management of Cuba’s Man and Biosphere (MAB) Reserve system with the potential for replicating/scaling up of results to other MAB Reserves.</p>	<p>Intermediate states are not identified in the project’s design.</p> <p>The project objective is an intermediate state that needs to be reached to enable long-term impacts but does not represent an impact in itself.</p>
	<p>Intermediate State 2. Certified food and fruit products are sustainably cultivated and commercialized, producing additional income and strengthening food security in communities within MAB Reserves. .</p>	This intermediate state builds on the achievement of the first and third project outcomes.
Outcomes		
Outcome 1. Increased agricultural biodiversity in the buffer and transition zones of the 2 project MaB Reserves	Outcome 1: Crop biodiversity in agriculture buffer zones increased through sustainable use of wild relatives and local varieties of economically viable species form within and around Cuban biosphere reserves	The reconstructed Outcome provides greater clarity regarding the purpose and scope of increased agricultural biodiversity.
Outcome 2. Improved management of Cuban Man and Biosphere (MaB) Reserve system through enhanced leadership and decision-making capacity of all stakeholders.	Outcome 2. Improved management of Cuban Man and Biosphere (MaB) Reserve system through enhanced leadership and decision-making capacity of all stakeholders.	No changes made
Outcome 3. Improved livelihoods of communities living in and around the project MaB Reserves through benefit sharing mechanisms that support the sustainable use of agricultural biodiversity	Outcome 3: Improved livelihoods of communities in and around the project MaB Reserves through benefit sharing mechanisms and product value chains that generate income, supporting the sustainable use of agricultural biodiversity.	The outcome and associated outputs are somewhat general and can benefit from greater clarity. For example, value chains and income generation (among other economic

Results in project document	Results in reconstructed ToC	Remarks / Justification for reformulation:
		benefits) are fundamental for improving community livelihoods. There are potential opportunities to supply tourism, hotel and gastronomic sectors with certified produce.
Outputs		
Output 1.1. Assessment of the existing agricultural biodiversity and its role and use in protected areas.	Output 1.1 Assessment of the existing agricultural biodiversity and its role and use in protected areas.	No changes made
Output 1.2. Increased use of traditional varieties and wild species	Output 1.2 Increased use of traditional varieties and wild species	No changes made
Output 1.3. Local seed systems are maintained, and planting material of traditional varieties is distributed to farmers in project MaB Reserves	Output 1.3 Local seed systems are maintained, and planting material of traditional varieties is distributed to farmers in project MaB Reserves	No changes made
Output 2.1. Agricultural biodiversity management actions are integrated and applied in the management plans of the project MaB Reserves system	Output 2.1 Agricultural biodiversity management actions are integrated and applied in project MAB management plans	Minor amendment to the text
Output 2.2. National policy-makers and provincial and local officials make informed decisions regarding conservation and sustainable use of agricultural biodiversity to improve the sustainability of the National System of Protected Areas	Output 2.2 National policy-makers and provincial and local officials make informed decisions regarding conservation and sustainable use of agricultural biodiversity to improve the sustainability of the National System of Protected Areas	No changes made
Output 2.3. Government Institutions put in place capacity building programmes	Output 2.3 Government Institutions put in place capacity building programmes	No changes made
Output 2.4. Information on agricultural biodiversity conservation in project MaB Reserves is made available to the global MaB network coordinated by UNESCO	Output 2.4 Information on agricultural biodiversity conservation in project MaB Reserves is made available to the global MaB network coordinated by UNESCO	No changes made
Output 3.1. Identify and strengthen income generation and other benefits from agricultural biodiversity management	Output 3.1 Identify and strengthen income generation and other benefits from agricultural biodiversity management	No change but expanded on. Reconstructed outputs 3.3 and 3.4 are more specific in relation to income generation and commercialization of agrobiodiversity products.

Results in project document	Results in reconstructed ToC	Remarks / Justification for reformulation:
<p>Output 3.2. Methodologies and tools for national participatory certification schemes that support sustainable agricultural biodiversity management practices and products</p>	<p>Output 3.2 Methodologies and tools for national participatory certification schemes that support sustainable agricultural biodiversity management practices and products</p>	<p>No changes made</p>
<p>-</p>	<p>Output 3.3 A strategy for community benefit-sharing and commercialising agrobiodiversity products to urban consumers and the hotel, tourism and gastronomy sectors</p>	<p>This new output builds on “identify income generation and other benefits” (Output 3.1) and directly supports the outcome with tangible products.</p> <p>Prior to COVID-19, there was a growing urban and hotel market for quality produce.</p>
<p>-</p>	<p>Output 3.4 Agreements are reached with community producers to supply agro-biodiverse products to hotel, school and health care facilities, tourism and gastronomy sectors.</p>	<p>This new output builds on “strengthen income generation and other benefits” (Output 3.1) and directly supports the outcome’s achievement with a tangible product.</p>

Figure 4. Reconstructed Theory of Change



52. The design of the main project components was influenced by external **assumptions**⁷ that were outside the project's control. They included the following:

- Communities in MAB Reserves are willing to adopt recommended practices and expand cultivation of agrobiodiverse crops;
- There are no conflicts between conservationists and resource users;
- There is a low risk of climate change or extreme climactic events;
- Adequate economic incentives, benefit sharing opportunities and marketing mechanisms are in place;
- Institutional and policy frameworks allow for the mainstreaming of agrobiodiversity with community participation in Protected Areas and across key sectors.

53. The ToC also recognizes the "**drivers**"⁸ that moved the implementation process forward. These included:

- Policy commitment to reduce biodiversity loss in Protected Areas and encourage new, integrative approaches at landscape scale;
- The interest of rural communities in improving livelihoods and income, and in having their knowledge recognized;
- The continuity of traditional agrobiodiversity knowledge and practices within MAB Reserves;
- Demand for high quality agricultural produce from urban consumers and the expanding tourism, hotel and gastronomic sectors.⁹

⁷ An assumption is a significant external factor or condition that should be present for the realization of the intended results but is beyond the influence of the project and its partners. Assumptions are often positively formulated risks

⁸ A driver is a significant external factor that, if present, is expected to contribute to the realization of the intended results of a project. Drivers can be influenced by the project and its partners

⁹ Recent national legislation had been approved authorizing private restaurant establishments, leading to a rapid expansion of their number. Many of these establishments were oriented to the tourist market.

5 EVALUATION FINDINGS

5.1 Strategic Relevance

(Rating: **Highly Satisfactory**)

54. “Agricultural Biodiversity Conservation and Man and Biosphere Reserves in Cuba” was an innovative project that articulated the thematic priorities and field initiatives of Bioversity International and the Cuban co-executing agencies. The project objectives and components were aligned with UNEP’s 2014-2017 Medium-Term Strategy as well as GEF IV’s biodiversity objectives, and its implementation and results were of interest to the global MAB Reserve network and monitoring system.

55. In strategic terms, the project addressed Cuba’s over-arching need to connect with the international scientific and conservation communities, and specifically to apply novel approaches to protected area management through the inclusion of agrobiodiversity and greater community participation. The project’s justification emphasized the lack of knowledge and tools among Reserve managers to manage agrobiodiversity or develop sustainable agriculture systems within protected areas.¹⁰ The project created dialogue spaces that brought together researchers, scientific experts and academics, local and national government officials, farmers representatives, NGOs, and private sector representatives. There were field visits and direct interactions with international experts on topics that included the conservation of genetic crop diversity, sustainable landscape management, benefit-sharing and product certification mechanisms.

56. The project was supportive of national policies and, in particular, new policy directions: Cuba’s 2010 National Environment Strategy prioritized the *in-situ* conservation of wild crop relatives, preserving traditional knowledge and conducting inventories of underutilized species with consideration of market options. The 2021-2015 National Biodiversity Strategy and Action Plan (NBSAP) called for the protection and sustainable commercialization of genetic resources, studies on biodiversity management in protected areas, community projects, and public awareness campaigns to promote sustainable biodiversity use.¹¹

57. The project concept was consistent with the government’s growing attention to national food security, reflected in new initiatives for urban agriculture and the private commercialization of surplus agricultural products.¹² Topics such as landscape management, ecosystem services, climate resilience and community livelihoods were being addressed in strategic documents such as the Management Plan for the Cuban National System of Protected Areas (SNAP), which prioritized (i) the provision of ecosystem goods and services, (ii) reduced soil erosion and improved soil quality, (iii) improved watershed management, (iv) sustainable rural development, and (v) better livelihoods of local populations in and around Reserves.¹³ During the project’s implementation, the Cuban government introduced economic policy reforms that enabled farmers to sell several products and surpluses from the production of contracted crops privately.¹⁴

58. At a global level, the project supported Cuba’s commitments to the Convention on Biological Diversity (CBD), International Treaty on Plant Genetic Resources for Food and Agriculture, and the UNESCO/MAB Madrid Action Plan (2008) that aimed to transform MAB reserves into “the principal designated areas dedicated to sustainable development in the 21st century.”¹⁵

¹⁰ Agricultural Biodiversity Conservation and Man and Biosphere Reserves in Cuba (PIF) 2010

¹¹ Estrategia Ambiental Nacional 2011-2015 (CITMA), Programa 015.

¹² In this regard, interviewed stakeholders highlighted the Ministry of Agriculture’s keen interest in the project and Outcome 3 in particular.

¹³ Agricultural Biodiversity Conservation and Man and Biosphere Reserves in Cuba (PIF), 2010

¹⁴ 4158 COBARB Cuba Final Report (2019)

¹⁵ Agricultural Biodiversity Conservation and Man and Biosphere Reserves in Cuba (PIF) 2010

59. There was relevance to prior and ongoing programmes. The project enabled the continuity of agrobiodiversity research and fieldwork that had been conducted by Cuban institutions since 1992 with support from Bioersivity International, the German International Cooperation agency (GIZ), the International Development Research Center–Canada (IDRC), and the Italian NGO CROCEVIA among others. The first project component aimed to apply and validate methodologies for integrating biodiversity conservation within agricultural management, with guidance from Bioersivity International. The third project outcome addressed the priorities of local farming communities: Surveys conducted during project implementation showed that 60% of farmers visualized selling their products to the state tourism sector and private establishments; while 80% sold their products locally and experienced difficulties accessing markets. Up to three-quarters of farmer produce was lost within the Reserves due to the lack of access to consumers. Most farmers considered that changes were needed to the present commercialization channels.¹⁶

60. The project’s design was supportive of UNEP’s Ecosystems Management focus area under its 2014-2017 Medium-Term Strategy (MTS), and in particular Targets 2 (Biodiversity values integrated) and 11 (Protected areas increased and improved). Additional relevance was noted to Ecosystems Management component’s aims of (i) supporting farmers in developing diversified and resilient eco-agriculture systems that provide critical ecosystem services, (ii) minimizing dependency on external inputs such as chemical fertilizers, pesticides and blue irrigation, and (iii) supporting green technologies for small-scale famers.¹⁷ The project indirectly supported the MTS’s Expected Accomplishment of Mainstreamed Environmental Sustainability (Option 4 of Seven Options for Improving Food Security). The third project component aimed to implement activities that reflected aspects of the Nagoya Protocol on Access and Benefit-Sharing (ABS).

61. In addition, the project was aligned with GEF’s Biodiversity Objectives. These included Strategic Objective 1 (SO1): To catalyze sustainability of protected area systems and Strategic Programme 3 (SP3): Strengthening terrestrial protected area networks. The second and third outcomes were supportive of GEF SO2: Mainstream biodiversity in production landscapes/seascapes and sectors, and SP5: Fostering markets for biodiversity goods and services.

5.2 Quality of Project Design

The overall quality of project design is **Satisfactory** as summarized in Table 6 below:

Table 6. Assessment of the quality of the project design

			YES/NO	Comments/Implications for the evaluation design	Section Rating:
A. Operating Context					
1	Does the project document identify any unusually challenging operational factors that are likely to negatively affect project performance?	i) Ongoing/high likelihood of conflict?	Yes	The section on Assumptions include the possibility of conflict between conservationists and resource users, and suggests risk mitigation measures.	Satisfactory = 5
		ii) Ongoing/high likelihood of natural disaster?	No	The sites do not appear to be highly vulnerable to natural disasters. A low Climate change risk.	
		iii) Ongoing/high likelihood of change in national government?	No	The section on Assumptions includes “a stable political and economic environment”	

¹⁶ Informe sobre Actividades de Comercialización, COBARB (2016)

¹⁷ (http://www.grida.no/_res/site/file/publications/FoodCrisis_lores.pdf: p 8).

		YES/NO	Comments/Implications for the evaluation design	Section Rating:	
			supported by Cuba's adherence to international treaties for biodiversity conservation and continued international support.		
B. Project Preparation					
2	Does the project document entail clear and adequate problem and situation analyses?	Yes	Both are clearly presented and supported by an integrative analysis that draws from different perspectives. Biodiversity loss and related challenges are linked to vertical MAB management practices with limited community participation, insufficient scientific knowledge of edible indigenous plant species, little understanding of traditional agrobiodiversity and resource management practices, i.e. <i>conucos</i> within the reserves, and the availability of few sustainable livelihood options.	Satisfactory = 5	
3	Does the project document include a clear and adequate stakeholder analysis, including by gender/minority groupings or indigenous peoples?	No	A general description of the population and crops cultivated within the MAB areas are included under the Project Justification.		
4	<i>If yes to Q4: Does the project document provide a description of stakeholder consultation/participation during project design process? (If yes, were any key groups overlooked: government, private sector, civil society, gendered groups and those who will potentially be negatively affected)</i>	No	Brief mention is made of the national MaB committee's (hosted in CITMA) involvement in developing the project, without further description. Community or other stakeholder participation in the design process is not mentioned.		
5	Does the project document identify concerns with respect to human rights, including in relation to sustainable development? (e.g. integrated approach to human/natural systems; gender perspectives, rights of indigenous people).	Yes	Benefit flows are anticipated to local communities that include remnants of indigenous populations, through the certification/marketing of agrobiodiversity products, and recognition of traditional agrobiodiversity practices in MAB management plans. This indirectly contributes to strengthening community land tenure security within the reserves.		
C Strategic Relevance		YES/NO	Comments/Implications for the evaluation design	Section Rating:	
6	Is the project document clear in	i) UNEP MTS, PoW and Strategic Priorities (including Bali	Yes	Project design supports Targets 2: Biodiversity values integrated and 11:	Highly Satisfactory = 6

			YES/NO	Comments/Implications for the evaluation design	Section Rating:
	terms of its alignment and relevance to:	Strategic Plan and South-South Cooperation,		Protected areas increased and improved of UNEP's 2014-2017 Medium-Term Strategy, under the Expected Accomplishment of "Enabling Environment." The global benefits generated from the project will be disseminated for uptake through UNESCO/MAB's South-South cooperation programme. The third outcome has high relevance to the Nagoya Protocol for Access and Benefit-sharing	
		ii) GEF/Donor strategic priorities	Yes	Project design supported GEF Biodiversity Strategic Objective 2: Mainstreaming Biodiversity in Production Landscapes/Seascapes and Sectors, and to Strategic Program 5. The project also contributed to Biodiversity Strategic Objective 1: To catalyze the sustainability of PA systems under GEF Strategic Programme 3.	
		iii) Regional, sub-regional and national environmental priorities?	Yes	There is consistency with Cuba's National Environmental Plan and 2006-2010 National Biodiversity Strategy & Action Plan (NBSAP), both of which assign high priority to the conservation and sustainable commercialization of agricultural biodiversity. Cuba's national CBD reports emphasize the need for conserving and sustainably managing natural resources	
		iv. Complementarity with other interventions	Yes	The project builds on complementarities with previous work executed by Biodiversity in the Reserves, and prior GIZ and NGO cooperation with the same Cuban institutional partners ¹⁸ The project was also linked to the ongoing UNDP-GEF project "Strengthening the national system of Protected Areas in Cuba." It additionally supported the global system of MaB	

¹⁸ Including Conservation and Use of Crop Genetic Diversity to Control Pests and Diseases in Support of Sustainable Agriculture; and In-situ conservation of crop wild relatives through enhanced information management and field application.

			YES/NO	Comments/Implications for the evaluation design	Section Rating:
				protected areas that is managed by UNESCO.	
D Intended Results and Causality					
7	Are the causal pathways from project outputs (Availability of goods and services to intended beneficiaries) through outcomes (changes in stakeholder behaviour) towards impacts (long lasting, collective change of state) clearly and convincingly described in either the logframe or the TOC?		Yes	Theory of Change analysis was not included in the project document. A Reconstructed ToC was formulated for this evaluation). The answers for this section are based on project the logframe. The achievement of the third outcome is influenced by externalities such as Cuba's marketing and distribution system for agricultural products, which is assumed to be in place. How this might address project performance is not addressed.	Satisfactory = 5
8	Are impact drivers and assumptions clearly described for each key causal pathway?		Yes	Assumptions are clearly stated. However, the challenges of marketing agricultural products from the Reserves may have been underestimated. Impact drivers are implicit in the sections on Project Rationale and Justification.	
9	Are the roles of key actors and stakeholders, including gendered/minority groups, clearly described for each key causal pathway?		Yes		
10	Are the outcomes realistic with respect to the timeframe and scale of the intervention?		Yes	Five years was adequate inadequate for achieving the combined outcomes, in particular the third outcome which is particularly innovative. The scale of intervention adequate and targets two of seven MaB reserves. However, the timeframe may be insufficient to generate the livelihood improvements and transversal policy effects that are envisioned. These elements may be at an incipient stage, affect the evaluation of delivery and effectiveness.	
E Logical Framework and Monitoring					
11	Does the logical framework:	i)Capture the key elements of the Theory of Change/ intervention logic for the project?	Yes	There is a logical progression of elements that integrate scientific research and data collection with capacity building and outreach at different levels, i.e. incorporating agrobiodiversity knowledge	Highly Satisfactory = 6

		YES/NO	Comments/Implications for the evaluation design	Section Rating:
			and conservation within MaB Reserve management plans; linking agrobiodiversity conservation to community benefit-sharing and livelihood improvements.	
	ii) Have appropriate and 'SMART' results at output level?	Yes	Outputs are tangible and measurable in general.	
	iii) Have appropriate and 'SMART' results at outcome level?	Yes	Increase in agrobiodiversity, farm output or livelihood improvements may be difficult to measure at the end of the project period.	
	iv) Reflect the project's scope of work and ambitions?	Yes		
12	Is there baseline information in relation to key performance indicators?	Yes	Baseline indicators are listed for each outcome in the Results Framework.	
13	Has the desired level of achievement (targets) been specified for indicators of outputs and outcomes?	Yes	Medium-term and End-of-project targets for outcomes are included in the Results Framework; some are quantified.	
14	Are the milestones in the monitoring plan appropriate and sufficient to track progress and foster management towards outputs and outcomes?	Yes	A monitoring plan is annexed to the project document (Appendix 7)	
15	Have responsibilities for monitoring activities been made clear?	Yes	Monitoring activities involve, the project team, executing partners and UNEP.	
16	Has a budget been allocated for monitoring project progress?	Yes		
17	Is the workplan clear, adequate and realistic? (eg. Adequate time between capacity building and take up etc)	Yes		
F	Governance and Supervision Arrangements			
18	Is the project governance and supervision model comprehensive, clear and appropriate? (Steering Committee, partner consultations etc)	Yes	<p>The management roles of UNEP, Bioversity and the national co-executing agencies are clearly described in Section 4. Institutional Framework. A project decision-making diagram is annexed to the project document (Appendix 10) that includes a National Steering Committee. However, community stakeholders or their associations are not explicitly included in project planning, management or oversight.</p> <p>The project Steering Committee is responsible for policy decisions on the implementation of the</p>	Satisfactory = 5

		YES/NO	Comments/Implications for the evaluation design	Section Rating:
			project, management decisions by consensus, and periodic reviews. However, its composition outside of the executing government institutions is not defined in the project document.	
19	Are roles and responsibilities within UNEP clearly defined? <i>(If there are no stated responsibilities for UNEP Regional Offices, note where Regional Offices should be consulted prior to, and during, the evaluation)</i>	Yes	The supervision and monitoring roles of UNEP are described (Appendix 7)	
G Partnerships				
20	Have the capacities of partners been adequately assessed?	Yes	The Background and Justification sections describe the institutional strengths and weaknesses of Protected Area management in relation to agrobiodiversity, as well as the main activities and challenges faced by communities within MaB reserves.	Satisfactory = 5
21	Are the roles and responsibilities of external partners properly specified and appropriate to their capacities?	Yes	The role of Bioersity International and UNESCO are adequately described.	
H Learning, Communication and Outreach				
22	Does the project have a clear and adequate knowledge management approach?	Yes	Knowledge management is adequate. KM includes (i) transfer of agrobiodiversity knowledge and traditional cultivation methods to MAB communities, (ii) uploading project data to the global MAB network, and (iii) bringing lessons and best practices to policy levels.	Satisfactory = 5
23	Has the project identified appropriate methods for communication with key stakeholders, including gendered/minority groups, during the project life? <i>If yes, do the plans build on an analysis of existing communication channels and networks used by key stakeholders?</i>	Yes	Stakeholder communications methods are described in detail and key persons under the Communications Strategy (Annex I).	
24	Are plans in place for dissemination of results and lesson sharing at the end of the project? <i>If yes, do they build on an analysis of existing communication channels and networks?</i>	Yes	One of the project outputs transfers lessons learned and best practices to policy levels.	
I Financial Planning / Budgeting				
25	Are the budgets / financial planning adequate at design stage? <i>(coherence of the budget, do figures add up etc.)</i>	Yes		Satisfactory = 5
26	Is the resource mobilization strategy reasonable/realistic? <i>(E.g. If the expectations are over-ambitious the delivery of the project outcomes may be undermined or if under-ambitious may lead to repeated no cost extensions)</i>	Yes	Expectations are reasonable in relation to the project budget, five-year timeframe and geographic scale of implementation.	
J Efficiency				

		YES/NO	Comments/Implications for the evaluation design	Section Rating:
27	Has the project been appropriately designed/adapted in relation to the duration and/or levels of secured funding?	Yes.	Design and expected results are reasonable in relation to the project budget, five-year timeframe and geographic scale of implementation.	Satisfactory = 5
28	Does the project design make use of / build upon pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. to increase project efficiency?	Yes	The project builds on the work of other UNEP/GEF projects executed by Bioversity – Conservation and Use of Crop Genetic Diversity to Control Pests and Diseases in Support of Sustainable Agriculture and “In-situ conservation of crop wild relatives through enhanced information management and field application”. There are direct links to UNDP/ GEF project “Strengthening the national system of Protected Areas in Cuba”. The project areas are part of the global MAB system that provides a supportive framework.	
29	Does the project document refer to any value for money strategies (i.e. increasing economy, efficiency and/or cost-effectiveness)?	Yes	The third project component supports benefit flows to communities from the sustainable financing of the protected area management systems. There are also plans to improve local livelihoods through benefit-sharing mechanisms and marketing of indigenous food products.	
30	Has the project been extended beyond its original end date? (If yes, explore the reasons for delays and no-cost extensions during the evaluation)	Yes	The project was extended by approximately one year at no cost and its closure was delayed due to the COVID 19 pandemic.	
K	Risk identification and Social Safeguards			
31	Are risks appropriately identified in both the TOC/logic framework and the risk table? (If no, include key assumptions in reconstructed TOC at Evaluation Inception)	Yes	A number of assumptions are identified, assessed and given risk ratings. The risks associated to marketing fresh organic agrobiodiversity products within Cuba’s centralized distribution system are not addressed.	Satisfactory = 5
32	Are potentially negative environmental, economic and social impacts of the project identified and is the mitigation strategy adequate? (consider unintended impacts)	Yes	Climate change is identified as a low risk.	
33	Does the project have adequate mechanisms to reduce its negative environmental foot-print? (including in relation to project management and work implemented by UNEP partners)	N/A	Negative environmental impacts were not foreseen and unlikely to occur. Bioversity International and CNAP brought experience in	

		YES/NO	Comments/Implications for the evaluation design	Section Rating:
			biodiversity conservation and protected area management to the project.	
L Sustainability / Replication and Catalytic Effects				
34	Did the design address any/all of the following: socio-political, financial, institutional and environmental sustainability issues?	Yes	The third outcome refers to community benefits and income generation through conservation benefit-sharing, the sustainable marketing of agrobiodiverse products, and organic certification.	Satisfactory = 5
35	Was there a credible sustainability strategy and/or appropriate exit strategy at design stage?	Yes	An exit strategy was discussed at the final Steering Committee meeting but was not included in the project's design. Sustainability is based on existing protected area financing and product certification schemes, and the marketing of organic indigenous food products to the important tourism and emergent gastronomic sectors.	
36	Does the project design present strategies to promote/support scaling up, replication and/or catalytic action? (if yes, capture this feature in the reconstructed TOC at Evaluation Inception)	Yes	The second outcome and related outputs support upscaling and replication of agrobiodiversity practices within Cuba's MAB Reserve system, and to policymaking levels.	
M Identified Project Design Weaknesses/Gaps				
37	Were recommendations made by the PRC adopted in the final project design? If no, what were the critical issues raised by PRC that were not addressed.		N/A	N/A
38	Were there any critical issues not flagged by PRC?		N/A	
N Gender Marker Score				
	<p>UNEP Gender Scoring:</p> <p>0 = gender blind: Gender relevance is evident but not at all reflected in the project document.</p> <p>1 = gender partially mainstreamed: Gender is reflected in the context, implementation, logframe, or the budget.</p> <p>2 = gender well mainstreamed throughout: Gender is reflected in the context, implementation, logframe, and the budget.</p> <p>n/a = gender is not considered applicable: A gender analysis reveals that the project does not have direct interactions with, and/or impacts on, people. Therefore, gender is considered not applicable.</p>	N/A	<p>Gender marker scores were not used at the time of the project's design (2012). However, the project document gives minimal attention to the gender dimension. The end-of-project target for the second outcome was that stakeholders would be included in gender-sensitive decision making processes. Additional information not given.</p> <p>The Unsatisfactory rating of "2" is equivalent to a "1" score applying the gender marker scale.</p>	Unsatisfactory= 2

	YES/NO	Comments/Implications for the evaluation design	Section Rating:
TOTAL SCORE: 64 AVERAGE SCORE: 4.9		The overall quality of project design is Satisfactory	

5.3 Nature of External Context

(Rating: **Favourable**)

62. The project was not affected by political instability, internal strife or natural disasters. During the project period, Cuba was hit by two hurricanes that brought heavy rains, flooding and strong winds. However, this did not impact the project’s implementation and affected farmers were reported to have quickly recovered from the damages.

63. Project delivery and efficiency were constrained by slow international procurement and cumbersome currency exchange processes that were outside it’s control. The project’s administrative closure was delayed by almost two years as a result of the COVID-19 pandemic and extended quarantine measures; however, this came after the finalization of project activities and did not affect performance.

64. Livelihood benefits from the commercialization of agricultural products (Outcome 3) were limited by the isolation of communities, the lack of cold transport or storage facilities, and marketing chains that were slow and did not recognize quality or origin.¹⁹ These constraints could have been anticipated and given closer attention at the design or inception stage.²⁰

65. Changes in economic policies were introduced during the project’s implementation that allowed farmers to privately sell some products and surpluses from contracted crops. These changes were considered to improve conditions for achieving the third expected outcome.²¹

5.4 Effectiveness

(Overall rating: **Moderately Satisfactory**)

5.4.1 Availability of Outputs

(Rating: **Satisfactory**)

66. The Final Project Report states that all of the nine outputs contained in the approved Results Framework had been completed by the end of the project. The Report’s summary of output achievement is presented in the table below (Table 7).

*Table 7. Availability of Outputs*²²

¹⁹ 4158 COBARB Cuba Final Report

²⁰ An assessment of commercialization practices and opportunities was conducted during project implementation.

²¹ 2019 Project Implementation Review (PIR) Report.

²² As reported in the 2019 Project Implementation Review (PIR) Report and COBARB Final Report

Outputs	Reported Level of Achievement	Comments
Output 1.1: Assessment of the existing agrobiodiversity and its role and use in protected areas	Completed	The inventory of agricultural biodiversity was completed in 78 farms in Sierra del Rosario and 93 in Cuchillas del Toa. Maps with the distribution of diversity were produced. A total number of 732 species have been described, this represents an increase compared to previous studies in the same area where 555 species had been described.
Output 1.2: Increased use and conservation of traditional varieties and wild species	Completed	Some traditional varieties of interest to farmers have been multiplied on municipal farms and through seed banks. A recently registered bean variety was distributed to the National Program on Urban, Sub-urban and Family Agriculture led by INIFAT
Output 1.3: Local seed systems are maintained and planting material of traditional varieties are distributed to farmers in project Reserves	Completed	Local governments and reserve managers have been trained in organizing diversity fairs in both reserves. Eleven fairs were organized all together for the exchange of material between farmers, and farmers from one reserve visited and exchanged material with farmers of the other reserve. 33 community seed banks were also established at farm level.
Output 2.1: Agrobiodiversity management actions are integrated and applied in the Management Plans of the Cuban MaB Reserves system	Completed	Agrobiodiversity was included for the first time in the Strategic Plan of the National System of Protected Areas of Cuba (SNAP) 2015- 2020 as part of a specific program. The main objective of the program is to conserve the traditional and native genetic resources that are part of the country's heritage, associated with the Biosphere Reserves.
Output 2.2: National policy-makers and provincial and local officials make informed decisions regarding conservation and sustainable use of agrobiodiversity to improve the sustainability of the National System of Protected Areas (SNAP)	Completed	A national platform involving different ministries (MINAG, CITMA, MINTUR) was established to work on a value addition strategy for the protected areas that includes the conservation and use of agrobiodiversity <i>(FPA: Partially Completed based on available documentation)</i>
Output 2.3: Government Institutions put in place capacity building programme	Completed	59 workshops were organized, and 1470 actors trained in various topics related to the conservation and use of agrobiodiversity. Training material has been produced and distributed to the reserves.
Output 2.4: Information on agrobiodiversity conservation in project MaB Reserves is made available to the global MaB network coordinated by UNESCO	Completed	Project activities and major results were shared to a wider community, including UNESCO, through the release of 6-monthly bulletins.
Output 3.1: Identify and strengthen income generation and other benefits from agrobiodiversity management	<i>(FPA: Partially Completed based on available documentation)</i>	This output entailed the creation of new markets that sell directly products from the reserves, creation of mini-industries to process fresh fruits and tourist circuits involving farmers have been created and have created opportunities to farmers to increase their income.

Outputs	Reported Level of Achievement	Comments
Output 3.2: Methodologies and tools for national participatory certification schemes that support sustainable agrobiodiversity management practices and products	Completed	For the first time in Cuba the Participatory Guarantee System was introduced and farmers have voluntarily signed up to follow the System and receive a certification similar to the organic one.
Reconstructed Output 3.3: A strategy for community benefit-sharing and commercialising agrobiodiversity products to urban consumers and the hotel, tourism and gastronomy sectors	Completed	Reconstructed Output 3.3 builds on “ <i>identify income generation and other benefits</i> ” (Output 3.1) by targeting potential commercialization opportunities and marketing outlets.
Reconstructed Output 3.4: Agreements are reached with community producers to supply agro-biodiverse products to hotel, school and health care facilities, tourism and gastronomy sectors	Completed	<p>A market study was conducted during implementation that offered an assessment of the current situation yet lacked the strategic vision and approach that were needed to advance towards Output 3.1 and its associated Outcome.</p> <p>Reconstructed Output 3.4 builds on “<i>strengthen income generation and other benefits</i>” (Output 3.1) by providing greater specificity to the expected products.</p> <p>During project implementation, agreements were reached to supply agricultural products to some food outlets/juice stands adjacent to the Reserves. However, such initiatives appear to have been limited in both scale and scope, and should have received greater attention (and specificity) within the Results Framework.</p>

67. The technical quality and comprehensiveness of various outputs are highlighted by the project reports. This perception is shared by Bioersity International’s ex-Project Coordinator and the UNEP Task Manager, particularly with relation to the first and second project outcomes. The inventories and fieldwork that were done in support of increased agrobiodiversity (Outcome 1) appear to have been conducted with scientific rigor and methodological consistency. Agrobiodiversity inventories were made in 170 farms under Output 1.1, raising the number of registered wild and cultivated species to 732 (above the pre-project baseline of 555). However, the reports do not measure an *increase* of agricultural biodiversity within the Reserves (which is what the outcome was about).

68. Under Output 1.2 seeds of selected traditional varieties were multiplied at INIFAT’s municipal seed farms for distribution to urban and suburban agriculture initiatives. This was an important step towards linking agrobiodiversity to national food security and generating demand outside of the Reserves. INIFAT reintroduced the cultivation of indigenous species such as red guava (*Psidium guajava*), cashew (*Anacardium occidentale*), orange (*Citrus sinense*), soursop (*Annona muricata*) and seagrape (*Coccoloba uvifera*). Seedlings were given to farmers to promote the cultivation of neo-tropical fruit species including abiu (*Pouteria caimito*), acerola (*Malpighia emarginata*), rollinia (*Rollinia mucosa*) and cas (*Psidium friedrichsthalianum*). Other tropical species were disseminated such as tamarind (*Tamarindus indica*), aromatic cassia (*Cinnamomum aromaticum*) and neem (*Azadirachta indica*). According to project reports, 38 crop species

(perennial and short cycle) were distributed to more than 50 households. The rates of adoption, survival or propagation of these species were not documented.

69. The Final Report highlights the development of a methodology for measuring biodiversity levels in and around farms, based on mechanisms used by the EU to certify biodiversity-friendly farms. Initially, the project intended to apply the Nature Matrix methodology that integrates land use, biodiversity and food security, but this proved to be unfeasible due to the range of biodiversity and farm heterogeneity within the Reserve's core and buffer zones. A more accessible approach was introduced that allows farmers to conduct self-assessments of biodiversity compatibility (applying a scale from 0 to 100) based on soil and water quality, and the presence of wild species. This methodology is reported to have influenced the guidelines of the Participatory Guarantee System and Collective Trademark mechanisms that were developed.

70. The outputs of the second project component were critical in shaping enabling policies for agrobiodiversity use and conservation. An important benchmark is the inclusion of agrobiodiversity in the 2015-2020 Strategic Plan of the National System of Protected Areas of Cuba (SNAP), under a programme that aimed to conserve traditional and native genetic resources within Biosphere Reserves. Agrobiodiversity conservation and sustainable use were incorporated to the 2016-2020 Management Plans of the Sierra del Rosario and Cuchillas del Toa MAB Reserves. Although the reporting timeline prevents a reliable confirmation of Output 1.3. (informed decisions on agrobiodiversity conservation at national, provincial and local policy levels) beyond the project period, the inter-ministerial platform that was created under Output 2.2 set a precedent that could have broader policy repercussions if continued. Knowledge dissemination was supported by UNESCO, the IBEROMAB network, multi-media campaigns, and the publication of a monograph of project findings²³ by Earthscan (Routledge).

71. Output 2.3 was fundamental by enabling a consistent schedule of workshops and scientific-technical exchanges that served capacity building purposes and offered access to external expertise. Much of project's capacity building efforts was focused on topics related to the first component and were directed at government institutions. The Final Report notes that almost 1,500 persons received training on agrobiodiversity conservation and use, and that a training curriculum was designed for the Reserves; it is likely that a share of the trainees came from farming communities within the Reserve. The gender dimension is not explicit in the project's design, although women participated in most activities. Specific gender-inclusive initiatives were centred on a fruit juice microenterprise in one community and the publication of a traditional recipe cookbook.

72. Output 3.1 seems to have been the most challenging to deliver. As noted in the Final Report and (one of two) interviews, the commercialization of agricultural products from the Reserves - a key incentive of farmer cooperation with the project's research and conservation activities - did take place on a modest scale; a home-based fruit juice enterprise was started in one of the Reserves. Agricultural products and fruit juices were sold at two outlets adjacent to the Reserves that largely catered to tourists, and at other juice stands in the vicinity. The project organized an agricultural biodiversity fair in Habana that brought farmers and products from the MAB Reserves to the capital for the first time.

73. However, progress towards Output 3.1 (and its associated Outcome) was affected by geographic isolation, limited entrepreneurial experience or skills, the lack of refrigeration or transport for fresh products, and a slow-moving commercialization chain that did not recognize product quality or place of origin.²⁴ In some cases, produce did not arrive in good condition to their destination. Efforts were made to reach larger markets – there were meetings with hotel managers, and corporate support was sought for *Mercados Naturales* in urban areas – but these

²³ Family Farms, Food Sovereignty, and the Conservation of Agrobiodiversity In Cuba

²⁴ These are mentioned in the 4th Project Steering Committee meeting report and Final Project Report,

initiatives do not appear to have reached fruition.

74. Data on agricultural outputs, demand, sales or economic impact do not seem to have been documented. Nor is there mention of benefit-sharing arrangements, which were a significant feature of the third component. Although a market assessment study was implemented during the project’s implementation, earlier feasibility studies should have been conducted at the design or inception phase to improve the project’s preparedness for delivering these outputs – or alternatively, to adjust targets and expectations.

75. Given the intervening factors, it is likely that Output 3.1 was only partially delivered (although a definitive statement cannot be made in the absence of stakeholder interviews). The most important contribution of the third component is likely to have been the creation of a Participatory Guarantee System (Output 3.2), representing Cuba’s first certification scheme for organic agricultural products. This was the result of an extensive process that included a landmark conference in 2015 on certification models that led to exchanges and the sharing of international experiences; a study tour to visit agro-ecological producers in Chile was held the same year. A PGS procedures and regulations manual was developed and, towards the project’s end, was in the process of being applied within the Reserves. However, there is no documented information regarding the extent of its application, the market response or the benefits that were derived.

5.4.2 Achievement of Project Outcomes

(Rating: **Moderately Satisfactory**)

76. All outcomes were reported as having been completed by the 2019 PIR and Final Project Report:

Table 8. Achievement of Project Outcomes

Outcome	End of Project Target	Reported Level of Achievement	Reported Justification of Rating
Outcome 1: Increased agricultural biodiversity in the buffer and transition zones of the 2 project MAB Reserves.	Increased number of species and varieties of global importance by 20% in project MAB reserves family farms A set of indicators identified to monitor agricultural biodiversity distribution, role and uses are in place and available for local and national stakeholders	Complete <i>(FPA Rating: Mostly Completed)</i>	70 farmers from the two reserves received 50 different neo-tropical fruit species and annual crops that are typical of the area Agrobiodiversity registries which collect information on agricultural biodiversity and its’ use and distribution have been created at community level and are linked to the community seed banks
Outcome 2: Improved management of Cuban Man and Biosphere (MaB) Reserve system through enhanced leadership and decision-making capacity of all stakeholders.	“Species, Habitats, Ecosystems Programme” of the Management and Action Plans of project MAB Reserves revised to include agricultural biodiversity	Complete <i>(FPA Rating: Partially Completed based on documented cases of enhanced leadership and decision-making, or of stakeholder involvement in MAB Reserve</i>	Legal framework related to ABD conservations and use which includes 6 laws, 12 law decrees, 11 decrees, 25 resolutions, 3 instructions, 3 circulars and 5 technical norms has been studied and analyzed. The PMU has made important efforts to integrate ABD into project MaB reserve management

Outcome	End of Project Target	Reported Level of Achievement	Reported Justification of Rating
	<p>Stakeholders (family farms, agro and ecotourism, cultural organizations) are included in gender sensitive decision making processes and regularly attend management planning meetings</p> <p>At least 4 agricultural practices known to improve sustainability (i.e. ecoagriculture approaches, mulching, inter-cropping, etc.) have been tested by 40% of the farmers in the project areas and are adopted by at least 20% of farmers in at least 1 project reserve</p>	<p><i>management decisions.</i></p> <p>Complete</p> <p><i>(FPA Rating: Partially Completed based on documented cases of stakeholder participation in management planning, outside of project activities.</i></p> <p>Complete</p>	<p>plans and encourage environment-friendly farming practices in and around reserves. Such efforts have been operationalized in the Strategic Plan of the National System for Protected Areas (2015-2020). Also after the end of the project INIFAT staff will be consulted in designing and writing the new.</p> <p>The national working group with core mandate for development of policies and strategies that promote the mainstreaming of local biodiversity into project reserves Management Plans is in place.</p> <p>The reserves have incorporated ABD in management plans and the National Programme for Urban, Suburban and Family Agriculture is mainstreaming ABD to urban, sub-urban and family farms.</p> <p>Practical manuals on good agricultural practices, which include minimum tillage, management of invasive species, the production and use of organic fertilizers, the use of natural pesticides, the use of cover crops and the of live and dead barriers have been prepared and widely distributed through the National Association of Small Farmers (ANAP). In 55% of the farms involved in the project these practices have been adopted.</p>
<p>Outcome 3. Improved livelihoods of communities living in and around the project MaB</p>	<p>Income is increased by 10% in 20% of project households in the project MAB Reserves through the sustainable use</p>	<p>Complete</p> <p><i>FPA Rating: Partially Completed.</i></p>	<p>The PMU, in collaboration with an expert from the University of Santiago de Chile, carried out an analysis of the potential of</p>

Outcome	End of Project Target	Reported Level of Achievement	Reported Justification of Rating
<p>Reserves through benefit- sharing mechanisms that support the sustainable use of agrobiodiversity</p>	<p>of traditional agricultural biodiversity</p> <p>Marketing of food produced in project MAB reserve is increased by 10%</p>	<p><i>Quantified data on end-of-project income increases (in relation to a baseline), or the volume and value of marketed food products, were not found during the desk review. It is not clear if this is due to lack of reporting or that they have not been measured</i></p>	<p>commercialization and income generation of the main agrobiodiversity products in the project reserves. In the commercialization analysis, PMU identified possible business ideas (short, medium to long term) to support the community-based commercial activities</p> <p>A proposal to insert some of the farms in Sierra del Rosario in an eco-tourism tour package was presented by INIFAT to the Cuban Export and marketing of products and services of Agricultural Science and Technology (CATEC). Two agro-ecological itineraries have been designed by two consultants in consultation with local communities. These represent an opportunity for farmers to sell their fresh products directly to tourists or hotels.</p> <p>The project coordinated marketing arrangements in Guantanamo between Mercado Agropecuario Especializado and the cooperative Lino Alvarez for the sale of ABD products coming from the community Las Munciones. The farmers who participated increased their annual income by 14%.</p> <p>Agricultural biodiversity fair was organized in the capital city bringing, for the first time, farmers and their products from the reserves to Havana. Farmers were able to sell all their produce directly to clients and learnt how to organize such events which represent an</p>

Outcome	End of Project Target	Reported Level of Achievement	Reported Justification of Rating
			important additional source of income

Source: 4158 COBARB – 2019 Project Implementation Report (Final)

77. Although the project clearly made significant advances towards Outcome 1, as described in some of the technical reports, the available data does not shed light on the extent to which some of the end-of-project target indicators were ultimately met (or surpassed). The Final Report mentions that 50 crop and fruit varieties, including under-utilized species, were distributed to 70 farmers. The creation of seed banks and promotional fairs are likely to have contributed to this outcome. However, there is little data on adoption/survival rates, yields, or the integration of exotic species within traditional *canuco* farming systems.²⁵ Did the distribution of crop and fruit species to 70 farmers²⁶ increase the number of species and varieties of *global importance* by 20%? A methodology for self-assessments of on-farm biodiversity was validated and tested, yet is not clear to what extent the methodology has been applied beyond its trial phase, or influenced land use and farming practices.

78. In this respect, there appeared to be an information gap between several outputs that were reported as completed, and the extent to which they met end-of-project targets. It is likely that additional baseline data was needed to measure progress and final results against targets, as well as arrangements for tracking selected indicators²⁷.

79. The second project outcome was reported to have been achieved with the inclusion of agro-biodiversity conservation in CNAP’s 2015-2020 Strategic Plan and the (updated) Management Plans for the Sierra del Rosario and Cuchillas del Toa MAB Reserves.²⁸ According to project reports, “...government institutions and reserve communities (farmers and other actors) worked together to identify support needs and refine these documents based on the management plans. In this way, local structures and organizations in need of training on agricultural biodiversity conservation were identified”.²⁹ The project’s capacity development events, training curricula and inter-ministerial consultations were likely to have contributed significantly towards the second outcome. Although the consideration of agrobiodiversity in the plans or activities of relevant ministries or departments (outside of CNAP and INIFAT) is not documented, the end-of-project targets for the second outcome were reported to have been reached. Nor are documented examples given of farmer or community participation in MaB Reserve management decision-making processes (outside of project activities), although this could be happening. Without verification on the ground, it is not possible to establish how the inclusion of agrobiodiversity within MaB Management Plans are reflected in better management decisions or resource allocations. Again, there may be undocumented examples. Based on data that is available, it is likely that the second outcome was partially reached.

80. As noted, the third project component was innovative for the Cuban context and therefore carried greater risk. In retrospect, expectations were unrealistic. It was ambitious in its design and set the bar highly by aiming to improve the “...sustainable marketing of the products of rich agricultural biodiversity production systems... through the development of marketing programs for

²⁵ The 2019 PIR states that 55% of all farms involved in the project had adopted “good agricultural management practices.” These included training on minimum tillage, management of invasive species, use of organic fertilizers and natural pesticides, cover crops and live barriers. Some of the technical LoA reports include data on trial yields of different crops.

²⁶ From an estimated population of 30,000 within the core project areas (source: Project Identification Form/PIF: Agricultural biodiversity conservation and Man and Biosphere Reserves in Cuba: Bridging managed and natural landscapes)

²⁷ Lack of baseline data on which to measure final results in relation to targets and indicators.

²⁸ Reporting 2021 Innovation #1250: Research Program on Water, Land and Ecosystem, CGIAR (2021)

²⁹ 2019 PIR: Knowledge Activities and Products

certified and non-certified agricultural biodiversity products in a nationally recognized market chain. Conditions will be put in place to promote markets which emphasize the production of traditional and indigenous crop varieties with diverse genetic base³⁰.

81. In retrospect, these expectations may have been unrealistic given Cuba's context and allocated project resources. As noted by the Final Report, "...the current marketing and trading systems in Cuba do not allow for quality recognition of agricultural products. All products are collected on farm by the state cooperatives and there is no mechanism to trace their origin once they reach the markets or enter the state distribution system."³¹ Although the project did develop the Participatory Guarantee System, this was a new development that does not appear to have generated immediate impacts. Other constraints included geographic isolation, low levels of entrepreneurial capacity, and the lack of cold storage or transport to move fresh products from the Reserves. However, the project budget did not provide for a cold facility or refrigerated truck. An in-depth feasibility study at the design or PPG stage could have provided greater insight and direction to the marketing, commercialization and benefit-sharing initiatives that were included in this component.

82. Project reporting on the third outcome does not offer evidence-based data on livelihood improvements, higher income, or increased marketing or sales of food produced in the Reserves. As noted earlier, tracking some of these indicators would require post-project surveys and field monitoring outside the scope of the project budget. However, the interviews suggest that the project did not have a measurable impact on community livelihoods or income due to the aforementioned constraints and low levels of community participation in marketing and commercialization initiatives.

83. Considering these factors, it is probable that the third outcome was partially – and not fully - achieved, although additional data and stakeholder input are needed to confirm this. If so, the progress achieved towards third outcome would have fallen below local expectations and could affect the willingness of communities to participate in future conservation initiatives.³²

5.4.3 Likelihood of Impact

(Rating: **Moderately Unlikely**)

84. The likelihood of impact is difficult to assess in the absence of site visits or stakeholder feedback. As a result, the analysis is highly subjective and the findings are open to discussion. The limitations are unfortunate, as the time lapsed since the project's closure in 2019 offered an opportunity to assess *ex-post* impact and sustainability.

85. There may have been some impact at the community level from the new farming practices that were adopted by farmers, i.e. agroforestry, organic agriculture, and introduction of new crops and fruit varieties. Even if they did not reach a critical mass of people, there is a moderate likelihood of local impact in terms of food security and the extent to which they were marketed (if at all once COVID 19 set in). There is a moderate likelihood of impact in enhanced biodiversity knowledge and conservation approaches, both within Cuba and across the MAB programme from the registration and research of new plant species from within the Reserves. Increased agrobiodiversity on family farms within MAB Reserves carries potential impacts in support of biodiversity conservation, better use of ecosystem services and food security. However, final results or impacts are not documented in relation to several end-of-project targets and their indicators. For example, it is not clear if the number of species and varieties of global importance actually increased by 20% or more, when only 70 families were reported to have received crop and fruit

³⁰ Agricultural biodiversity conservation and Man and Biosphere Reserves in Cuba: Bridging managed and natural landscapes - Project Document, pg. 10.

³¹ 4158 COBARB Cuba Final Report, pg. 7.

³² This cannot be confirmed due to the lack of access to local stakeholders.

varieties (including staples) from the project. Nor is it clear to what extent agrobiodiversity assessments are being conducted by farmers, and if this had effect on land use, agricultural practices or resource management. Cases of enhanced MAB Reserve management with direct stakeholder involvement in decision-making are not documented. The inclusion of agrobiodiversity in the plans and budgets of relevant public institutions, outside of the two MAB Reserves, is not evident.

86. The isolation and macroeconomic impacts that followed the COVID-19 pandemic have had an effect on capacity of national institutions (INIFAT, CNAP, ACTAF, Pronaturaleza) to provide conduct regular field visits, provide field guidance, sustain seed banks or assist marketing initiatives beyond the project term. This could undermine the consolidation of results and potential for achieving lasting impact.

87. The project has had policy impact through the incorporation of agrobiodiversity conservation and sustainable use in the 2015-2020 Strategic Plan of Cuba's National Center for Protected Areas (CNAP), and within the Management Plans of both MAB Reserves. However, a credible assessment of impact would need to consider the extent to which agrobiodiversity components were budgeted and implemented, and the effect they have had on agrobiodiversity management across the national Protected Area system. Again, it is likely that the implementation of agrobiodiversity plans on a wider scale was limited by COVID-19 and ensuing macroeconomic conditions.³³

88. Improvements to rural livelihoods and income under the third outcome were reported but do not seem to have been documented via surveys or other instruments. The likelihood of impact appears to be low: The challenges of commercializing agricultural produce from the MAB Reserves were acknowledged in project reports, and are unlikely to have been mitigated by the Participatory Guarantee System that was introduced towards the end of the project. Livelihood and income improvements have not been documented or quantified, yet are unlikely to have been substantial given the challenges faced in creating product supply chains, and the modest scale of community participation these initiatives. Potential impacts were further undermined by the COVID-19 pandemic and quarantine measures that halted the tourism sector and had broad economic repercussions. The steep reduction of tourism to the Reserves in probably lowered demand for the high-quality organic produce that was being offered locally.

5.4. Financial Management

(Rating: Satisfactory)

89. A total project budget of USD 4,148,208 was approved that consisted of a GEF grant of USD 1,368,182.00 and co-financing commitments from international and national partners (described under Section 3.6). Approximately 57% of the total budget was allocated to the three technical components and their expected outcomes. This is low ratio that may have been influenced by high overhead costs due to the geographic isolation of project sites.

90. Co-financing commitments had been met by 2014 (the second year of implementation) in spite of cutbacks of the CGIAR Research Program (CRP) contribution for 2015 -2016.³⁴ Additional resources above those committed at time of approval were subsequently contributed by the same partners:

- Bioversity International: USD 153,918 (cash)

³³ At an early stage of discussion on the proposed Final Evaluation of this project, the problems of securing transport and petrol to reach the Reserves, or obtaining food once inside, were raised by the government representative as reasons to avoid field travel.

³⁴ Financial Statements 2015 for the year ended 31 December 2015 - Auditor's Report (Bioversity International, 2015)

- INIFAT: USD 1,102,320.00 (USD 359,496 cash + USD 742,823 in-kind)
- INIFAT- ITPGRFA Project: USD 199,710 (cash)
- Diversity and Development: USD 110,000 (in-kind)
- UNESCO: USD 23,000 (in-kind)
- Pro-Naturaleza: USD 54,379 (cash)

91. The project experienced low expenditure levels during much of its initial implementation period³⁵, which led to the approval of a one year, no-cost extension. By the end of the project's extension in 2019, overall financial delivery had reached highly satisfactory levels according to reported expenditures: According to the final cumulative expenditure report of April 2019, 97.3% of the GEF grant had been spent (USD 1,332,141.00 against USD 1,368,182.00) with an unspent balance of only USD 36,041;³⁶ this was recorded by budget line and not by component or output. The project received 16 cash advances from UNEP between February 2013 and January 2019. There were delays in payments and the approval of budget revisions during the initial project period that were attributed to the change of UNEP's financial system.³⁷

92. Financial reporting was conducted in accordance with UNEP guidelines. Quarterly expenditure reports were required from the project to approve cash advances. Annual consolidated co-financing reports were prepared by budget line; these reports indicate that co-financing commitments were ultimately met and, in some cases, surpassed (combining cash and in-kind contributions). There were reported delays in payments and in the approval of budget revisions during the initial years of project implementation, that were attributed to changes in UNEP's financial system.

93. In spite of the difficulties faced in raising some of the co-financing contributions, project finances were well managed. Annual external audits were contracted by Bioversity International with positive findings. The 2015 audit conducted by Price Waterhouse concluded that "...Despite the challenges posed by several unexpected cuts in CRP allocations and a difficult bilateral resource mobilization environment, the Bioversity team has implemented effective mitigating measures and continue to achieve great results in delivering scientific evidence, management practices and policy options to use and safeguard agricultural biodiversity to attain sustainable global food and nutrition security."³⁸ Indeed, the project's ability to sustain activities within the budget over its extension period suggests effective management.

94. Critical observations regarding allocations to budget lines were not found in the documentation or raised during interviews. The project had annual budget revisions that enabled adjustments between budget lines and facilitated adaptive management. In retrospect, an allocation to purchase a cold unit and refrigerated truck (even a used model) could have made a significant difference in the effectiveness of marketing initiatives under the third component.

5.5 Efficiency

(Rating: **Unsatisfactory**)

95. The project was cost-effective in its implementation arrangements. Implementation was led by a compact Project Management Unit that contracted consultants or institutions (the latter through Letters of Agreement) on an as-needed basis. The technical staff of the PMU were

³⁵ Low expenditure delivery was aggravated by slow procurement, currency exchange and banking processes that are influenced by the US economic embargo. The project was extended by two years without additional funding.

³⁶ As reported in Quarterly Expenditure Statement All47: Final Report.

³⁷ Procurement was slow administratively, largely due to the economic embargo against Cuba

³⁸ Financial Statements 2015 for the year ended 31 December 2015 - Auditor's Report (Bioversity International, 2015)

provided by INIFEM under its co-financing agreement. With the support of Bioversity, UNEP and UNESCO, cooperation opportunities with international institutions were generated and utilized.

96. The unsatisfactory rating is attributable to the slow pace of implementation that left an unspent balance at the end of the project term that was used to finance a no-cost extension into 2019. In addition to distance or access to some of the project sites, delivery was influenced by external factors outside the project's control: Procurement processes were slow due to the embargo, and currency exchange cumbersome; dollars had to be converted to euros before being exchanged to convertible Cuban pesos (CUCs). In spite of strong institutional commitment to the project, there was a high turnover of staff among the national partners³⁹. The internal reorganisation of UNEP's financial system (from IMIS to Umoja) caused delays in processing payments and approving budget revisions. Financial delivery improved over the project extension, and more than 97% of the GEF allocation had been spent by the project's end in 2019.⁴⁰ The project's closure was delayed by more than one year as a result of the COVID-19 pandemic. However, this occurred after the project activities had been and did not affect delivery or efficiency.

97. The technical implementation of activities was conducted by qualified experts, national and international. This was reflected in the implementation of the first project component in particular. However, a broader assessment of technical effectiveness or efficiency is not feasible in the absence of contact with stakeholder groups that were involved in the project components.

5.6 Monitoring and Reporting

(Rating: **Moderately Satisfactory**)

5.6.1 Monitoring Design and Budgeting

(Rating: **Highly Satisfactory**)

98. A Monitoring Plan and budget were annexed to the project document that established roles, benchmarks, timelines and cost. The Monitoring Plan was consistent with UNEP and GEF guidelines and provided considerable detail (Table 9) beyond the standard requirement. Monitoring was designated as an outcome by itself in the Results Framework. An allocation of USD 373,313 was approved for M&E that represented over 27% of the GEF contribution and 6.5% of the total budget. However, provisions for the *ex-post* impact monitoring were absent; this was attributable to GEF-UNEP financial management guidelines⁴¹ and not by design oversight.

99. Monitoring roles were clearly defined: Day-to-day monitoring was responsibility of the Project Management Unit with support from Bioversity International. Technical reports were issued by project partners and contracted institutions according to the terms of their LoAs. Some were given data collection responsibilities to help track the relevant indicators. The Project Director was responsible for informing UNEP and Bioversity of delays or difficulties faced during implementation, in order to determine corrective measures.

100. The Monitoring Plan included SMART indicators that were divided into mid-term and end-of project targets. The indicators were realistic and measurable for the most part, although several of the outcome indicators would have required tracking beyond the project term. The outcome and output indicators provided the main tool for assessing project progress and the achievement of results. Efforts were made to generate baseline data, and activities were programmed for this purpose under the first outcome. After the project's approval, the Monitoring Plan was socialized

³⁹ Including the untimely demise of the first National Project Coordinator.

⁴⁰ Based on data from Final Report A1147 (Q2)

⁴¹ Budgets must be closed within 12 months after the termination of implementation activities.

with project partners at an Inception Workshop to ensure consensus on M&E roles and responsibilities.

Table 9. Costed M&E Plan

Type of M&E activity	Responsible Parties	Budget (USD) GEF & Co-finance	Time Frame
Inception Workshop	- Project Director - Project Coordinator/Project Management Unit (PMU) - UNEP	Total \$8,100 - GEF: \$2,000 - Co-finance: \$6,100	Within 2 months of project start-up
Inception Report	- Project Director/Project Coordinator /PMU	None	1 month after project inception meeting
Measurement of project indicators (outcome, progress and performance indicators, GEF tracking tools) including baseline data collection	- Project Director - Project Coordinator/PMU - Project team - Consultants	Total \$194,846 - GEF: \$23,000 - Co-finance: \$ 171,846	- Outcome indicators: start, mid and end of project - Progress/perform. Indicators: annually
Semi-annual Progress/Operational Reports to UNEP	- Project Director ^[SEP] - Project Coordinator/PMU	None	Within 1 month of the end of reporting period i.e. on or before 31 January and 31 July
Project Steering Committee (PSC) meetings	- Project Director ^[SEP] - Project Coordinator/PMU ^[SEP] - UNEP	Total \$27,000 - GEF: \$12,200 - Co-finance: \$14,800	Once a year minimum
Reports of PSC meetings	- Project Director ^[SEP] - Project Coordinator with inputs from partners	None	Annually
Project Implementation Review (PIR) Report	- Project Director ^[SEP] - Project Coordinator/PMU - UNEP	None	Annually, part of reporting routine
Monitoring visits to field sites	- Project Director ^[SEP] - Project Coordinator - UNEP	Total \$33,255 - GEF: US\$ 16,300 - Co-finance: US\$16,955	As appropriate
Mid Term Review/Evaluation	- Project Director/Project Coordinator/PMU - Domestic & External Consultant(s) ^[SEP] - UNEP ^[SEP]	Total \$24,575 - GEF: US\$ 15,000 – Co-finance: \$9,575	At mid-point of project implementation
Terminal Evaluation	- UNEP ^[SEP] - External consultant(s)	Total \$34,471 - GEF: \$24,400 - Co-finance: \$10,071	Within 6 months of end of project implementation
Audit	- PMT ^[SEP] - Project Executing Agency	Total \$6,000 - GEF: \$2,000 -Co-finance: \$4,000	Annually
Project Final Report	- Project Director ^[SEP] - Project Coordinator/PMU	None	Within 2 months of the project completion date
Co-financing report	- Project Director ^[SEP] - Project Coordinator/PMU	None	Within 1 month of the PIR reporting period, i.e. on or before 31 July

Type of M&E activity	Responsible Parties	Budget (USD) GEF & Co-finance	Time Frame
Publication of Lessons Learnt and other project documents	- Project Director ⁴² - Project Coordinator/PMU	Total \$42,066 - GEF: \$16,300 - Co-finance: \$25,766	Annually, part of Semi-annual reports & Project Final Report
Total M&E Plan cost		\$ 373,313	

Source: Project Document

5.6.2 Monitoring of Project Implementation

(Rating: **Unsatisfactory**)

101. The rating is attributed to the failure of national co-executing Ministries to organize the Terminal Project Evaluation, despite successive requests by UNEP over an 18-month period. In the absence of feedback from the Cuban government, UNEP made the decision to schedule a Final Performance Assessment (FPA), a scaled-down alternative that is used when internal strife, natural disasters or other disruptions prevent in-country country missions and interviews.

102. The FPA provided an option to the terminal evaluation requirement and avoided a potential non-compliance issue that might have affected future GEF funding for Cuba. However, the it has relied almost exclusively on the desk review of project reports and other documents, without contact with national stakeholders⁴² or site visits. A major setback is that Cuban participants were not given the opportunity to share their views on project performance or impact. As a result, the FPA as conducted lacks the depth and scope of a formal terminal evaluation.

102. The project's monitoring component was not covered by the annual Project Implementation Review (PIR) reports, and received little attention in the semi-annual progress reports. However, other documents and the two interviews that were conducted suggest that monitoring was conducted consistently by Bioversity Intl. and executing partners. Monitoring focussed both on the project's implementation and Results Framework, and on the scientific or technical monitoring of activities under the first project component. The UNEP Task Manager visited the project on two occasions and commented on the annual PIR reports.

103. In the project document, participatory monitoring was envisioned to include farmers, protected area managers, extension services and market or certification agents. The extent to which this occurred is not documented, although there was local participation in the field monitoring of farming and conservation-related activities. A method for on-farm biodiversity and land use assessment was disseminated and tested with a group of farmers, although it is not clear if the scale of this activity or data generated fed into the monitoring of the first component.

104. However, the quality and depth of monitoring varied according to the project components. The first project outcome was more closely related to the core work of Bioversity and the main implementing institutions and were adequately monitored. However, end-of-project results in relation to their targets do not seem to have been documented in several cases. As a result, the level of achievement of expected outcomes – the second and third outcomes in particular – is not evident based on the available documentation. Some of the outcome indicators would have required tracking beyond the implementation period to reliably determine their level of achievement.

105. The Final Project Report covers the entire implementation period that ran between March 2013 and April 2019. The Final Report documents the achievement of outputs and outcomes, lessons learned and likelihood of sustainability. It is a well-documented report and has provided

⁴² Under these circumstances, interviews were only possible with the ex-project coordinator of Bioversity International and UNEP Task Manager.

key inputs for this Assessment. However, the narratives supporting the achievement of some of the outcomes seem to describe output-level results. For example, the first project outcome (increased agrobiodiversity in the Reserves) and output 1.2 (increased use and conservation of traditional and wild varieties) are not convincingly substantiated: Has the distribution of 50 fruit and staple crop varieties to 70 farmers (within an estimated population of 20,000) led to the achievement of this outcome? Similarly, the attainment of Outcome 3 (Improved community livelihoods in and around the Reserves through benefit-sharing mechanisms) does not appear to be justified by the participatory diagnosis or the outlets for the sale of fruit juices and local produce located near the Reserves. There were efforts to reach urban markets and secure commercial agreements with hotels that did not materialize. Improved farmer incomes and other indicators of this outcome do not seem to have been measured (or have not been reported). However, this may be due to reporting omissions and not reflect on actual achievement.

106. An independent Mid-Term Evaluation was held in 2017 as was foreseen in the Monitoring Plan. The MTE highlighted the progress that had been made under the first project component (Outcome 1) in documenting agro-biodiverse traditional crop varieties, fruit species and wild relatives, and recognized the project's efforts to transfer seeds, plant material and improved agricultural practices to farmers. Seeds were also given to the National Program of Urban and Suburban Agriculture. The MTE also highlighted the project's communication strategy for socializing information through different media.

107. The report noted the complexity of assessing agrobiodiversity in the Reserves. Attempts to apply the Nature Matrix methodology that linked land use with biodiversity (and applied by the EU) weren't successful due to the high levels of biodiversity and heterogeneity of farms located in MAB core and buffer zones, and a more accessible approach was developed. The development of market outlets and other commercialization ventures were constrained by limited capacities and experience.⁴³

108. The MTE recommended significant increasing seed saving and distribution of plant materials. There were also suggestions to explore institutional markets such as schools, hospitals, orphanages, and homes for the elderly, or selling medicinal plants to the Health Service. The PIR reports and final project report did not describe the Management Response or extent to which the MTE recommendations were applied, if at all.

5.6.3 Project Reporting

(Rating: **Satisfactory**)

109. The overall quality and timeliness of project reporting were satisfactory, as reflected in the half-yearly progress reports, annual PIRs and technical reports by participating institutions. In particular, the Half-Yearly Progress Reports prepared by Bioversity Intl. were comprehensive and provided insight into the implementation process. However, there seemed to be a gap in the final measurement of results against targets: The 2019 PIR and Final Project Report do not provide data on the extent to which several targets were met (or surpassed); nor is the data in the technical reports that were reviewed. However, this is more of a monitoring and evaluation issue than one of reporting.

110. Critical observations concerning the timeliness of project reports were not raised, aside from manageable delays in the translation of the original Spanish texts. There were delays in UNEP's approval of budget revisions and expenditure reports during the transition from IMIS to Umoja. However, these delays do not reflect on the quality of the reports provided.

⁴³The lack of entrepreneurial skills and business experience among farmers were identified as constraints to the creation of product commercialization platforms at the 4th Steering Committee.

5.7 Sustainability

(Rating: **Unlikely**)⁴⁴

111. The final review of a project that finished activities in 2019 should provide an opportunity to assess post-project sustainability and impact. Unfortunately, the lack of stakeholder contacts or ex-post primary data prevents an informed assessment of the situation on the ground. As a result, **the analysis and rating of sustainability are highly subjective, based on the consultant's perceptions, and guided by the available secondary data.** The assessment assumes that the likelihood of sustainability was weakened by the COVID-19 pandemic and decline of Cuba's vital tourism sector, as well as by the economic difficulties that have followed.

5.7.1 Socio-political Sustainability

(Rating: **Moderately Likely**)

112. In general, Cuba has a consistent record of policy implementation, and decisions made at senior government or sector levels tend to be applied to the extent that conditions allow. Both the former Project Director and UNEP Task Manager considered that the national partner institutions had demonstrated consistent commitment and ownership towards the project, in spite of personnel turnovers and resource constraints. The inclusion of agrobiodiversity conservation and sustainable use within CNAP's 2015-2020 Strategic Plan for Protected Areas, and in the Management Plans for the Sierra del Rosario and Cuchillas del Toa Reserves, indicated a firm policy commitment on the part of CNAP. As a result, there is a moderate likelihood that agrobiodiversity conservation may be incorporated to the management plans of other Reserves.

113. However, policy implementation may be affected by budget constraints (aggravated by Cuba's macroeconomic situation), the turnover of technical staff, and the logistical challenges of reaching the more distant project sites. This could have bearing on the continuity of seed banks (and seed and plant distribution), on-farm agrobiodiversity assessments, or the adoption of sustainable farming practices. It is not clear to what extent the management of these initiatives were transferred to community stakeholders at the end of the project. The documentation does not indicate if adequate local capacities were in place to sustain initiatives beyond the project's termination; or if communities were involved in the formulation and oversight of MAB Reserve management plans. Capacity development efforts are likely to continue, albeit on a smaller scale, through continued research cooperation between Cuban institutions and Bioversity International, although this may focus on other Reserves or Protected Areas. A national training curriculum was designed by the project, but its present status or level of application is not known.

114. The cultivation of new fruit and crop species that were introduced by the project is likely to be sustained by farmers, to the extent that they improve food security. However, the commercialization of agricultural products and fruit juices under the third project component is likely to have lost momentum as a result of the COVID-19 pandemic and sharp decline of tourist visitation to the Reserves.

5.7.2 Financial Sustainability

(Rating: **Unlikely**)

115. Provisions for continued support by UNEP or GEF were not foreseen and were probably not viable after the project extension had lapsed and the COVID-19 pandemic was reaching Cuba. The

⁴⁴ UNEP Evaluation Office guidelines establish that the overall rating for Sustainability is equivalent to the lowest rating among the three sub-categories)

Final Report mentioned parallel donor projects that may have contributed indirectly to the consolidation of project results.⁴⁵

116. There are provisions for continued cooperation by Bioersity International with Cuban partner institutions, however the assistance is likely to be technical rather than financial. Government budgets are unlikely to enable the full continuity of seed banks, field research or farmer extension services (Outcome 1) without some external support. Similarly, budget cuts or other limitations - petrol, transport - may have affected the implementation of agrobiodiversity initiatives that were included in CNAP's 2015-2020 Strategic Plan and the Management Plans of both Reserves.

117. The economic impact of COVID-19, combined with the sharp decline of tourism (a primary source of foreign exchange), are likely to have weakened the sustainability of market outlets that were developed under the third project component. These outlets were located near the Reserves and catered largely to tourists (who stopped arriving shortly after the project's termination). It is improbable that the food and juice stands that catered to visitors were able to survive the pandemic; and if so, would be struggling under current conditions. Tourist visitation continues to be well below pre-pandemic levels. The reduced momentum would lower the livelihood and income benefits that were expected under the third outcome, affecting financial sustainability as well. The extent to which the Participatory Guarantee System has been used or had economic impact is not documented.

5.7.3 Institutional Sustainability

(Rating: **Unlikely**)

118. Further institutional presence is likely to be needed in order to consolidate seed and plant distribution networks, sustainable farming practices, and (in particular) commercialization and benefit-sharing initiatives that were foreseen under the third outcome. However, the extent to which national institutions are in a position to continue providing assistance in the Reserves without external support is low. Bioersity International has plans to continue working with some of the national partner institutions, although on a lower scale than the project and possibly in other protected areas.

119. The national partners demonstrated high levels of technical competence in their areas of expertise. They have core programmes and their institutional presence of the executing institutions (CNAP, INIFAT) is likely to continue at the project sites to some extent in spite of present difficulties. The question is to what extent they have the operational capacity to sustain or expand initiatives on the ground that require continued guidance. The lack of resources to sustain field activities, combined with the turnover of personnel,⁴⁶ are likely to weaken institutional memory or the application of capacities developed through the project. The unresponsiveness of national executing partners towards the Terminal Evaluation is in itself indicative of low institutional sustainability and possibly commitment as well.

⁴⁵ The projects were: Apoyo a la formulación y gestión de políticas públicas para la sostenibilidad alimentaria local en Cuba (financed by the European Union), Fortaleciendo la resiliencia comunitaria en dos Reservas de la Biosfera de Cuba (TIRFAA), Apoyo a una Agricultura Sostenible en Cuba (PAAS) and Introducción de nuevos métodos agrícolas para la conservación y el uso sostenible de la biodiversidad (GEF-FAO)

⁴⁶ None of the government counterparts or focal points could be contacted to organize the project's Terminal Evaluation. Petrol for transport needed to be requested months in advance, and adequate food or lodging could not be guaranteed within the Reserves.

5.8 Factors Affecting Project Performance and Cross-Cutting Issues

5.8.1 Preparation and Readiness

(Rating: **Satisfactory**)

120. The project demonstrated adequate levels of preparation and readiness, in particular with regard to the first and second components (Outcomes 1 and 2). Partner capacities were in place: Both Bioversity Intl. and the Cuban co-executing agencies – CITMA, MINAG, INIFAT, CNAP – brought technical expertise and methodological rigor to the project. The project’s first outcome built on the progress achieved through prior cooperation between Bioversity International and Cuban institutions on biodiversity research and conservation. The project was conceived at an appropriate policy juncture, at which agrobiodiversity, landscape management and traditional knowledge were receiving greater recognition in national environmental plans. The emergent policy environment improved enabling conditions for attaining the second project outcome.

121. For the first time in Cuba, work was done to understand the level of connectivity between different habitats. As mentioned, Bioversity International led the application of the Nature Index methodology, followed by the design of a more accessible approach that relied on farmer self-assessments to assess the interaction of local farming systems and biodiversity.

122. The project made efforts to be informed. Attention was given to developing comprehensive baseline data. At the time of the project’s approval approximately 50% of baseline data was available; additional data collection activities were included in the Results Framework.⁴⁷ Plans for collecting data at project sites were annexed to the project document (Appendix 5), including surveys of farming practices and inventories of wild edibles and underutilized plants.

123. There may have been less readiness for implementing the third project component, which was innovative to Cuba’s context and influenced by external factors. Generating sustainable market outlets for farmer products faced several challenges – geographic isolation and poor road access, lack of storage facilities and transport, slow marketing networks, and limited business knowledge - that weren’t fully understood until a general market assessment study was conducted during the project’s implementation. In retrospect, the complexities associated with the third component seem to have been underestimated and should have received earlier attention at the project design (or PPG) phase, for example by contracting a market feasibility study on which to develop the strategy. The inclusion of used cold storage equipment or a refrigerated truck in the project budget could have contributed significantly towards the third outcome.

124. Financing arrangements were adequate and clearly outlined in the project document’s budget. The project took appropriate measures to cope with unexpected budget cuts and initial difficulties in mobilizing co-financing resources. As recognized by the by the 2015 Audit Report,⁴⁸ the adaptive management and mitigation measures that were implemented at an early stage by Bioversity International and the PMU enabled the project to eventually surpass its co-financing targets and meet its deliverables. The project covered a one year no-cost extension with unspent funds that were carried over, ultimately achieving high delivery.

5.8.2 Quality of Project Management and Supervision

(Rating: **Moderately Satisfactory**)

125. Detailed supervision plans outlining activities and responsible entities were annexed to the project document.⁴⁹ UNEP was the designated GEF implementing agency for this project. Project

⁴⁷ On aspects such a landscape connectivity, the impact of agricultural activities on wild biodiversity genetic erosion, and community perceptions of vulnerability.

⁴⁸ Financial Statements 2015 for the year ended 31 December 2015 - Auditor’s Report (Bioversity International, 2015)

⁴⁹ Supervision arrangements are presented in Table 7 and Annex 5 of the project document.

supervision was entrusted to the UNEP Task Manager (based at the Division of Environmental Policy Implementation/DEPI) and Financial Management Officer. The following specific monitoring responsibilities were listed in the project document:

- Monitor the overall project and provide links with the GEF;
- Monitor the agreed M&E plan in accordance with the terms of agreement with GEFSEC;
- Receive half-yearly progress reports, annual PIR reports, quarterly financial reports;
- Task manager to attend and participate fully in meetings of the Steering Committee;
- Task Manager to conduct supervision missions with member(s) of the PMU to selected project sites to identify implementation problems and suggest remedies at Steering Committee meetings; and
- Engage and prepare terms of reference for independent M&E consultants to conduct the mid-term and final evaluations.⁵⁰
- Oversee the project both at regional and country levels with respect to adherence to the project proposal in terms of content and finances.
- Establish reporting guidelines for all partners in the project and ensure that they meet reporting dates and provide reports of suitable quality.
- Prepare quarterly progress reports and annual summary progress reports for UNEP, and forward substantive and quarterly financial reports, with supporting documentation as appropriate, in a timely manner to UNEP.
- Carry out a programme of regular visits to project sites to supervise activities, and pay special attention to those sites with serious implementation problems.

126. The project documentation does not assess or otherwise address UNEP's performance as the GEF implementing agency. Interviews with the ex-international Project Coordinator from Bioversity and UNEP Task Manager indicate that the responsibilities assigned were executed in a satisfactory manner. However, the supervision visits stipulated in the project document were inconsistent, as the review of annual Steering Committee reports indicate that the UNEP Task Manager physically attended the first two of six SC meetings that were held over the project's lifespan. There were few site visits – not all were visited – and UNEP seems to have had limited exposure to implementation issues on the ground. A more regular schedule of site visits might have triggered adaptive management responses some of the challenges that were faced under the third project component in particular.

127. UNEP faced challenges in executing its supervisory role – particularly on the financial side - as a non-resident UN agency without country representation. There were delays in approving expenditure reports and budget revisions during the transition between financial accounting systems. The presence of UNDP and, in particular, UNESCO country offices was important to alleviate the lack of direct presence. UNESCO's Cuba office played a key role in assisting the project application process and dissemination of project results (both in-country and to the global MaB network) through events (i.e. agrobiodiversity fairs, presentations) and informative bulletins.

5.8.3 Stakeholder Participation and Cooperation

(Rating: **Highly Satisfactory**)

128. The project generated spaces for stakeholder dialogue, networking and knowledge-sharing

⁵⁰ Project document, Table 7

that brought together relevant ministries and government agencies, the academic sector, national researchers, farmer cooperatives, NGOs and representatives from the tourism and hotel sectors. The issues that were covered included the identification and conservation of new plant varieties and species, the sustainable management of crop genetic diversity, sustainable landscape management, and quality certification of agricultural products. These events and associated capacity building activities raised the level of technical preparedness.

129. The scope of stakeholder engagement is reflected in the project's management arrangements (Figure 4), which included a Technical Advisory Committee and National Steering Committee.

130. Stakeholder participation was well organized and represented at two levels. A Project Steering Committee was comprised by the implementing and executing partners: UNEP, UNESCO, FAO, Bioversity International, CITMA, MINAG, INIFAT and CNAP (both of which co-chaired the SC). According to the project document, the PSC was responsible for taking policy decisions on the implementation of the project, providing oversight, and holding periodic reviews.

131. Annual meetings were held consistently with the additional participation of technical experts from various institutions, university professors and farmer representatives (associated with ANAP) from communities inside the Reserves. The reports of these meetings indicate that the Steering Committee did play a substantive role in providing technical guidance and supporting communications and coordination. For example, the agenda for the 3rd SC meeting (2015) included a review of the project logframe and discussions on management issues, project risks and risk management. The final PSC meeting (2018) highlighted the need of an exit strategy for the project.

132. The other vehicle for stakeholder participation was the Technical Advisory Committee. The TAC had several functions that included providing guidance on agrobiodiversity approaches at landscape scale; developing improved sustainable management practices; developing policy and regulatory frameworks; determining market and non-market benefits; and strengthening institutional frameworks. Representatives of the international partners and technical resource persons formed the basis of the TAC, which joined the Steering Committee meetings as observer.

133. Through these committees, participating institutions, scientific experts and researchers contributed substantively to the planning and implementation of the project's components. Less evident was the level of participation of farmer and community representatives who attended these meetings. They do not seem to have been part of the project Steering or Technical Advisory Committee structures, or given an explicit role in the design, implementation or oversight of the Reserve management plans.⁵¹ Farmer representatives attended Steering Committee meetings and were included in roundtable discussions. However, these discussions often tended to focus on coordination issues and technical issues that may not have been accessible to this focus group.

134. There was direct farmer participation in the implementation of field activities. The Final Report states that the project worked with farmers in defining and implementing various activities. Recognition is given to the role of farmers in maintaining crop genetic diversity and sharing traditional knowledge of plants. There were frequent farmer consultations and participation with relation to the implementation of field activities, rather than oversight, monitoring or co-management. The degree of community participation in the project was likely to have been influenced by local organizational capacities and prevailing practice.

⁵¹ On the basis of the information available.

135. Farmer participation was highest under the first project component of increased agrobiodiversity. Conversely, the scale of local participation in product marketing and commercialization activities under the third component was low (according to interviews); this may have been influenced by the limited number of market outlets that were created, low business capacities and other difficulties that are mentioned in the report.

5.8.4 Responsiveness to Human Rights and Gender Equity

(Rating: **Moderately Unsatisfactory**)

136. The project document did not address these issues, nor are they mentioned in project reports. The project's design lacked a gender strategy and did not include explicit gender-inclusive activities; the publishing of a recipe book was presented as an example of women's empowerment in the Final Project Report. However, women from both Reserves participated in project activities and were beneficiaries with their male counterparts; women led the juice processing enterprise under the third component. Although quantified data on the level of women's participation or other gender indicators weren't reported, the project approach was generally consistent with UNEP's Policy and Strategy for Gender Equality and the Environment.

5.8.5 Environmental and Social Safeguards

(Rating: **Satisfactory**)

137. The project carried few environmental or social risks, and was formulated to conserve biodiversity, promote indigenous crops and wild crop relatives, and incorporate agrobiodiversity concerns into the management of protected areas. Under the first component, improved agricultural practices that promoted organic production without agrochemical inputs were demonstrated and transferred to farmers in the Reserves. In addition to the supporting biodiversity conservation and improving crop resilience to climactic events, this approach was key to generate market niches for the commercialization of certified organic (and healthy) products under the third project component.

138. The project document ⁵² recognized the latent environmental risk of concentrating production on a specific agrobiodiversity product (encouraging monoculture); and the risk of intensive production in response to market demand, which could lead to overharvesting or soil depletion. An explicit Safeguards Plan or Strategy was not formulated for the project. However, the project's monitoring framework, combined with the dissemination of on-farm biodiversity assessment methodologies, were expected to contain these risks. However, the relatively small level of increased agricultural production and commercialization that was achieved is unlikely to have generated the conditions for environmental degradation.

139. Social safeguards were reflected in the project's efforts to include local participation in field implementation and monitoring, and in promoting farmer alliances and group-based commercialization ventures (such as the community fruit juice enterprise that was created in the *Cuchillas del Toa* Reserve). Nevertheless, there was the potential risk that the distribution of newly-generated income could widen socio-economic disparities or undermine the social cohesion of farming communities. However, the project's impact on farmer livelihoods or income was

⁵² Section 3.11 "Environmental and Social Safeguards"

insufficient to engender internal conflict or negative social repercussions (with the possible exception of unmet local expectations).

5.8.6 Country Ownership and Driven-ness

(Rating: **Moderately Satisfactory**)

140. The project benefited from high levels of country ownership during its design and implementation. One of the primary roles of Biodiversity International was to assist the national co-executing agencies (INIFAT and CNAP) in implementing the project component. The review of Project Steering Committee reports and PIRs – as well as the perceptions of interviewed (international) participants - indicated a strong commitment on the part of the Cuban co-executing agencies and participating institutions, universities, scientists and researchers. This was reflected in the government's co-financing contributions and the quality of the technical work that was performed in the field, in spite of resource constraints and high staff turnover. The National Project Coordinator and PMU were fully engaged in the project's implementation and demonstrated consistently satisfactory performance. Likewise, the PSC played a substantive advisory and oversight role that influenced the project's planning and management.

141. The project coincided with a favourable policy context. This was reflected in the consideration of agrobiodiversity, landscape management and traditional knowledge in national environmental plans; and in a partial opening to private food production and commercialization as a means of enhancing national food security. The Ministry of Agriculture was highly supportive of the project and in particular its third component, which it viewed as supporting national food security objectives and the National Program for Urban and Suburban Agriculture (led by MINAG). After approval, the project was included in Cuba's Five-Year Development Plan. Subsequently, agrobiodiversity components were incorporated both within CNAP's 2015-2020 Strategic Plan and in the revised Management Plans of both MAB Reserves.

142. Conversely, the ownership and commitment displayed during implementation were contradicted by the unresponsiveness of national executing partners towards the project's terminal evaluation, lowering an otherwise satisfactory performance.

5.8.7 Communication and Public Awareness

(Rating: **Highly Satisfactory**)

143. Communications were linked to public awareness and was central to the project strategy. The project developed a Communications Strategy for the 2015-16 period that set guidelines and approaches for communicating with different stakeholder groups – farming communities, resource users, government decision-making levels – in order to raise public awareness on the importance of agricultural biodiversity within the Reserves. The communications strategy provided national and international visibility to the project and supported the dissemination of experiences, results and lessons through different media - newsletters, videos, press releases, promotional events and publications (such as the Earthscan/Routledge series on "Issues in Agricultural

Biodiversity”). The reviewed documentation does not indicate if the Communications Strategy was renewed or extended to cover the full implementation period.

6 CONCLUSIONS

144. The following conclusions (as well as lessons and recommendations) should be taken in the context of the Final Performance Assessment. They are based on a comprehensive review of project documentation, and remote interviews with two of the project's international focal points. The findings are not supported by interviews with national stakeholders from the co-executing institutions, rural communities within MAB Reserves, or visits to the project sites. The lesson and recommendations presented below are drawn from a project that finished operations more than five years ago; hence their relevance or utility is open to question.

145. **Conclusion 1: The project broke new ground by demonstrating approaches to biodiversity conservation and protected area management that were novel to the Cuban context.** This was an innovative project that coincided with the emergence of supportive national environmental and agricultural policy frameworks. The project provided a pilot platform to implement new approaches in landscape management, agrobiodiversity research, on-farm biodiversity assessment, and sustainable commercialization of agricultural products to benefit local livelihoods. For the first time in Cuba, work was done to understand the level of connectivity between different habitats, through landscape connectivity maps and methodologies to measure the effect of farms on connectivity. These approaches were integrated under a comprehensive project strategy that was supported by over-arching capacity development and communications. This generated a set of causal pathways and linkages that improved the project's ability to address interrelated barriers and challenges.

146. **Conclusion 2: The project played a strategic role in supporting Cuba's access to global knowledge, and by generating spaces for dialogue, exchange and collaboration with recognized technical and scientific institutions. These were the main drivers of project performance, combined with the technical competence and commitment of the main partners.** Access to knowledge was stated as one of the main project purposes and was possibly its greatest contribution. The project enabled government partners, national institutions, academics and researchers to interact with recognized international expertise (starting with Bioversity Intl.) and benefit from training and exchange activities. This was reflected in the commitment and engagement that was demonstrated by national institutions, in spite of resource limitations and technical personnel turnover.

147. **Conclusion 3: The project's main contributions were to the research, inventorying and conservation of indigenous and underutilized crops, and wild crop relatives (Outcome 1). This led to an important increase in the number of registered plant species and reproduction of genetic material. At policy level, agrobiodiversity was incorporated within the national protected area strategy of CNAP and both MAB management plans (Outcome 2).** The agrobiodiversity research and conservation outputs of the first project component were successful largely due to the scientific and technical expertise of Bioversity Intl., national co-executing partners and contracted institutions (with parallel involvement by researchers, university faculty and students). Likewise, the applied research, seed reproduction and farmer extension activities that were implemented under the first component were less affected by external variables outside the project's control, in comparison with the second component (influenced by policy priorities and decision-making) or especially the third component (conditioned by geographic distance, market demand, and product supply chains). The third component was more innovative in the context of Cuba's economic system, and outside the core mandates or technical competencies of the executing agencies. As

a result, it was more risk-prone (see Lessons below) and the third project outcome was partially achieved.

148. **Conclusion 4. Impact and sustainability were likely to have been undermined by the COVID-19 pandemic that followed, and its repercussions on the Cuban economy and operational capacity of the national partners.** These externalities came into being after the project had finished activities and did not influence its performance. However, many of the project's ongoing initiatives would have required further continuity or a gradual exit strategy to ensure their transfer to, and appropriation by national stakeholders. The COVID-19 pandemic and associated quarantine measures were likely to have restricted continued activity by INIFAT, CNAP or other partner institutions in the Reserves. Likewise, post-COVID impacts on Cuba's economy are likely to have led to reductions in public sector budgets and lower institutional presence in the Reserves. The steep reduction of tourist visitation and ensuing macroeconomic hardships have probably lowered consumer demand for the quality of food products and fruit juices marketed by project. The extent to which local capacities and resources enabled the appropriation and continuity of project-supported initiatives is not documented. Nor is it clear whether a project exit strategy was applied as suggested by the Steering Committee.

149. The management response to the recommendations of the Mid-Term Evaluation or extent to which they were applied, were not included in the documentation.⁵³ It is likely that the MTE's recommendations to increase seed and plant distribution to farmers and reinforce the extension of sustainable farming practices were applied (based on the review of subsequent PIRs and progress reports).

150. **Conclusion 5: The Assessment findings indicate that the project overall performance was Moderately Satisfactory.** The following table summarizes the project's performance ratings and associated scores according to the evaluation criteria:

⁵³ In response to *Strategic Overarching Question 1* from the Terms of Reference of this Assessment.

Table 10. Summary Assessment of Project Performance

Criterion	Summary Assessment	Rating
A. Strategic Relevance	The project piloted new approaches for biodiversity management, sustainable agriculture and food security that supported emergent environmental and agricultural policy directions and addressed community livelihood needs.	HS
1. Alignment to MTS and POW	Project design supported Targets 2: Biodiversity values integrated and 11: Protected areas increased and improved of UNEP's 2014-2017 Medium-Term Strategy, under the Expected Accomplishment of "Enabling Environment."	HS
2. Alignment to UN Environment /Donor/GEF strategic priorities	Project design supported GEF Biodiversity Strategic Objective 2: Mainstreaming Biodiversity in Production Landscapes/Seascapes and Sectors, and Strategic Program 5. The project also contributed towards Biodiversity Strategic Objective 1: To catalyze the sustainability of PA systems under GEF Strategic Programme 3.	HS
3. Relevance to regional, sub-regional and national environmental priorities	There was consistency with Cuba's National Environmental Plan, 2006-2010 National Biodiversity Strategy & Action Plan (NBSAP), and agricultural food security policies, which assigned priority to the conservation and sustainable commercialization of agricultural biodiversity. Project experiences were disseminated through UNESCO/MAB's South-South cooperation programme. The third outcome supported Cuba's national urban and peri-urban farming programme, and had relevance to the Nagoya Protocol for Access and Benefit-sharing.	HS
4. Complementarity with existing interventions	The project built on the previous work of Biodiversity, GIZ and Cuban institutional partners. The project was linked to UNDP- GEF project "Strengthening the national system of Protected Areas in Cuba."	S
B. Quality of Project Design	Project components were complementary and mutually supportive, combining scientific research with farmer extension, sustainable farming practices, and livelihood benefits for communities in the Reserves. The output pathways lead to their respective outcomes and are also transversally linked. The project encouraged institutional participation and collaboration. The benefit-sharing and commercialization aspects of the third project component required earlier and more in-depth studies (and some basic equipment) to address the various challenges in a strategic and timely manner.	S
C. Nature of External Context	The project was implemented at a favourable policy context, in which agrobiodiversity conservation and sustainable commercialization had been recently included in environmental and agricultural plans. Traditional <i>canuco</i> agricultural practices and local knowledge of biodiversity were conserved by communities.	F
D. Effectiveness	Most outputs appear to have been fully delivered despite information gaps. Outcomes were partially achieved for the second and third project components. Impacts are Moderately Likely in relation to the first outcome, Moderately Unlikely in relation to the second outcome and Unlikely for the third.	MS

Criterion	Summary Assessment	Rating
<i>1. Delivery of outputs</i>	All outputs were reported as completed. The extent to which some reached their final targets is not reported. The FPA assessment considers that some were partially completed based on the information available.	S
<i>2. Achievement of direct outcomes</i>	The outcome of increased agricultural biodiversity was mostly achieved, although the scale of results in relation to their targets is not clear. Documented examples of enhanced leadership or improved management decisions with direct stakeholder involvement (outcome 2) outside of the project activities, although having included agrobiodiversity in both MAB Reserve plans and the National Strategic Plan for Protected Areas is conducive to the outcome. The third outcome of improved livelihoods through benefit-sharing was innovative to the Cuban context and faced various challenges, with limited impact.	MS
<i>3. Likelihood of impact</i>	A moderate likelihood of impact is likely from the extension of new crop and fruit varieties and farming practices, i.e agroforestry, to local farmers. Impacts resulting from the second are Moderately Unlikely and unlikely in relation to the third outcome. To a large extent, expected impacts were undermined by the COVID-19 pandemic and extended quarantine measures, the suspension of tourism, and subsequent economic difficulties that affect institutional outreach capabilities.	MU
E. Financial Management	Financial management appears to have been satisfactory and no critical issues were raised.	S
<i>1. Completeness of project financial information</i>	The reports and data were complete. The project received annual external audits.	S
<i>2. Communication between finance and project management staff</i>	Communications appear to have been consistent and fluid.	S
F. Efficiency	Implementation was slow much of the approved period and the project required an extension. Financial management and delivery were affected by complex and slow moving currency exchange and procurement requirements. The transition between UNEP's financial accounting systems caused delays in the approval of expenditure requests and disbursements.	U
G. Monitoring and Reporting	Considerable attention was given to monitoring design and budgeting. Project reporting and field monitoring were generally satisfactory despite gaps in reporting of final results against targets. The lack of response of Cuban partners to the required Terminal Evaluation was a major setback in M&E performance.	MS
<i>1. Monitoring design and budgeting</i>	Monitoring responsibilities were clearly outlined and budgeted. Indicators and targets were identified in the Results Framework. The fifth project component was devoted to monitoring.	HS
<i>2. Monitoring of project implementation</i>	Monitoring of the implementation process and of research activities were conducted by Bioversity Intl. with satisfactory depth and detail. However, final levels of achievement in relation to several output and outcome targets do not appear to have been monitored. national co-executing agencies were	U

Criterion	Summary Assessment	Rating
	unresponsive towards the mandatory Terminal Project Evaluation.	
3. <i>Project reporting</i>	Project reporting was timely and satisfactory in general. No critical issues have been raised. All reports from the project were translated from original Spanish versions, causing minor delays.	S
H. Sustainability ⁵⁴	The sustainability of project initiatives and results are likely to have been undermined by the COVID 19 pandemic that followed the project's closure, extended quarantine measures and sharp decline of tourism. These have contributed to ongoing macroeconomic difficulties that affect institutional capabilities and restrict market opportunities for products from the Reserve.	U
1. <i>Socio-political sustainability</i>	The distribution of new crop and fruit varieties, combined with the extension of sustainable farming practices, could raise levels of agrobiodiversity and local food security to the extent they are adopted. The field presence of CNAP is likely to continue albeit on a reduced scale, which may assist in consolidating project-supported initiatives. The inclusion of agrobiodiversity within the National Strategic Plan for Protected Areas could trigger similar initiatives at other sites.	ML
2. <i>Financial sustainability</i>	Financial sustainability is undermined by the difficulties of commercializing agricultural products (access, lack of refrigeration or transport, slow marketing networks) combined with the effects of COVID 19 and quarantine measure, the suspension of tourism and resulting economic impacts. Macroeconomic conditions are likely to have reduced institutional budgets and field presence.	U
3. <i>Institutional sustainability</i>	The national co-executing agencies have been unresponsive towards the evaluation. This could indicate internal resource constraints, high staff turnover and loss of institutional memory, as well as a diminishing institutional commitment.	U
I. Factors Affecting Performance	The ratings assigned to the respective performance factors indicate overall satisfactory performance.	S
1. <i>Preparation and readiness</i>	The project demonstrated adequate levels of preparation and readiness, in particular with regard to the first and second components (Outcomes 1 and 2). The third outcome required earlier and more-in depth analysis to improve strategic vision and direction. The executing institutions had technical capacities and showed satisfactory level of commitment during implementation. The project built on a cumulative process of collaboration between Bioversity Int., INIFAT and other Cuban institutions.	S
2. <i>Quality of project management and supervision</i>	UNEP's management and supervision role was adequate and guidance provided, yet field missions were intermittent and below programmed levels. Closer scrutiny might have enabled earlier adaptive management in response to the challenges of the third component.	MS
3. <i>Stakeholders participation and</i>	The project provided opportunities for collaboration between national partners and interaction with	HS

⁵⁴ The overall rating for Sustainability is the lowest rating among the three sub-categories.

Criterion	Summary Assessment	Rating
<i>cooperation</i>	recognized international institutions such as Bioersity Intl, and universities, in addition to study tours. Community stakeholders participated in the field implementation of project activities and their representatives attended Steering Committee meetings.	
<i>4. Responsiveness to human rights and gender equity</i>	These aspects were not addressed in the project’s design, although women participated in all field activities. Specific gender-inclusive were not evident beyond a fruit juice microenterprise and cookbook of traditional recipes.	MU
<i>5. Country ownership and driven-ness</i>	The project benefited from high levels of country ownership during it design and implementation. Project reports and limited interviews indicate a strong commitment on the part of the Cuban co-executing agencies and participating institutions, universities, scientists and researchers in spite of staff turnover and budget constraints. Conversely, the national executing agencies were unresponsive towards the project’s Terminal Evaluation. As a result, national stakeholders and target beneficiaries have not had the opportunity to express their views on the project’s performance.	MS
<i>6. Communication and public awareness</i>	Communications were linked to public awareness and was central to the project strategy. The project developed a Communications Strategy for the 2015-16 period that set guidelines and approaches for communicating with different stakeholder groups. Experiences, results and lessons were disseminated through different media - newsletters, videos, press releases, promotional events and publications (including the Earthscan/Routledge series “Issues in Agricultural Biodiversity”).	HS
Overall Project Rating	The combined weighted ratings for the evaluation criteria indicate Moderately Satisfactory performance.	MS

6.1 Lessons Learned

151. **Lesson 1: A key driver of the change process⁵⁵ was the access of Cuban institutions to new scientific knowledge and approaches to agrobiodiversity conservation from recognized international organizations and universities.** The project created spaces for dialogue, exchange and field collaboration with external actors that would not otherwise have been possible. This enabled the piloting of innovative approaches that supported emergent national policies for environmental conservation, food security and protected area management.

152. **Lesson 2: Another driver of change was the technical expertise and commitment of the project's institutional partners (national, international) and contracted entities that supported implementation.** The project's institutional arrangements and management approach encouraged synergies between different actors, in a manner that enhanced performance and encouraged high levels of country ownership. The participation of community-based and farming organizations was focused on planning and implementing field activities at site level, rather than general project management, governance or oversight. Local participation at Project Steering Committee meetings tended to be passive and closer to one of observer than protagonist. It is not clear to what extent local capacities for protected area planning or management were strengthened.

153. **Lesson 3: Innovation carries inherent risks. The partial achievement of project outputs or outcomes that aim to introduce new concepts or practices may not signify inadequate performance. Adaptive management is key in such situations. However, the risks associated with innovation need to be understood in advance and remedial measures built into project design (or expectations adjusted).** This lesson emerges from the marketing and commercialization initiatives that were envisioned under the third project component. Progress towards Outcome 3 was hindered by the lack of business experience and entrepreneurial skills, and by the limited capacity of the project's executing agencies to provide guidance on these aspects. Additional risks were posed by geographic isolation, the lack of cold storage or transport, and slow-moving marketing and supply chains that did not certify product quality or place of origin. The timelines that were needed to reach the third outcome were underestimated in relation to these challenges. In hindsight, better planning and preparation would have helped to better understand the risks and address uncertainties associated with the third outcome. An in-depth analysis of market feasibility and supply chains should have been conducted at the design stage (through the Project Preparation Grant/PPG that was awarded), and not commenced with a general assessment after implementation was underway and the clock was running.

Innovation often requires testing and validation in the field. Under the first component, the failure to apply the Nature Index methodology at the project sites (due to the complexity posed by high biodiversity levels and heterogeneous farm sizes) was the outcome of a field testing and validation process that did not reflect on project performance; an alternative and more accessible method of biodiversity monitoring was subsequently developed that relied on farmer self-assessment.

154. **Lesson 4: Project design processes and preparatory grants (i.e. PPGs) should also be used to conduct early research and feasibility studies that provide insight and guidance on implementing new approaches.** In hindsight, the scheduling of market feasibility studies and outreach activities at the design or inception phase (and not into the implementation process) could have influenced the approach, timelines or budgets⁵⁶ that were assigned to the third component and Output 3.1 in particular.

⁵⁵ In response to Strategic Overarching Question 3 from the Terms of Reference: *"What aspects of this intervention are identified as having been the key drivers in the change process and in what ways did their inclusion/exclusion in the project cycle influence project performance?"*

⁵⁶ The difference can be in the detail; The procurement of a used cold storage unit or refrigerated truck would have raised the effectiveness of the third component and Output 3.1 in particular.

154. **Lesson 6** **Projects such as this provide opportunities to study gender roles and their potential for biodiversity conservation and community development.** Most or all of the project's field and capacity building activities have included women's participation. However, the potential to encourage transformative change within traditional rural social structures (that support surrounding biodiversity) merit more attention to specific gender-inclusive activities or gender-disaggregated data.

154. **Lesson 7** **Project documentation, reporting and knowledge management are critical to understanding performance, issues faced and the various contributing factors. They have enabled the Final Performance Assessment in the absence of any communication with national stakeholders.** Despite the lack of institutional responsiveness or contact with national participants, project progress was well documented in general. The insights obtained from PIRs, Half-yearly Progress Reports and various technical reports have been fundamental for guiding the Final Performance Assessment.

6.2 Recommendations

155. Making meaningful recommendations for future actions requires an understanding of the present situation that was not possible with the limitations that were faced. Suggesting recommendations around a project that finished activities in 2019 is a difficult and possibly futile task. **The following recommendations are based on the assumption (and are applicable to the extent) that agrobiodiversity cooperation has resumed or is being planned in Cuban MAB Reserves or other Protected Areas:**

156. **Recommendation 1:** Manage local expectations on the basis of realistic assumptions and prior situational analysis, especially when vulnerable communities are involved.

Challenge/problem to be addressed: Although the Assessment was unable to interview targeted communities or farmers in the Reserves, project surveys suggest that local expectations were centred on improved marketing and commercialization opportunities for agricultural products. In this respect, the activities and results leading to the third project outcome provided a key incentive for farmer engagement and collaboration with the project's research and conservation activities. It is probable that local expectations were not met by the scale of commercialization and benefit-sharing that was reached, or by the (undocumented) livelihood and income benefits that may have been achieved. This could affect the trust that was built over the course of the project and discourage farmer collaboration with future conservation projects.

Priority level: Important

Type of recommendation: Important

Responsibility: Bioversity CIAT Alliance, INIFAT, CNAP

Proposed implementation time-frame: Within 12 months.

157. **Recommendation 3:** Generate baseline knowledge at the project design or inception phases to guide implementation and measure performance.

Challenge/problem to be addressed by the recommendation: Activities supporting data collection and baseline assessments were included in the project Results Framework, and fed into the design of project work plans and deliverables. As noted earlier, however, PPG funding should have provided an opportunity to conduct baseline research and feasibility studies prior to implementation, so as to gain better insight into contexts, complexities and risks associated with change processes. The *ex ante* knowledge that was gained would have informed the design of project implementation strategies and deliverables, in particular for the third project component.

Priority Level: Opportunity for Improvement

Type of Recommendation: Project level.

Responsibility: Bioversity CIAT Alliance, INIFAT, CNAP

Proposed implementation time-frame: Within 12 months.

158. **Recommendation 4:** Implementation timelines should be based on a realistic assessment of the impacts and transformative changes that are being sought.

Challenge/problem to be addressed by the recommendation: Realistic timeline assessments are particularly important for the design of food transformation and biodiversity conservation initiatives that are conditioned by seasonal or biological cycles and require longer gestation periods to manifest impact. Likewise, the development of capacities to manage product supply and value chains may require technical guidance and follow-up beyond the approved project period. The standard 4 to 5-year project cycle is often insufficient to consolidate results and generate the enabling conditions for impact; this project required an extension to deliver the planned outputs. This is an overarching issue that needs to be discussed between donors and recipient agencies, in order to explore options such as the gradual disengagement of technical support to transfer project functions, designing and budgeting exit strategies, or programming concurrent project phases across programme or funding cycles.

Priority Level: Important

Type of Recommendation: Project level.

Responsibility: Bioversity CIAT Alliance, INIFAT, CNAP

Proposed implementation time-frame: Within 12 months.

159. **Recommendation 5:** The factors that contributed to successful inter-agency collaboration should be studied and if feasible, replicated on a broader scale to support the *One UN* and *Delivering as One* corporate policies that historically have had limited success

Challenge/problem to be addressed by the recommendation: The project offered an interesting case study of institutional collaboration that appears to have been effective and merits further review. The project's institutional framework was well-conceived, comprehensive and encouraged synergies between project partners and components. This included the participation of three UN agencies – UNEP, UNESCO, FAO – that used of their comparative advantages to the project's benefit. The findings could have value for future projects contemplating inter-agency collaboration.

Priority Level: Opportunity for Improvement

Type of Recommendation: Project level.

Responsibility: UNEP Law Div. and Evaluation Office.

Proposed implementation time-frame: The study should be conducted within 12 months, if contacts and data are available.

Annex I: Terms of Reference for the Performance Assessment

PART 1: PROJECT BACKGROUND AND OVERVIEW

Project General Information

Table 1. Project summary

GEF Project ID:	4158		
Implementing Agency:	UNEP	Executing Agency:	Bioversity International
Relevant SDG(s) and indicator(s):	SDG 2 (Target 2.4 on sustainable agriculture and indicator 2.4.1 on portion of agricultural area under sustainable production; Target 2.5 on maintenance of genetic diversity and indicator 2.5.1 on Number of plant and animal genetic resources for food and agriculture secured in either medium- or long-term conservation facilities); SDG12 (Target 12.B on sustainable tourism and indicator 12.B.1 on Number of sustainable tourism strategies or policies and implemented action plans with agreed monitoring and evaluation tools); SDG15 (Target 15.9 on integration of ecosystems and biodiversity values into national and local planning and indicator 15.9.1 on progress towards national targets established in accordance with Aichi Biodiversity Target 2)		
GEF Core Indicator Targets (identify these for projects approved prior to GEF-7)	GEF4 Biodiversity Strategic Objective 1 (SO1): to catalyze sustainability of protected area (PA) systems and its Strategic Programme 3 SP3: Strengthening terrestrial PA networks. The project will also contribute to GEF4 Biodiversity Strategic Objective 2 (SO2) to mainstream biodiversity in production landscapes/seascapes and sectors and its Strategic Programme 5. SP5: Fostering markets for biodiversity goods and services.		
Sub-programme:	Healthy and Productive Ecosystems	Expected Accomplishment(s):	EA (a): The health and productivity of marine, freshwater and terrestrial ecosystems are institutionalized in education, monitoring and cross-sector and transboundary collaboration frameworks at the national and international levels. Indicator (i) Increase in the number of countries and groups of countries that improve their cross-sector and transboundary collaboration frameworks for marine and terrestrial ecosystems.
UNEP approval date:	17 January 2013	Programme of Work Output(s):	
GEF approval date:	December 2012	Project type:	FSP
GEF Operational Programme #:	BD	Focal Area(s):	Biodiversity
Project Partners	Instituto de Investigaciones Fundamentales en Agricultura Tropical (INIFAT), Cuba	GEF Strategic Priority:	BD1; BD2; SP3; SP5
Expected start date:	December 2012	Actual start date:	17 March 2013
Planned completion date:	31 May 2018	Actual operational completion date:	30 April 2019

Planned project budget at approval:	\$4,148,208	Actual total expenditures reported as of 30 June 2019:	\$1,332,141	
GEF grant allocation:	\$1,368,182	GEF grant expenditures reported as of [date]:		
Project Preparation Grant - GEF financing:	\$100,000	Project Preparation Grant - co-financing:	\$150,000	
Expected Medium-Size Project/Full-Size Project co-financing:	\$2,780,026	Secured Medium-Size Project/Full-Size Project co-financing as of 30 April 2019:	\$ 4,423,353	
Date of first disbursement:	28 February 2013	Planned date of financial closure:	October 2020	
No. of formal project revisions:	2	Date of last approved project revision:	12/04/2019	
No. of Steering Committee meetings:	6	Date of last/next Steering Committee meeting:	Last 18 January 2019:	Next:
Mid-term Review/ Evaluation (planned date):	December 2017	Mid-term Review/ Evaluation (actual date):	January to April 2017	
Terminal Evaluation (planned date):	March 2021	Terminal Evaluation (actual date):		
Coverage - Country(ies):	Cuba	Coverage - Region(s):	Latin America and the Caribbean	
Dates of previous project phases:	N/A	Status of future project phases:	N/A	
IMIS number:	4158-GFL-5060-2715-4C72	Actual expenditures entered in IMIS as of 31 December 2019*:	\$ 400,543.00	

Project rationale

1. Cuba is a center of evolution and speciation in the Antilles and is one of the most important islands for biodiversity in the world. Accounting for half the land area of the insular Caribbean biodiversity hotspot, it harbors more than half of the region's endemic plants largely within its reserves. Like in many developing countries, the biodiversity of Cuba has been declining due to the modification of natural habitats and the country is one of 11 countries in the world in the greatest need of plant biodiversity conservation.
2. Agrobiodiversity in Cuban biosphere reserves underpins rural livelihoods and is essential for many ecosystem functions; it is also an important component of cultural identity. The unique bio-cultural heritage found in Cuban reserves can be attributed to the complex, long-standing interactions between the productive activities of farm households and communities within the biosphere and its buffer zones, and the ecosystems and biological resources that comprise their livelihood assets. Understanding the management of family farms, *conucos*⁵⁷ and home gardens in Cuban Man and the Biosphere (MaB) Reserves and the environmental, socio-economic, and policy factors that play a role is crucial both for in situ agrobiodiversity conservation and natural ecosystem conservation within protected areas, and for the livelihoods of the people who live within the reserves.
3. However, positive elements of farmer community management of the interface between natural ecosystems and agricultural landscapes in biosphere reserves have not been adequately assessed and documented. Useful practices, traditional crop varieties, traditional knowledge and genetic diversity of edible and useful plants and animals have not been adequately documented and mainstreamed into national agricultural, environmental, and development policies and institutions. This gap limits the adaptive capacity and sustainability of agriculture in Cuba. The gap also leads to an undervaluation of biodiversity in protected areas and its contribution to the national development goals, especially food sovereignty, food security and incomes for rural communities. In the face of climate change impacts that include more intense hurricanes, storms, flooding and drought, conserving agrobiodiversity, including genetic resources, crop wild relatives, and mosaic landscapes is essential, for the adaptation and resilience of tropical agroecosystems. While a growing awareness exists, biosphere reserve managers and policy makers lack the knowledge and tools to systematically consider the use of agrobiodiversity as an option to improve the conservation of protected areas and to mainstream biodiversity for

⁵⁷ Conuco is a Taino word used in Caribbean Spanish to refer to a family farm consisting of small plots used to grow a variety of tropical foods including fruit trees, maize, beans, vegetables, condiments, roots and tubers; they are commonly located near secondary forests.

more sustainable agriculture. The main issue facing the MaB Reserves is how to manage both natural and bio-cultural production landscapes as part of a single conservation and management plan for the specific protected area.

4. To address these gaps, the project was to provide evidence-based strategies, plans and practices that include agrobiodiversity functions in maintaining the wild and cultivated interface, buffers and biodiversity corridors as well as resilient and productive agricultural landscapes.

5. The project selected two of the six Cuban biosphere reserves, the Sierra del Rosario (BRSR) in the Pinar del Rio Province in southwestern Cuba, and the Cuchillas del Toa (BRST) in the Guantánamo Province in northeastern Cuba. Both reserves are important reservoirs of genetic material and of many fruit and horticultural species and varieties that are currently under threat within the larger, more intensive agriculture systems elsewhere in Cuba. These two reserves were chosen for this project as they contain the largest area of agricultural landscapes, the largest number of farm families, and cover the full range of agroecosystems found in Cuba.

Project Results Framework

6. The overall goal of the project was to “conserve biodiversity within and around protected areas in ways that improve the livelihoods of rural communities and sustain ecosystem functions in and around the Man and the Biosphere (MaB) Reserves in Cuba”. The objective of the project was to “mainstream agrobiodiversity into the management of Cuban MaB Reserve system”. The project was to deliver on its goal and objective through the implementation of three components:

Mainstreaming mechanisms that integrate high levels of agrobiodiversity into MaB buffer and transition zones (Component 1);

Improved protected area management systems and capacity building (Component 2);

Improved livelihoods from increased benefit flow within protected areas (Component 3).

7. The project was meant to work closely with a range of stakeholders and beneficiaries, including farmers and communities, Non-Governmental Organizations (NGOs), universities, and government agencies across relevant sectors including environment, agriculture, education, and tourism

Table 1. Expected Outputs and Outcomes - as per the Prodoc (2012)

Development Objective:	
To contribute to the conservation of the diversity within and around protected areas in ways that improve the livelihoods of rural communities and sustain ecosystem functions in and around the MaB reserves.	
Immediate Objective: To conserve the diversity within and around protected areas through mainstreaming agricultural biodiversity into the management of the Cuban MAB Reserve System	
Expected Outputs	Expected Outcomes
Component 1: Mainstreaming mechanisms that integrate high levels of agrobiodiversity into MaB buffer and transition zones	
Output 1.1 Assessment of the existing agricultural biodiversity and its role and use in protected areas	Outcome 1 Increased agricultural biodiversity in the buffer and transition zones of the 2 project MaB Reserves
Output 1.2 Increased use of traditional varieties and wild species	
Output 1.3 Local seed systems are maintained and planting material of traditional varieties is distributed to farmers in project MaB Reserves	
Component 2. Improved protected area management systems and capacity building	
Output 2.1 Agricultural biodiversity management actions are integrated and applied in the management plans of the project MaB Reserves system	Outcome 2 Improved management of Cuban Man and Biosphere (MaB) Reserve system through enhanced leadership and decision-making capacity of all stakeholders.
Output 2.2 National policy-makers and provincial and local officials make informed decisions regarding conservation and sustainable use of agricultural biodiversity to improve the sustainability of the National System of Protected Areas	

<p>Output 2.3 Government Institutions put in place capacity building programmes</p>	
<p>Output 2.4 Information on agricultural biodiversity conservation in project MaB Reserves is made available to the global MaB network coordinated by UNESCO</p>	
<p>Component 3: Improved livelihoods from increased benefit flow within protected areas</p>	
<p>Output 3.1 Identify and strengthen income generation and other benefits from agricultural biodiversity management</p>	<p>Outcome 3 Improved livelihoods of communities living in and around the project MaB Reserves through benefit sharing mechanisms that support the sustainable use of agricultural biodiversity</p>
<p>Output 3.2 Methodologies and tools for national participatory certification schemes that support sustainable agricultural biodiversity management practices and products</p>	

Executing Arrangements

8. UNEP, as the GEF Implementing Agency for the Project was to be responsible for the overall coordination of the activities of national and any international partners; technical and scientific expertise; and enhancement of regional and international cooperation. Also, for general project supervision to ensure consistency with GEF and UNEP policies and procedures and to guide on linkages with related UNEP and GEF-funded activities. Project supervision was entrusted to the UNEP/GEF Task Manager and Fund Management Officer. UNEP was to enter into an Execution Agreement with Bioversity International as the lead Executing Agency for the provision of services to the Project.

9. Bioversity International was to be responsible for the overall execution of the Project and for providing appropriate scientific support and technical expertise as required by the Ministry of Agriculture (MINAG) and the Ministry of Science, Technology and Environment (CITMA), and project partners.

10. MINAG and CITMA were to co-execute the Project through the National Institute for Fundamental Research on Tropical Agriculture (INIFAT), in consultation with the National Center for Protected Areas (CNAP). INIFAT was to establish and host a Project Management Unit (PMU), under the direct supervision of the Director of INIFAT, which was to be in charge of implementing project activities in Cuba.

11. The PMU was to consist of the National Project Coordinator (NPC), Project Assistant and thematic consultants (on a needs basis). The PMU was to serve as the critical link between the project sites and the partner national agencies, civil society organizations, local authorities and Bioversity International to ensure that lessons learned were shared among sites and within national committees and to provide visibility of the Project at the national and international level.

12. The Project Steering Committee (PSC) was to consist of representatives of the partner institutions (and including UNEP and Bioversity International), which was to be cochaired by the Director of INIFAT and the Director CNAP. The PSC was to be responsible for taking policy decisions about the implementation of the Project as well as to evaluate the overall progress, provide strategic direction for the implementation, and to guarantee the necessary interinstitutional coordination.

13. A Technical Advisory Committee (TAC) was to be established to provide expert guidance. Selected representatives from international partners were to form the basis of the TAC.

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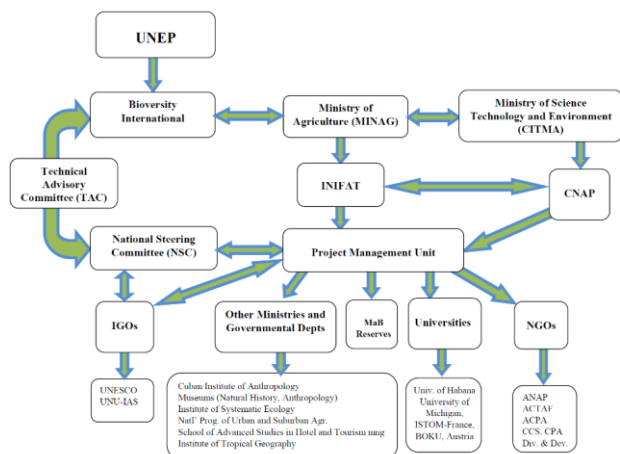


Figure 1: Project management arrangements

Project Cost and Financing

Table 2: Financing Plan Summary for the Project (US\$) – as per the Prodoc

	<i>Project Preparation</i>	<i>Project</i>	<i>Agency Fee</i>
GEF	100,000	1,368,182	146,818
Co-financing	150,000	2,780,026	
Total	n.a.	4,148,208	146,818

Table 3: Co-financing by Sources and Component (US\$) – as per the Prodoc

<i>Name of Co-financier (source)</i>	<i>Classification</i>	<i>Cash</i>	<i>In Kind</i>
Component 1		285,150	528,004
INIFAT	Nat. Gov. EA	51,303	266,191
Biodiversity	EA	173,847	191,813
UNESCO	UN Agency	0	40,000
INIFAT PGR&PB Department	University	30,000	
FAO	Multilateral Agency	30,000	30,000
Component 2		226,205	424,839
INIFAT	Nat. Gov. EA	49,590	255,996
Biodiversity	EA	103,106	128,843
UNESCO	Multilateral Agency	0	40,000
Pronaturaleza	NGO	53,509	0
INIFAT PGR&PB Department	University	20,000	0
Component 3		266,165	441,424
INIFAT	Nat. Gov. EA	35,694	174,525
Biodiversity	EA	146,962	151,899
UNESCO	Multilateral Agency	0	40,000
Pronaturaleza	NGO	53,509	0
FAO	Multilateral Agency	30,000	30,000
Diversity&Development	NGO	0	45,000
Component 4		55,117	206,996
INIFAT	Nat. Gov. EA	2,916	70,000
Biodiversity	EA	52,201	96,996

UNESCO	Multilateral Agency	0	40,000
Component 5		28,299	317,827
INIFAT	Nat. Gov. EA	5,813	115,000
Bioversity	EA	22,486	162,827
UNESCO	Multilateral Agency	0	40,000
TOTAL		860,936	1919,090

Table 4: GEF Resources Requested by Focal Area(s), Agency(ies) or Country(ies) as per the PIF

GEF Agency	Focal Area	Country Name/ Global	(in \$)			
			Project Preparation	Project	Agency Fee	Total
UNEP	BD	Cuba	100,000	1,368,182	146,818	1,615,000
Total GEF Resources			100,000	1,368,182	146,818	1,615,000

Implementation Issues

14. The project underwent a Mid-Term Review (MTR) in 2017 (completed in April 2017). The MTR concluded that the project reached several milestones towards achieving its primary objectives. Likewise, even though project sites suffered severe damage following a major hurricane (Matthew) in October 2016, it concluded that many project achievements exceeded expectations at mid-point.

15. The MTR provided several recommendations for the project across a range of different topics. These included reaching wider audiences in raising awareness beyond stakeholders and direct beneficiaries, including Universities, children schools, and particularly policymakers who do not necessarily consider AgBD. Other recommended actions included that capacity building on restoration ecology and agroecological farming practices should become crucial in the MAB reserve management plans.

PART 2. OBJECTIVE AND SCOPE OF THE PERFORMANCE ASSESSMENT

Objective of the Evaluation

16. In line with the revised UNEP Evaluation Policy (2022)⁵⁸, UNEP ascribes to the definition of evaluations set out by the United Nations Evaluation Group: *“an evaluation is an assessment, conducted as systematically and impartially as possible, of an activity, project, programme, strategy, policy, topic, theme, sector, operational area or institutional performance. It analyses the level of achievement of both expected and unexpected results by examining the results chain, processes, contextual factors and causality using appropriate criteria such as relevance, effectiveness, efficiency, impact and sustainability. An evaluation should provide credible, useful evidence-based information that enables the timely incorporation of its findings, recommendations and lessons into the decision-making processes of organizations and stakeholders.”*

17. Evaluation serves three main purposes, namely, to support: (i) evidence-based decision-making; (ii) a culture of learning as a driver for innovation and continuous improvement in the organization; and (iii) the accountability framework by constituting an important source of evidence for understanding organizational performance.

18. According to the UNEP Evaluation Manual (2023)⁵⁹, UNEP is held accountable for the quality and delivery of its work through evaluations and other performance assessments.

19. An in-depth terminal evaluation of this project in Cuba (GEF5158) was attempted in 2021 and 2022; in both instances the evaluation process was aborted on account of sub-optimal collaboration from the project partners in the country, rendering it impossible to carry out an in-depth and evidence-based assessment of project performance. An alternative way forward had to be determined, on the grounds that a standard terminal evaluation of the project could not take place without in-country support and participation.

20. Consequently, the Evaluation Office, in a third and final attempt to conduct a performance assessment of the project, is proposing a different approach to make way for a formal completion of the project cycle.

21. In lieu of the regular procedure that is normally undertaken in an independent terminal evaluation, the Evaluation Office will hire a consultant to **conduct a desk-based and primarily document-based performance assessment** of this project with the objective of:

- (a) Examining project records and providing an analysis of its delivery against the approved Results Framework i.e., project performance in delivering programmed Outputs and progress in achieving the expected Outcomes and global Objective(s) (including an assessment of the associated project milestones /indicators /targets);

⁵⁸ UNEP Evaluation Policy (revised, October 2022). <https://wedocs.unep.org/20.500.11822/41114>

⁵⁹ UNEP Evaluation Manual. 2023. <https://wedocs.unep.org/20.500.11822/42025>

- (b) Analysing supplementary data (e.g., from remote interviews, email correspondence, other) through communication with representatives from Bioversity International and UNEP who will represent the Implementing Agency and Executing Agency, respectively.
- (c) Prescribing recommended actions and/or identifying lessons of operational relevance for future project formulation and implementation, especially for planned and/or ongoing UNEP interventions in Cuba;
- (d) Preparing a Performance Assessment Report that captures the findings stemming from (a) - (c) above, to satisfy the need for learning and accountability, and to the extent feasible under the present circumstances.

22. The Evaluation Office notes that the GEF Independent Evaluation Office has made provision for a more document-based approach in difficult circumstances⁶⁰. Although the circumstances in this instance are not of an external and/or crisis nature, the UNEP Evaluation Office sees no other way of meeting its commitment to assessing the project's performance.

Key Evaluation Principles and Strategic Questions

23. **The "Why?" Question.** As this is a terminal performance assessment and a follow-up project is likely [or similar interventions are envisaged for the future], particular attention will be given to learning from the experience. Therefore, the "Why?" question should be at the front of the consultants' minds all through the evaluation exercise and is supported by the use of a theory of change approach. This means that the consultant needs to go beyond the assessment of "what" the project performance was and make an effort to provide a deeper understanding of "why" the performance was as it was. This should provide the basis for the lessons that can be drawn from the project.

24. In addition to the assessment criteria outlined in Section 10 below, the consultant will address the strategic questions listed below. These are questions of interest to UNEP and to which the project is believed to be able to make a substantive contribution: Also included are five questions that are required when reporting in the GEF Portal and these must be addressed in the **summary of the findings in the Conclusions section** of the report:

25. Strategic [overarching] questions:

Q1: To what extent were the management actions following the MTR able to improve delivery?

Q2: What aspects of the project results in Cuba can be used to influence future UNEP work on food systems transformation and/or conservation of agricultural biodiversity?

Q3: What aspects of this intervention are identified as having been the key drivers in the change process and in what ways did their inclusion/exclusion in the project cycle influence project performance?

26. Questions required for the GEF Portal:

a) Stakeholder Participation and Cooperation:

- b) What were the progress, challenges and outcomes regarding engagement of stakeholders in the project as evolved from the time of the MTR? *(This should be based on the description included in the Stakeholder Engagement Plan or equivalent documentation submitted at CEO Endorsement/Approval)*

Responsiveness to Human Rights and Gender Equality:

- What if any, were the gender-responsive measures or actual gender result areas? (This should be based on the documentation at CEO Endorsement/Approval, including gender-sensitive indicators contained in the project results framework or gender action plan or equivalent)

Environmental and Social Safeguards:

- What was the progress made in the implementation of the management measures against Environmental and Social Safeguards? *(Check PIRs for supporting documentation)*

Communication and Public Awareness:

What were the challenges and outcomes regarding the project's Knowledge Management Approach, including: knowledge and learning deliverables (e.g. website/platform development); knowledge products/events; communication strategy; lessons learned and good practice; adaptive management actions? *(This may be based on the documentation approved at CEO Endorsement/Approval)*

Evaluation Criteria

27. All evaluation criteria will be rated on a six-point scale. Sections A-I below, outline the scope of the evaluation criteria, which are grouped in nine categories: (A) Strategic Relevance; (B) Quality of Project Design; (C) Nature of External Context; (D) Effectiveness, which comprises assessments of the availability of outputs, achievement of outcomes and likelihood of impact; (E) Financial Management; (F) Efficiency; (G) Monitoring and Reporting; (H) Sustainability; and (I)

⁶⁰ GEF, Terminal Evaluation Guidelines, draft 2022 (p. 8): *In instances such as a catastrophic natural event or accident, civil strife, war, or a pandemic, where project sites are inaccessible and it may be dangerous to conduct field verifications, Agencies may prepare a terminal evaluation based on online interviews of key informants and synthesis of information from data sources such as project information reports, mid-term review and financial records.*

Factors Affecting Project Performance. The evaluation consultant can propose other evaluation criteria as deemed appropriate.

- Strategic Relevance

28. The assessment will consider *'the extent to which the activity is suited to the priorities and policies of the target group, recipient and donor'*. This will include an assessment of the project's relevance in relation to UNEP's mandate and its alignment with UNEP's policies and strategies at the time of project approval. Under strategic relevance an assessment of the complementarity of the project with other interventions addressing the needs of the same target groups will be made.

- Quality of Project Design

29. The quality of project design is assessed using an agreed template during the evaluation inception phase, ratings are attributed to identified criteria and an overall Project Design Quality rating is established. In the Performance Assessment Report, a summary of the project's strengths and weaknesses at design stage should be included, while the complete Project Design Quality template is annexed.

- Nature of External Context

30. A rating is established for the project's external operating context (considering the prevalence of conflict, natural disasters and political upheaval⁶¹). Where a project has been rated as facing either an Unfavourable or Highly Unfavourable external operating context, and/or a negative external event has occurred during project implementation, the ratings for Effectiveness, Efficiency and/or Sustainability may be increased at the discretion of the evaluation consultant and Evaluation Manager together. A justification for such an increase must be given.

- Effectiveness

- i. Availability of Outputs⁶²

31. The Consultant will assess the project's success in producing the programmed outputs and achieving milestones as per the project design document (ProDoc). Any *formal* modifications/revisions made during project implementation will be considered part of the project design. Where the project outputs are inappropriately or inaccurately stated in the ProDoc, reformulations may be necessary in the reconstruction of the TOC. In such cases a table should be provided showing the original and the reformulation of the outputs for transparency. The availability of outputs will be assessed in terms of both quantity and to the extent possible, their quality (ownership by, and usefulness to, intended beneficiaries and the timeliness of their provision). The assessment will attempt to explain the reasons behind the success or shortcomings of the project in delivering its programmed outputs.

- ii. Achievement of Project Outcomes⁶³

32. The achievement of project outcomes is assessed as performance against the project outcomes as defined in the reconstructed⁶⁴ Theory of Change. These are outcomes that are intended to be achieved by the end of the project timeframe and within the project's resource envelope. Emphasis is placed on the achievement of project outcomes that are most important for attaining intermediate states. As with outputs, a table can be used where substantive amendments to the formulation of project outcomes is necessary. The consultant shall attempt to identify evidence of attribution and/or 'credible association' between UNEP's intervention and the project outcomes realised.

- iii. Likelihood of Impact

33. Based on the articulation of long-lasting effects (Impact) in the reconstructed TOC, the consultant will assess the likelihood of the intended, positive impacts becoming a reality. Few projects are likely to have impact statements that reflect such long-term or broad-based changes. However, the Consultant should attempt to will assess the likelihood of the project to make a substantive contribution to the long-lasting changes. To the extent possible, the Consultant shall take into account whether the assumptions and drivers identified in the reconstructed TOC held. The Consultant will also consider the likelihood that the intervention may lead, or contribute to, unintended positive and/or negative effects (e.g. on vulnerable groups such as those living with disabilities and/or women and children). Some of these potential negative effects may have been identified in the project design as risks or as part of the analysis of Environmental, Social and Economic Safeguards.⁶⁵

- Financial Management

⁶¹ Note that 'political upheaval' does not include regular national election cycles, but unanticipated unrest or prolonged disruption. The potential delays or changes in political support that are often associated with the regular national election cycle should be part of the project's design and addressed through adaptive management by the project team.

⁶² Outputs are the availability (for intended beneficiaries/users) of new products and services and/or gains in knowledge, abilities and awareness of individuals or within institutions (UNEP, 2019)

⁶³ Outcomes are the use (i.e. uptake, adoption, application) of an output by intended beneficiaries, observed as changes in institutions or behavior, attitude or condition (UNEP, 2019)

⁶⁴ All submitted UNEP project documents are required to present a Theory of Change with all submitted project designs. The level of 'reconstruction' needed during an evaluation will depend on the quality of this initial TOC, the time that has lapsed between project design and implementation (which may be related to securing and disbursing funds) and the level of any formal changes made to the project design.

⁶⁵ Further information on Environmental, Social and Economic Safeguards (ESES) can be found at <http://wedocs.unep.org/handle/20.500.11822/8718>

34. Financial management will be assessed under three themes: *adherence* to UNEP's financial policies and procedures, *completeness* of financial information and *communication* between financial and project management staff. The assessment will establish the actual spend across the life of the project of funds secured from all donors. This expenditure will be reported, where possible, at output level and will be compared with the approved budget. The assessment will verify the application of proper financial management standards and adherence to UNEP's financial management policies. Any financial management issues that have affected the timely delivery of the project or the quality of its performance will be highlighted. The evaluation will record where standard financial documentation is missing, inaccurate, incomplete or unavailable in a timely manner. The Consultant will assess the level of communication between the Project/Task Manager and the Fund Management Officer as it relates to the effective delivery of the planned project and the needs of a responsive, adaptive management approach.

- Efficiency

35. The Consultant will assess the extent to which the project delivered maximum results from the given resources. This will include an assessment of the cost-effectiveness and timeliness of project execution. Focussing on the translation of inputs into outputs, cost-effectiveness is the extent to which an intervention has achieved, or is expected to achieve, its results at the lowest possible cost. Timeliness refers to whether planned activities were delivered according to expected timeframes as well as whether events were sequenced efficiently. The Consultant will also assess to what extent any project extension could have been avoided through stronger project management and identify any negative impacts caused by project delays or extensions. The assessment will describe any cost or time-saving measures put in place to maximise results within the secured budget and agreed project timeframe and consider whether the project was implemented in the most efficient way compared to alternative interventions or approaches.

36. Special attention should be given to efforts made by the project teams during project implementation to make use of/build upon pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities⁶⁶ with other initiatives, programmes and projects etc. to increase project efficiency.

37. The factors underpinning the need for any project extensions will also be explored and discussed. As management or project support costs cannot be increased in cases of 'no cost extensions', such extensions represent an increase in unstated costs to implementing parties.

- Monitoring and Reporting

38. The evaluation will assess monitoring and reporting across three sub-categories: monitoring design and budgeting, monitoring implementation and project reporting.

- i. Monitoring Design and Budgeting

39. The Consultant will assess the relevance and appropriateness of the results indicators as well as the methods used for tracking progress against them as part of conscious results-based management. The Consultant will assess the quality of the design of the monitoring plan as well as the funds allocated for its implementation.

- ii. Monitoring of Project Implementation

40. The Consultant will assess whether the monitoring system was operational and facilitated the timely tracking of results and progress towards projects objectives throughout the project implementation period. This assessment will include consideration of whether the project gathered relevant baseline data that was accurately and appropriately documented. This should include monitoring the representation and participation of disaggregated groups (including gendered, marginalised or vulnerable groups, such as those living with disabilities) in project activities. It will also consider the quality of the information generated by the monitoring system during project implementation and how it was used to adapt and improve project execution, achievement of outcomes and ensure sustainability. The performance at project completion against Core Indicator Targets should also be reviewed (refer to the project's final Tracking Tool).

- iii. Project Reporting

41. The evaluation will assess the extent to which both UNEP and donor reporting commitments have been fulfilled. Consideration will be given as to whether reporting has been carried out with respect to the effects of the initiative on disaggregated groups.

- Sustainability

42. The Consultant will identify and assess the key conditions or factors that undermined or contributed to the endurance of achieved project outcomes (ie. 'assumptions' and 'drivers'). Some factors of sustainability may be embedded in the project design and implementation approaches while others may be contextual circumstances or conditions that evolved over the life of the intervention.

- i. Socio-political Sustainability

43. The Consultant will assess the extent to which social or political factors supported the continuation and further development of project outcomes. It will consider the level of ownership, interest and commitment among government and other stakeholders to take the project achievements forwards, and whether capacity development efforts are likely to be sustained.

⁶⁶ Complementarity with other interventions during project design, inception or mobilization is considered under Strategic Relevance above.

ii. Financial Sustainability

44. The Consultant will assess the extent to which project outcomes are dependent on future funding for the benefits they bring to be sustained. Even where future funding has been secured, the Consultant should assess whether the project outcomes are financially sustainable.

iii. Institutional Sustainability

45. The Consultant will assess the extent to which the sustainability of project outcomes (especially those relating to policies and laws) is dependent on issues relating to institutional frameworks and governance. It will consider whether institutional achievements such as governance structures and processes, policies, sub-regional agreements, legal and accountability frameworks etc. are robust enough to continue delivering the benefits associated with the project outcomes after project closure. In particular, the assessment will consider whether institutional capacity development efforts are likely to be sustained.

- Factors Affecting Project Performance and Cross-Cutting Issues

Please provide summaries under the following headings:

i. Preparation and Readiness

46. The Consultant will assess whether appropriate measures were taken to either address weaknesses in the project design or respond to changes that took place between project approval, the securing of funds and project mobilisation. In particular, consider the nature and quality of engagement with stakeholder groups by the project team, the confirmation of partner capacity and development of partnership agreements as well as initial staffing and financing arrangements

ii. Quality of Project Management and Supervision

47. This refers to the supervision, guidance and technical backstopping provided by UNEP to the project management of the executing agency. The Consultant will assess the effectiveness of project management with regard to: providing leadership towards achieving the planned outcomes; managing team structures; maintaining productive partner relationships (e.g. Steering Groups etc.); communication and collaboration with colleagues; risk management; use of problem-solving; project adaptation and overall project execution.

iii. Stakeholder Participation and Cooperation

48. Here the term 'stakeholder' should be considered in a broad sense, encompassing all project partners, duty bearers with a role in delivering project outputs and target users of project outputs and any other collaborating agents external to UNEP and the Executing Agency. To the extent possible, the assessment will consider the effectiveness of all forms of communication and consultation with stakeholders throughout the project life and the support given to maximise collaboration and coherence between various stakeholders, including sharing plans, pooling resources, and exchanging learning and expertise. The inclusion and participation of all differentiated groups, including gender groups should be considered.

iv. Responsiveness to Human Rights and Gender Equity

49. The assessment will ascertain to what extent the project has applied the UN Common Understanding on the human rights-based approach (HRBA) and the UN Declaration on the Rights of Indigenous People. Within this human rights context the Consultant will assess to what extent the intervention adhered to UNEP's Policy and Strategy for Gender Equality and the Environment⁶⁷.

v. Environmental and Social Safeguards

50. The Consultant will assess whether UNEP requirements⁶⁸ were met to: *review* risk ratings on a regular basis; *monitor* project implementation for possible safeguard issues; *respond* (where relevant) to safeguard issues through risk avoidance, minimization, mitigation or offsetting and *report* on the implementation of safeguard management measures taken. Implementation of the management measures against the Safeguards Plan submitted at CEO Approval should be reviewed, and the effectiveness of any measures taken to address identified risks assessed.

vi. Country Ownership and Driven-ness

51. While there is some overlap between Country Ownership and Institutional Sustainability, the focus for this criterion will be on the involvement not only of those directly involved in project execution, but also those official representatives whose cooperation is needed for change to be embedded in their respective institutions and offices (e.g.,

⁶⁷The Evaluation Office notes that Gender Equality was first introduced in the UNEP Project Review Committee Checklist in 2010 and, therefore, provides a criterion rating on gender for projects approved from 2010 onwards. Equally, it is noted that policy documents, operational guidelines and other capacity building efforts have only been developed since then and have evolved over time. https://wedocs.unep.org/bitstream/handle/20.500.11822/7655/-Gender_equality_and_the_environment_Policy_and_strategy-2015Gender_equality_and_the_environment_policy_and_strategy.pdf.pdf?sequence=3&isAllowed=y

⁶⁸For the review of project concepts and proposals, the Safeguard Risk Identification Form (SRIF) was introduced in 2019 and replaced the Environmental, Social and Economic Review note (ESERN), which had been in place since 2016. In GEF projects safeguards have been considered in project designs since 2011.

representatives from multiple sectors or relevant ministries beyond Ministry of Environment) and that is necessary for long term impact to be realised.

vii. Communication and Public Awareness

52. The Consultant will assess the effectiveness of: a) communication of learning and experience sharing between project partners and interested groups arising from the project during its life and b) public awareness activities that were undertaken during the implementation of the project to influence attitudes or shape behaviour among wider communities and civil society at large. Where knowledge sharing platforms were established under the project, the assessment will comment on the sustainability of the communication channel as appropriate.

PART 3. EVALUATION APPROACH, METHODS AND DELIVERABLES

53. The Terminal Evaluation will be an in-depth evaluation using a participatory approach whereby key stakeholders are kept informed and consulted throughout the evaluation process. Both quantitative and qualitative evaluation methods will be used as appropriate to determine project achievements against the expected outputs, outcomes and impacts. It is highly recommended that the consultant(s) maintains close communication with the project team and promotes information exchange throughout the evaluation implementation phase in order to increase their (and other stakeholder) ownership of the evaluation findings. Where applicable, the consultant(s) will provide a geo-referenced map that demarcates the area covered by the project and, where possible, provide geo-reference photographs of key intervention sites (e.g. sites of habitat rehabilitation and protection, pollution treatment infrastructure, etc.).

54. The findings of the evaluation will be based on the following:

(a) A desk review of:

Relevant background documentation, inter alia National Biodiversity Strategic Action Plan (NBSAP), National Programme of Urban and Suburban Agriculture, National Law 81 on the Environment (1997), Legal Decree 259, National Law 85 on Forestry (1998), Legal Decree 212, UNEP Medium-Term Strategy 2010-2013 and corresponding Programmes of Work;

Project design documents (including minutes of the project design review meeting at approval); Annual Work Plans and Budgets or equivalent, revisions to the project (Project Document Supplement), the logical framework and its budget;

Project reports such as six-monthly progress and financial reports, progress reports from collaborating partners, meeting minutes, relevant correspondence and including the Project Implementation Reviews (PIRs) and Tracking Tool etc.;

Project outputs: including Articles, Reports, Flyers, Guides/manuals; Books; Catalogues; Posters; Videos; and other publications

Mid-Term Review (MTR) Report of the project;

(b) Interviews – to the extent possible with:

UNEP Task Manager (TM);

Project management team, including the Project Manager within the Executing Agency;

UNEP Fund Management Officer (FMO);

Portfolio Manager and Sub-Programme Coordinator, where appropriate;

Project partners, including Bioersity International, ProNaturaleza, Diversity & Development, UNESCO, FAO;

Other relevant resource persons;

(c) Other data collection tools: The Inception Report will clarify the use of any other data collection tools.

Deliverables and Review Procedures

55. The Consultant will prepare **Draft and Final Performance Assessment reports** containing an executive summary that can act as a stand-alone document; analysis of the evaluation findings organised by evaluation criteria; lessons learned, recommendations (where applicable), and an annotated ratings table.

56. **Review of the draft evaluation report:** The Consultant will submit a draft report to the Evaluation Manager and revise the draft in response to their comments and suggestions. Once a draft of adequate quality has been peer-reviewed and accepted, the Evaluation Manager will share the cleared draft report with the Task Manager, who will alert the Evaluation Manager in case the report contains any blatant factual errors. The Evaluation Manager will then forward revised draft report (corrected by the Consultant where necessary) to other key stakeholders, to provide feedback on the findings, proposed recommendations and lessons learned. Any comments or responses to draft reports will be sent to the Evaluation Manager for consolidation. The Evaluation Manager will provide all comments to the Consultant for consideration in preparing the final report, along with guidance on areas of contradiction or issues requiring an institutional response.

57. Based on a careful review of the draft report, the Evaluation Manager will provide an assessment of the performance ratings. Where there are differences of opinion between the evaluator and the Evaluation Manager on these ratings, both viewpoints will be clearly presented in the final report. The Evaluation Office ratings will be considered the final ratings for the project.

58. If the assessment generates Recommendations at the end of the process, the Evaluation Office will prepare a **Recommendations Implementation Plan** to be completed and updated at regular intervals by the Task Manager.

The Evaluation Consultant

59. For this evaluation, one Evaluation Consultant will work under the overall responsibility of the Evaluation Office represented by an Evaluation Manager [Pauline Marima], in consultation with the UNEP Task Manager in the current Ecosystems Integration Branch [Ersin Esen] and the former Task Manager [Marieta Sakalian], Fund Management Officer [Joel Mbothu] and the Sub-programme Coordinator of the UNEP Sub-programme on Nature Action, [Marieta Sakalian] and the Director of the Ecosystems Division (Susan Gardner). The consultant will liaise with the Evaluation Manager on any procedural and methodological matters related to the evaluation. It is, however, the consultant’s individual responsibility to plan meetings with stakeholders, obtain documentary evidence and any other matters related to the assignment. The UNEP Task Manager and project team will, where possible, provide support (introductions, meetings etc.) allowing the consultants to conduct the evaluation as efficiently and independently as possible.

60. The consultant will be hired over a period of approximately **four months (mid-July to mid-November 2023)** and should have the following: a university degree in environmental sciences, international development or other relevant political or social sciences area is required and an advanced degree in the same areas is desirable; a minimum of ten (10) years professional experience is required; evaluation experience is also required, preferably including evaluating large, regional or global programmes and using a Theory of Change approach; a broad understanding of agrobiodiversity conservation and sustainable use and mainstreaming is desired. English and French are the working languages of the United Nations Secretariat. For this consultancy, fluency in oral and written English and Spanish is required. Working knowledge of the UN system and specifically the work of UNEP is an added advantage. Experience with GEF policies and procedures is an asset. The work will be home-based with no field visits included.

61. The consultant will be responsible, in close consultation with the Evaluation Office of UNEP for overall management of the performance assessment of the project, and timely provision of its outputs, described above. The consultant will ensure that all evaluation criteria and questions are covered to the extent possible using a desk-based and primarily document-based assessment.

Schedule of the evaluation

62. The table below presents the tentative schedule for the evaluation.

Table 3. Tentative schedule for the evaluation

Milestone	Tentative Dates
Data collection and analysis	July - August 2023
Draft report to Evaluation Manager (and Peer Reviewer)	August 2022
Draft Report shared with UNEP Project Manager and other relevant personnel	September 2022
Draft Report shared with wider group of stakeholders	October 2022
Final Report shared with all respondents	November 2022

Contractual Arrangements

63. The Consultant will be selected and recruited by the Evaluation Office of UNEP under an individual Special Service Agreement (SSA) on a “fees only” basis (see below). By signing the service contract with UNEP /UNON, the consultant shall certify that they have not been associated with the design and implementation of the project in any way which may jeopardize their independence and impartiality towards project achievements and project partner performance. In addition, they will not have any future interests (within six months after completion of the contract) with the project’s executing or implementing units. All consultants are required to sign the Code of Conduct Agreement Form.

64. Fees will be paid on an instalment basis, paid on acceptance by the Evaluation Manager of expected key deliverables. The schedule of payment is as follows:

Table 4. Schedule of Payment for the [Evaluation Consultant/Principal Evaluator]:

Deliverable	Percentage Payment
Approved Draft Performance Assessment Report	60%
Approved Final Performance Assessment Report	40%

65. The consultants may be provided with access to the project’s document repositories and if such access is granted, the consultants will agree not to disclose information to third parties beyond information required for, and included in, the Performance Assessment report.

66. In case the consultant is unable to provide the deliverables in accordance with these guidelines, and in line with the expected quality standards by the UNEP Evaluation Office, payment may be withheld at the discretion of the Director of the Evaluation Office until the deliverables meet UNEP’s quality standards. If the consultant fails to submit a satisfactory final product to UNEP in a timely manner, i.e. before the end date of their contract, the Evaluation Office reserves the right to employ additional human resources to finalize the report, and to reduce the consultants’ fees by an amount equal to the additional costs borne by the Evaluation Office to bring the report up to standard.

Annex II: List of documents and individuals consulted

Reviewed Documents:

- Agrobiodiversity Conservation and Man and the Biosphere Reserves in Cuba: Bridging Managed and Natural Landscapes: Project Document (UNEP, 2012)
- Agrobiodiversity conservation and Man and the Biosphere (MAB) Reserves in Cuba: bridging managed and natural landscapes: Mid Term Evaluation Report (M. Altieri, 2017)
- Amendment No. 2 to the Project Cooperation Agreement of the GEF Medium-Size Project Agrobiodiversity conservation and Man and the Biosphere (MAB) Reserves in Cuba: bridging managed and natural landscapes: No-cost Extension (UNEP, Bioversity International, 2013)
- Budget Review 2019 (Bioversity International, 2019)
- Boletín 2 (COBARB, 2012)
- Boletín 4 (COBARB, 2014)
- Costed M&E Plan, Project Document (2012)
- COBARB Steering Committee Meeting, COBARB video (no date)
- Earthscan (Routledge) Cuban Book Proposal-guidelines (COBARB, no date)
- Especies de Plantas Sub-Utilizadas en Cuba, COBARB (no date)
- Estrategia de Comunicación para promover la conservación de la biodiversidad agrícola en dos reservas de la Biosfera en Cuba, C. Cabrera Ibáñez, Y. Sánchez, A. González, A. Socorro, D. Arzola, Y. González G. Begué (no date)
- Final Performance Assessment of the UNEP/GEF project “Agricultural Biodiversity Conservation and Man and Biosphere Reserves in Cuba: Bridging managed and Natural Landscapes” (GEF ID 4158): Terms of Reference (UNEP, 2023)
- Financial reports 2019:
 - MAB_Q1_2019_Cash statement_MS clearance
 - A1147 Q1 FR
 - BFN_Q2_2019 Cash statement_MS clearance
 - Final report A1147 (Q2)
- Half-yearly Technical Reports 2013-2018 (COBARB)
- Informe de Comercialización: Componente 3 (COBARB, no date)
- Informe Técnico LOA 14/017 (COBARB, 2015)
- Informe Técnico LOA 15/078 (COBARB, 2015)
- Informe Técnico LOA 15/28 (COBARB, 2016)
- MaB Project Flyer (COBARB, 2014)
- Participatory Mapping (N. Cardona, no date)
- Plan de Trabajo Detallado (Platform for Agrobiodiversity Research/PAR)

- Project Implementation Reports/PIRs: 2014-2019 (COBARB/UNEP)
- Project Newsletter 1 (COBARB, 2013)
- Project Supervision Plan (Annex 5, Project Document)
- Reporting 2021 Innovation #1250: Inclusion, of Agrobiodiversity management and conservation in the management plans of the Man and the Biosphere Reserves of Cuba, for the first time (CGIAR, 2021)
- Revised PIF (COBARB, 2019)
- SEPLs in two Cuban Man and Biosphere Reserves (UNESCO/ MaB, no date)
- Snapshots of Success: Conserving Cuba's Agrobiodiversity (Alliance Bioiversity-CIAT, webpage)
- Steering Committee Meeting Reports: 2013 – 2019 (COBARB)
- Taller "Modelos de certificación para las Reservas de la Biosfera en Cuba, dialogando con experiencias y prácticas internacionales": Informe (COBARB, 2015)
- Third Steering Committee Meeting (video, 2015))
- Yoset Testimonio, video (COBARB, no date)

Individuals Consulted:

- Nadia Bergamini, former Project Coordinator, Alliance Bioiversity and CIAT
- Marieta Sakalian, Senior Programme Management Officer, UNEP Law Division

