



United Nations Environment Programme

# **Terminal Evaluation of the UNEP Project Caribbean Biological Corridor**

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## ACRONYMS AND ABBREVIATIONS

AMARC ALC	<i>Asociación Mundial de Radios Comunitarias para América Latina y el Caribe</i>
ANAP	<i>Agence Nationale des Aires Protégées</i>
BIOECO	<i>Centro Oriental de Ecosistemas y Biodiversidad</i>
BMA:	<i>Brigarde Maritime en Action</i>
CAR-RCU	Caribbean Environment Programme - Regional Coordinating Unit
CASEC	<i>Conseil d'Administration de la Section Communale</i>
CATEDES	<i>Centro de Aplicaciones Tecnológicas para el Desarrollo Sostenible</i>
CBC	Caribbean Biological Corridor
CBD	Convention on Biological Diversity
CEDAF	<i>Centro para el Desarrollo Agropecuario y Forestal</i>
CEPF	Critical Ecosystem Partnership Fund
CIGET	<i>Centro de Información y Gestión Tecnológica</i>
CITMA	<i>Ministerio de Ciencia, Tecnología y Medio Ambiente</i>
DR	Dominican Republic
EO	Evaluation Office
EU	European Union
FANJ	<i>Fundación Antonio Nuñez Jimenez para la Naturaleza y el Hombre</i>
GEF	Global Environment Facility
GIS	geographic information system
GIZ	<i>Deutsche Gesellschaft für Internationale Zusammenarbeit</i>
ISPAN	<i>Institut de Sauvegarde du Patrimoine National</i>
IT	information technology
MARN	<i>Ministerio del Ambiente y Recursos Naturales</i>
MDE	<i>Ministère de l'Environnement</i>
MoU	memorandum of understanding
NGO	non-governmental organisation
PV	photovoltaic
ODBJ:	<i>Organisation pour le Développement de Bassin Bleu, Jacmel</i>
RCU	Regional Coordinating Unit
ROLAC	Regional Office for Latin America and the Caribbean
SNAP	<i>Système National des Aires Protégées</i>
SPAW	Protocol on Specially Protected Areas and Wildlife
SSFA	small-scale financing agreement
TNC	The Nature Conservancy
TNO	Tri-national Office
ToC	Theory of Change
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
USD	United States dollar
WFP	World Food Programme
WHH	Welthungerhilfe

## PROJECT IDENTIFICATION

**Table 1: Project identification table**

<b>UNEP approval date:</b>	December 2009	<b>First disbursement:</b>	February 2010
<b>Actual start date:</b>	January 2010	<b>Planned duration:</b>	36 months
<b>Intended completion date:</b>	December 2012	<b>Actual or expected completion date:</b>	Programmatic completion (31/12/2014). Final operative and financial closure (30/06/2015)
<b>UNEP co-financing:</b>	Euros 108,000 (in kind)	<b>Total cost:</b>	Euros 2,882,835
<b>EU Contribution:</b>	Euros 2,774,835		
<b>Mid-term review (planned date):</b>	June 2011	<b>Terminal evaluation (actual date):</b>	November 2014 – March 2015
<b>Mid-term review (actual date):</b>	May – June 2012	<b>No. of revisions:</b>	3 extensions
<b>Date of last Steering Committee meeting:</b>	November 2014	<b>Date of last revision:</b>	30 May 2014
<b>Disbursement as of 31 December:</b>	3 out 4 payments made by EU	<b>Date of financial closure:</b>	Project ends on 31/12/2014 but according to the contribution agreement with donor, the financial closure can be done within the 6 months after the end of project (i.e. 30 June 2015)
<b>Date of completion:</b>	31/12/2014 (programmatic completion)	<b>Actual expenditures reported as of 30 June 2014:</b>	USD 3,453,460.70
<b>Total co-financing realized as of 31 December 2014<sup>1</sup></b>	USD 451,549.00	<b>Actual expenditures entered in IMIS as of 31 December 2014:</b>	USD 3,564,227.00
<b>Leveraged financing<sup>2</sup>:</b>	USD 451,549.00		

<sup>1</sup> Cash only. See Section III.F and Annex 5 for information on in-kind contributions.

<sup>2</sup> Cash only. See Section III.F and Annex 5 for information on in-kind contributions.

## EXECUTIVE SUMMARY

### *Main findings*

1. *The establishment of a biological corridor between Cuba, the Dominican Republic and Haiti is a unique and highly significant initiative that is relevant to the needs of the participating countries and consistent with national, regional and international policies and commitments.* In many respects, the Caribbean Biological Corridor (CBC) is one of the most concrete and ambitious efforts to achieve conservation objectives in the Caribbean Islands hotspot<sup>3</sup>, but it is also an instrument of international cooperation and a promoter of sustainable development in the three countries, providing the Caribbean, and possibly other regions, with a new model and an innovative framework that are useful and relevant. It is an important initiative that must be sustained, strengthened and institutionalised.

2. *While a biological corridor is highly relevant to the needs and priorities of the three participating countries, and of the Caribbean Islands hotspot as a whole, and while the objectives and activities of the CBC Project were all largely relevant to local issues, the CBC Project, and consequently the larger CBC Initiative, have suffered from conceptual weaknesses and from a lack of consensus on their vision and their purpose.* Most, if not all, of the people interviewed for this evaluation insist on the relevance and usefulness of the CBC Initiative and Project, reiterate their own personal or institutional commitments and state that there is a clear vision, but the contents of that vision actually vary:

- in Hispaniola, many of the actors implicitly or explicitly equate transboundary cooperation (between the Dominican Republic and Haiti) with a regional corridor, but these are different concepts and different instruments, and transboundary cooperation can take place in the absence of a multi-national corridor;
- all actors agree that a central purpose of the CBC Project was to support Haiti, with a focus on poverty reduction, but the initial concept of the CBC Project in that regard may have been far too ambitious, underestimating challenges and local complexities, and possibly naïve, ignoring some of the local institutional, socio-political and cultural realities and challenges as well as lessons from past experiences;
- as a result, the links between the core function of a biological corridor, namely the maintenance of biological connectivity between ecosystems, and the human development (including poverty reduction) objectives of the CBC Initiative and Project are somewhat unclear and weak, and the main stakeholders do not have the same understanding of what these links are and should be;
- these conceptual weaknesses are caused, in part, by the fact that the CBC Initiative is based on incontestable and easily embraceable principles and objectives: South-South cooperation; supporting Haiti; linking conservation, sustainable livelihoods and poverty reduction; promoting transboundary cooperation between the Dominican Republic and Haiti; all these are causes that one easily subscribes to, but with the danger of subscribing to the idea without giving it enough substance and focus.

3. *For a variety of reasons, including: (a) the conceptual issues mentioned above, (b) weaknesses in the original project design<sup>4</sup>, (c) human resource and other management issues and procedures, (d) various levels of implementation, i.e. from high-level ministerial to local stakeholders and (e) the specific requirements to select and manage pilot projects in three countries, the CBC Project constitutes a very complex project, which has nevertheless been well managed.* The first two years of project execution were marked by a number of

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<sup>3</sup> Caribbean Islands constitute one of the world's 34 biodiversity hotspots.

<sup>4</sup> The project's logical framework was revised twice (February and December 2013) and these revisions greatly improved the design, but the project remained guided, and to some extent constrained, by many of the original provisions.

challenges and difficulties, including delays in the appointment of a Technical Director, leading to a situation where several key partners, including the European Union (EU) as the main funding agency, had serious doubts about its chances of success and where the mid-term review raised very critical questions. But the changes in project leadership, both at the tri-national office and at the Regional Office for Latin America and the Caribbean (ROLAC) of the United Nations Environment Programme (UNEP), that occurred during the first half of 2012 created radically new conditions and the project was allowed to deliver most of its planned outputs over the remaining 30 months. Those responsible for the CBC Project over that period, while conscious of the challenges and weaknesses, have made the right management decision to focus on the delivery of those project outputs. As a result, the CBC Initiative is more a reality now than it was in 2009, and there is a significant capital of achievements, capacities, partnerships and commitments upon which the future of the CBC Initiative can be built.

4. *To some extent, it could be argued that the CBC Project has followed a pathway that is not entirely consistent with the one that the CBC Initiative should have followed.* This argument could be made for four reasons: (a) the CBC Project was broad and weakly designed, making it difficult to focus on the primary functions of a biological corridor, (b) project design did not include programmatic and financial provisions to support networking activities and broad-based governance arrangements, (c) the late start of many activities implied that much had to be achieved in a very short period, requiring project staff and partners to concentrate on deliverables, especially in the pilot projects and other field activities, and (d) the demands of project execution, especially considering the administrative procedures of the financing and implementing agencies as well as the logistical constraints of working in and with these three countries, left the CBC Project team with little time and space to devote to the more intangible, yet important functions of networking and institutional collaboration, and to respond to needs and new opportunities that arose.

#### ***Main lessons learned***

5. A number of interesting and useful lessons can be learned from this Project.

- Initiatives that seek to link biodiversity conservation, environmental management, livelihoods and poverty reduction must articulate clearly and realistically the assumptions on which they are based and the logic they want to follow.
- Biodiversity, and broader environmental concerns, can be important factors and channels of international cooperation, even in contexts that are not objectively favourable to such cooperation.
- UN agencies may not be best suited to execute complex projects, especially those that include small-scale pilot activities and field implementation with a multiplicity of partners.
- Stakeholder involvement and building governance structures are vital for the challenging task of achieving sustainability.

#### ***Key recommendations***

6. *With all that has been achieved, the principal challenge at this time is for all actors involved to take advantage of the end of this project, and of the upcoming phase, to shape the future of the CBC Initiative and to design institutional arrangements and activities that will allow it to flourish within a cohesive vision and implementation strategy.* What has been achieved is remarkable, but it would be a mistake to assume that the CBC Initiative should

remain on the exact pathway set by this CBC Project. On the contrary, there is a need for a lucid examination of impacts and lessons learned, for an assessment of strengths and weaknesses, and for the formulation and adoption of a new vision and strategy. The CBC Project has brought the CBC Initiative to a stage where it can now shape this future, and it is hoped that this terminal evaluation will assist in that process. To this end, Section V.C of the report provides specific recommendations with respect to the visioning, strategic planning, programming and the geographic scope of the Corridor.

### *Summary ratings*

**Table 2: Summary ratings table**

<b>Criterion</b>	<b>Summary Assessment</b>	<b>Rating<sup>5</sup></b>
<b>A. Strategic relevance</b>	Project as designed highly relevant to conservation and development needs, but some of that relevance lost because of insufficient focus on connectivity and difficulty to achieve poverty reduction	<b>S</b>
<b>B. Achievement of outputs</b>	Many achievements against all five project objectives and against pilot projects, many of the expected results delivered, but with significant gaps	<b>MS</b>
<b>C. Effectiveness: Attainment of project objectives and results</b>	Objectives partially attained, reflecting issue in project design, with objectives possibly too ambitious and planned results insufficient to achieve these objectives	<b>MS</b>
1. Achievement of outcomes (as per reconstituted ToC)	Outcomes, expressed as outputs in reconstituted ToC, largely delivered, except for the facilitation of the strengthening of a network of protected areas, which was among the project's objectives, but without a dedicated budget	<b>MS</b>
2. Likelihood of impact	Institutional and capacity impact likely to be high, but direct conservation, reduction of biodiversity loss and poverty reduction limited	<b>ML</b>
3. Achievement of project goal and objectives	Goal not achieved (and too broad in project design to expect achievement and to allow for measurement), objective as in reconstituted ToC achieved, objectives as in project logframe partially achieved	<b>ML</b>
<b>D. Sustainability and replication</b>	Significant progress made towards the establishment of the Corridor; while it is not yet a sustainable entity, the achievements are very significant considering the time available and the challenges involved in setting up such a new cooperation arrangement	<b>S</b>
1. Financial	No arrangement for financial sustainability in place, except for the commitment of countries and some partners to sustain activities	<b>MU</b>
2. Socio-political	Very high commitment at political level in the three countries, but insufficient involvement of civil society and academia	<b>S</b>
3. Institutional	Progress made, but attention now needed towards strategic	<b>MS</b>

<sup>5</sup> Ratings of effectiveness as well as ratings of monitoring and evaluation are: Highly Satisfactory (HS), Satisfactory (S), Moderately Satisfactory (MS), Moderately Unsatisfactory (MU), Unsatisfactory (U) and Highly Unsatisfactory (HU).

Ratings of sustainability are: Highly Likely (HL), Likely (L), Moderately Likely (ML), Moderately Unlikely (MU), Unlikely (U), and Highly Unlikely (HU).

The criteria used in the determination of these ratings are described in Annex 2 of the Terms of Reference; see Annex 2 to this report.



<b>Criterion</b>	<b>Summary Assessment</b>	<b>Rating<sup>5</sup></b>
framework	planning and consolidation	
4. Environmental	There is no internal factor threatening environmental sustainability	<b>HS</b>
5. Catalytic role and replication	The lessons learned and the experienced gained from the Project will have a catalytic role at the national level and in the region, and have built the base for replication (geographic expansion), but there will be need for a clear strategy towards such expansion	<b>MS</b>
<b>E. Efficiency</b>	Significant issues during the first two years of implementation, increased efficiency thereafter, but some challenges posed by procedures, complexity of managing small scale projects, and specific procurement conditions	<b>MS</b>
<b>F. Factors affecting project performance</b>	Some factors affected positively while others affected negatively	<b>MS</b>
1. Preparation and readiness	Several factors and drivers favourable, good process of country participation in project design, but design too ambitious and may have assumed that the information required to delimitate the corridor was already available, thus did not include new research which would have been useful	<b>MS</b>
2. Project implementation and management	Slow rate of implementation and management issues during first two years, all addressed since with high rate of implementation since mid-2012	<b>MS</b>
3. Stakeholders participation and public awareness	Very good level of participation of a core group of stakeholders (ministries, direct project partners), but insufficient involvement of civil society, the private sector and the scientific community	<b>MS</b>
4. Country ownership and driven-ness	Very high level of country ownership, and Technical and Ministerial Meetings serving as higher organ of governance	<b>HS</b>
5. Financial planning and management	Satisfactory, except for inadequate provisions to support field projects, and for challenges and delays encountered in procurement and reimbursements of expenses	<b>MS</b>
6. UNEP supervision and backstopping	Excellent since 2012, but some communication and effectiveness issues in 2010 – 2011	<b>S</b>
7. Monitoring and evaluation	Project difficult to evaluate because original design was not built on strong results-based management framework	<b>MS</b>
a. M&E Design	Original design did not include adequate indicators and did not provide a robust framework	<b>MU</b>
b. Budgeting and funding for M&E activities	Adequate	<b>S</b>
c. M&E Plan Implementation	Two EU monitoring missions, a useful mid-term review and a terminal evaluation conducted according to plans	<b>S</b>
<b>Overall project rating</b>	A complex project that was able to deliver many results and to achieve significant objectives in spite of a number of internal and external challenges	<b>MS</b>

## I. INTRODUCTION

7. This is the report on the terminal evaluation of the project entitled *Demarcation and Establishment of the Caribbean Biological Corridor (CBC): as a Framework for Biodiversity Conservation, Environmental Rehabilitation and Development of Livelihood Options in Haiti, the Dominican Republic and Cuba* (the Project). The Project was designed as a major contribution to the initiative to establish the Caribbean Biological Corridor (CBC), which began in 2007 with the adoption by the Ministers of Environment of Cuba, the Dominican Republic and Haiti of a statement known as the Santo Domingo Declaration. In 2009, the three countries adopted the CBC Plan of Action and formulated this Project, with a cooperation agreement signed in December 2009 between the European Union (EU) and the United Nations Environment Programme (UNEP). The agreement initially covered a total of 36 months, and has since been extended on three occasions (in April 2012 for 6 months, in June 2013 for 12 months and in May 2014 for 6 months). The revised completion date of the Project was 31 December 2014.

## II. THE EVALUATION

8. This evaluation has focused on the Project, using criteria and methods that are conventional for exercises of this kind, but it has also examined the broader context as well as the evolution of the concept and establishment of the regional corridor. This evaluation therefore makes the distinction between the overall initiative, referred to as the CBC Initiative in this report, and the Project under review<sup>6</sup>. Because the CBC Initiative aims at providing a permanent platform for cooperation among participating countries, and because it has reached a critical moment with the completion of this Project, this evaluation has been designed and carried out as a forward-looking exercise aimed at assessing impacts and performance and at examining and proposing options and directions for the future.

9. This evaluation's Terms of Reference (see Annex 2) indicate that the exercise had two primary purposes: (a) to provide evidence of results to meet accountability requirements, and (b) to promote learning, feedback and knowledge sharing through results and lessons learned. The inception report provided by the evaluation consultants recommended a third purpose: (c) to identify options and formulate recommendations for the future of the CBC initiative, based on an analysis of results obtained and lessons learned. This recommendation sought to respond to an explicit expectation among the Project's participating countries and partners that this evaluation would assist with identification and design of strategies and institutional arrangements for the future of the CBC initiative. These are presented in section V.C of this report.

10. The questions provided in the Terms of Reference are all valid and were used to guide the evaluation process, but the inception report also proposed that the scope and objective of the evaluation be restructured around four critical issues (examining, for each issue, the impacts and results to date, the lessons learned, and the options and recommendations for the future):

- the establishment of a biological corridor (making it real);
- the establishment of the institutional arrangements and capacities to manage and sustain a biological corridor (making it effective and sustainable);

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<sup>6</sup> For this reason, this report normally uses the past tense to refer to implementation arrangements, operations and activities, since the EU-funded project has formally ended, even if some of these arrangements, operations and activities are and will be sustained under the auspices of the CBC Initiative and through future cooperation agreements.

- the role, impact and contribution of the pilot projects and the propagation centres (the place of local action in a CBC framework);
- the efficiency, effectiveness and performance of Project execution arrangements (how the Project worked).

11. Under each of these four headings, the questions that were examined are detailed in the matrix below.

**Table 3: Assessment framework**

Assessment question	Forward-looking question	Indicators	Sources
<b>The establishment of a biological corridor (making it real)</b>			
<p>What is the concept of biological corridor, what are its main elements, and is there a consensus on the concept? How do concepts such as connectivity, endemism and ecosystem-based management fit into the design of the CBC and in the implementation of this Project?</p> <p>Is there a clear vision of the role and functions of the CBC? How and where does the CBC add value to existing policies and initiatives?</p> <p>What have been, and what are, the impacts of the Project and the CBC on political and technical cooperation between Cuba, the Dominican Republic and Haiti (and their institutions) in biodiversity conservation? in other spheres of environmental management and sustainable development?</p> <p>Has the project fostered South-South cooperation, and what are the lessons that can be learned from that approach?</p> <p>Has the Project been able to focus on the most critical needs of Haiti and if so how, and with what impacts?</p> <p>How much progress has been made in defining the geographic boundaries of the CBC?</p> <p>Which criteria have been used in defining boundaries, and how?</p> <p>Has the Project helped to build a joint approach between the three countries and, if so, how and with what results?</p> <p>Has the Project created synergies with other institutions and processes? Is there now a platform for cooperation among institutions and projects relevant to the CBC?</p> <p>Has the Project contributed to new or enhanced partnerships?</p> <p>Has knowledge increased, where</p>	<p>If there is a need to define or clarify the vision, what should be the process to do so? Does the CBC require a new strategy and revised Plan of Action? If so, how should these be developed, and what could be some of the most critical elements?</p> <p>How should CBC be positioned in the regional landscape?</p> <p>Should the CBC approach geographic expansion? If yes, what should be the criteria and process used? What are the opportunities and risks to be considered?</p> <p>Should the CBC consider expansion to the marine environment, and if so how?</p> <p>How could the regional policy and legislative framework, especially the Cartagena Convention and its Protocol on Specially Protected Areas and Wildlife (SPA), provide a more enabling environment for the CBC? Can and should global and regional multi-lateral environmental agreements provide a framework and an instrument for integration and sustainability?</p> <p>Is there a need to enhance policy coherence between the participating countries, as well as between the national and regional levels, and if so how could it be done?</p> <p>To what extent is there a comprehensive strategy for bi-national cooperation between the Dominican Republic and Haiti on transboundary resource management, environment and development, and can the CBC assist in enhancing such a strategy, or facilitating its formulation if it does not exist?</p> <p>Are there ways in which South-</p>	<p>Existence of a vision statement</p> <p>Extent to which CBC and Project documents and agreements spell out a clear long-term vision</p> <p>Cooperation agreements and activities</p> <p>Perceptions of the Project by selected stakeholders</p>	<p>Interviews</p> <p>CBC website, including maps</p> <p>CBC and Project documents</p> <p>Other regional policy and strategy documents in biodiversity and related fields</p> <p>Review of experience of other biological corridors</p> <p>National biodiversity policies, strategies and action plans</p> <p>Schillet <i>et al.</i> (2012)</p> <p>Communication strategy</p>

Assessment question	Forward-looking question	Indicators	Sources
<p>and how? To what extent has the Project developed and made accessible the information base needed in support of the CBC?</p> <p>Has information sharing increased and improved among countries and other actors within the CBC?</p> <p>Has biodiversity conservation improved thanks to the Project and the CBC? If so, what are the factors, processes and actions that have been responsible for these improvements?</p> <p>What is the current visibility of the CBC among the various groups, does it have a recognisable and effective brand, and how has the Project contributed to visibility and understanding?</p> <p>How does the CBC process to date compare with similar processes in other regions, in terms of approach, effectiveness and efficiency?</p> <p>Are there lessons to be learned from the Project with respect to the concept of biological corridor and the processes through which a corridor can be established?</p>	<p>South cooperation could be enhanced, particularly with respect to the sharing of Cuban expertise?</p> <p>Are there coordination and facilitation functions that the CBC and the Project have not yet fulfilled, but that could and should be considered in a next phase?</p> <p>In particular, is there a role for the CBC in facilitating donor coordination in the participating countries and at the regional level?</p> <p>What could and should be the place of the cultural heritage in the vision and future programmes?</p> <p>What should be the CBC's communication strategy in the next phase? Does it need a stronger and clearer brand? Is there a need to identify priority communication targets and, for each of these targets, the messages to be conveyed and the pathways through which they can be effectively disseminated?</p>		
<p>The establishment of the institutional arrangements and capacities to manage and sustain a biological corridor (making it effective and sustainable)</p>			
<p>How strategic has the approach been?</p> <p>What has been the impact of the project on the capacity (i.e. skills, resources, linkages, systems) on the various Project participants?</p> <p>What has been the impact of the Project on awareness and understanding of conservation and sustainable use?</p> <p>Are there lessons to be learned from the capacity-building (including training) approaches and capacities used by the Project?</p>	<p>Within a long-term vision (see questions above), what is the most desirable institutional arrangement for the growth and sustainability of the CBC initiative?</p> <p>What kinds of partnerships (other sectors in government, business, communities, civil society) should be developed, and how, to strengthen the CBC and enhance its effectiveness and sustainability?</p> <p>Can the CBC be made sustainable, what should be the main elements of a financing strategy for the CBC, and what are the requirements for this strategy to succeed?</p> <p>Are there specific risks and dangers to be considered in the process of institutionalisation and growth of the CBC?</p> <p>To what extent is there an explicit demand from the countries for continued support and can this demand be channelled through the appropriate channels (e.g. Cariforum)?</p>	<p>Use of skills acquired in training</p> <p>Availability and use of resources and equipment provided by Project</p> <p>Existence and application of agreements between Project partners</p> <p>Knowledge of CBC and its products among various categories of stakeholders</p>	<p>Review of reports on training activities</p> <p>Interviews with selected participants in training activities</p> <p>Review of communication products (video, radio and TV spots, documents, website, etc.)</p> <p>Interviews with key informants (including media personnel)</p> <p>Review of training materials produced</p>

Assessment question	Forward-looking question	Indicators	Sources
<b>The impact and contribution of the pilot projects and the propagation centres</b>			
<p>What has been the process of selection of the pilot projects (themes and sites), has been it been effective, and has it allowed for the identification of the most suitable set of field interventions?</p> <p>How, and how adequately, have the projects been designed and the partners selected?</p> <p>How adequate and useful have the assessments been? Should they have been done differently?</p> <p>What has been the impact, if any, of each project on biodiversity conservation, livelihoods and poverty reduction?</p> <p>What has been the cumulative impact of the projects?</p> <p>To what extent have the projects contributed to innovation, demonstration and change (i.e. <i>pilot</i> projects)? What have been the positive and negative factors in that regard?</p> <p>Have the pilot projects, the propagations centres and the energy interventions contributed to biodiversity conservation, reforestation, livelihoods and poverty reduction?</p> <p>Will the interventions be sustained beyond the life of the Project?</p> <p>Are there lessons to be learned from these pilot projects and interventions?</p>	<p>What should be the place and role of field projects in the future design of the CBC?</p> <p>Are there opportunities for increased linkages between the projects and interventions supported by the Project, and with projects and interventions executed by other actors?</p> <p>What is required to ensure the sustainability of the interventions initiated or supported by the Project to date?</p> <p>What could be the role of a fully functioning corridor in developing and promoting common strategies, methodologies and instruments, in facilitating the sharing of good practice, and in providing technical support and advice?</p> <p>Should the CBC consider focusing on common themes?</p> <p>Should the CBC consider giving greater focus and attention to conservation in core and connectivity zones, in Key Biodiversity Areas and in protected areas?</p>	<p>Extent to which pilot projects and other field activities have been implemented according to plans</p> <p>Results obtained</p> <p>Existence of institutions mandated, willing and able to sustain effort</p>	<p>Review of SSFAs</p> <p>Field visits and interviews with project stakeholders</p> <p>Interviews with experts and organisations with experience in similar local initiatives</p> <p>Case studies from similar experiences</p>
<b>The efficiency, effectiveness and performance of Project execution arrangements</b>			
<p>How was the project designed, to what extent did primary stakeholders participate in the process and contribute to design?</p> <p>How do project results compare with expectations from the original and revised logical frameworks?</p> <p>Considering its geographic and programmatic scope, has the Project been cost-effective?</p> <p>To what extent has the project been able to balance the various levels of demand and interventions, including the expectations from the three countries?</p> <p>How efficient have project management and administration been?</p> <p>What has been the counterpart contribution of countries and other partners (assuming that it is possible to estimate it)?</p>	<p>How can existing and new coordination and execution arrangements contribute to a building a permanent structure for the coordination of the CBC?</p> <p>Are there lessons to be learned from the past 4 years that can be useful in the design of future coordination and project management arrangements?</p> <p>Are there features of the current execution arrangements (e.g. in organisational culture, management systems, leadership style, partnerships) that should be retained, or changed, to enhance effectiveness and build a sustainable coordination structure?</p> <p>Based on the answers to all questions above, what are the implications for the short-term work plan of the CBC and its</p>	<p>Flexibility in Project execution and changes to original design</p> <p>Existence of legal instruments</p> <p>Existence and efficiency of internal systems</p>	<p>Interviews with all members of staff of the Tri-National Office (TNO)</p> <p>Review of Project technical reports and other documents</p> <p>Review of presentations to 5<sup>th</sup> Technical and Ministerial Meetings</p> <p>Review of draft work plan for 2015</p>

Assessment question	Forward-looking question	Indicators	Sources
<p>What has been the role and contribution of UNEP ROLAC in project execution and administration? How effective and efficient have these been? Were there specific challenges arising from procurement and administrative procedures?</p> <p>Were there specific procurement and other project management issues (e.g. for purchase of equipment for Cuba) and did these affect project execution in any way?</p>	<p>newly established Secretariat?</p>		

12. The evaluation team is satisfied that it has been able to address all questions and that the process used in the assessment has been rigorous, fair and productive. The main instruments and activities used in the evaluation (see more details on programme and process in Annex 3) have been:

- observation of the Technical and Ministerial Meetings held in Santo Domingo, Dominican Republic, 11 – 13 November 2014. These meetings provided much information and an excellent opportunity to observe decision-making processes, to gather the views of participants (countries, donors and other partners) and to identify the critical issues that the evaluation exercise should focus on;
- preparation and submission of an inception report, which provoked useful exchange with Project personnel and the UNEP Evaluation Office (EO), especially around the reconstituted Theory of Change (ToC);
- review of documents and financial data;
- semi-structured interviews, both in person and electronically, with Project personnel and partners (see list in Annex 3);
- interviews with other actors with mandates and / or experience relevant to the Project and its activities (see list in Annex 3);
- field observation of pilot projects and other field activities (see Annex 3 for schedule), visits to facilities constructed or enhanced with Project support, and interviews with participants and beneficiaries, leading to the preparation of individual data sheets (in Spanish and French as the languages of countries involved) (see Annex 7);
- conduct of a de-briefing session at UNEP ROLAC at the end of the country visits to present and seek feedback on preliminary findings;
- preparation and distribution of a short discussion note summarising the main findings of the evaluation (in both English and Spanish), giving partners the opportunity to comment (in writing, or through an online or telephone interview). This proved very useful in testing preliminary conclusions, seeking feedback from the main partners, and validating or adjusting the findings;
- preparation and submission of a zero draft for submission to the EO;
- preparation and submission of this revised draft that integrates all the comments provided by the EO, including the feedback from internal peer review.

13. While this evaluation has involved site visits to most of the projects implemented under Objective 3 and has been informed by a large number of interviews and by a review of relevant documents, it must be stressed that it does not provide a quantified assessment of tasks performed and outputs delivered, as this would have required a much more substantial effort and more time in the field. This evaluation report therefore assumes that the information contained in the various progress reports and financial reports prepared and submitted by the CBC Project partners to the Tri-National Office (TNO) and by the TNO to UNEP has been verified as correct.

14. One of the challenges faced in the evaluation – and this is a challenge that is frequently encountered in the assessment of projects that were designed a few years ago – is that some of the methods and instruments prescribed in more current terms of reference, such as those in the present evaluation, are not all consistent with and applicable to the approach used in past project design. When this CBC Project was formulated in 2009, it was not customary to develop theories of change, and agencies were far less rigorous in their application of results-based management (UNEP made results-based management compulsory in 2010). Therefore, in such circumstances, it can be difficult to reconstitute the logic that guided original project design and this was very much the case in the present evaluation with respect to the place of poverty reduction in the Project's ToC. In addition, project design did not use a robust results-based management framework, and it was therefore somewhat difficult to follow exactly every step in the evaluation's terms of reference, as they assumed the existence of a clear logical framework. All efforts have been made in this evaluation to base the assessment on a reconstituted ToC, but it was at times difficult to apply the assessment methods and tools requested in the Terms of Reference, because they are based on the assumption that project design was consistent with results-based management.

15. The evaluation team is extremely grateful to the staff of the CBC Project Tri-National Office, the Project partners in the three participating countries and colleagues at UNEP ROLAC and the UNEP EO for their support and for the excellent arrangements made for field visits and the various interviews.

### III. THE PROJECT

#### A. Context

16. It is important to consider the context under which this evaluation is carried out, because the CBC is a conservation project that had strong political, institutional, developmental and cultural dimensions. There are perhaps six main observations that should be made which provide a regional context pertinent to this evaluation:

- *the Caribbean islands are biologically rich and diverse*: from a global perspective, the biodiversity of this small region is extremely important. For example, Cuba has 132 endemic species of reptiles, Haiti has 30 endemic species of amphibians, the Dominican Republic has 11 endemic species of fresh water fish, and Jamaica has 3003 flowering plant species, 830 of which are endemic;
- *this biological diversity is threatened*: it is remarkable that such a large diversity of plant and animal life remains on these islands, considering the radical changes that occurred during the colonial era and the current pressures on natural ecosystems. These threats are particularly severe in Haiti, where a combination of historical, social, economic and land tenure factors are responsible for extensive deforestation and the loss of most natural habitats;
- *biodiversity conservation and human development are closely linked*: in islands more than in other landscapes, it is impossible to approach conservation without placing it in its social, cultural and economic context. Activities occurring on land impact on coastal and marine areas, ecosystems are small and interlinked, and most economic sectors (agriculture, mining, fisheries, tourism) and livelihoods depend heavily on the use of natural resources;
- *the insular Caribbean is a region that is culturally and politically fragmented*: while the islands of the Antilles share a common modern history and many cultural

features, the linguistic, geographic and political barriers still existing make collaboration difficult. These barriers are particularly strong on Hispaniola, with a number of historical and other factors at times contributing to tensions between the two countries that share that island. Meanwhile, efforts at regional integration remain timid, and only a very small number of institutions are willing and able to overcome these barriers. The most successful in this regard are those concerned with environment and development, especially those that focus on the Caribbean Sea;

- *environmental protection and human development needs in Haiti are critical and urgent*: all indicators, from life expectancy (63 years<sup>7</sup>) to GDP per capita (USD 820 in 2013<sup>8</sup>) and from natural forest cover (below 4%<sup>9</sup>) to the percentage of people living below the poverty line (58.5%<sup>10</sup>), point to the fact that any initiative concerned with environment and development in this region should consider Haiti as an absolute priority;
- *Cuban institutions and professionals have exceptional skills that they are willing to share, especially with the Caribbean and the rest of the developing world*: indeed, there is a remarkable match between the needs of the region – and especially those of Haiti – and the expertise that Cuba offers, including in the disciplines related to biodiversity and natural resource management.

## **B. Objectives and components**

17. The objectives and expected results of this project were as listed in the following table.

**Table 4: Objectives and expected results**

Objective 1: To define the CBC spatially and compile the relevant existing information
1.1. Collection and analysis of existing knowledge and projects in execution, and identification of gaps in knowledge
1.2. Analysis of existing legislation
1.3. Definition of the specific areas that are central to the CBC
1.4. Creation of an information system and data base
1.5. Creation of an updated Action Plan for the CBC
Objective 2: To facilitate the strengthening of a network of protected areas within the CBC
2.1. Coordination mechanisms between the different systems of protected areas established
Objective 3: To identify and implement livelihood alternatives for the communities and reduce pressures on biological diversity
3.1. Pilot demonstration projects conducted to rehabilitate degraded land and develop alternative livelihoods
3.2. Nurseries functioning for the propagation of plants
3.3. Alternative energy sources in use
3.4. Partnerships between communities and the private sector in place
Objective 4: To contribute to the development of the human resources needed in the participating countries, so as to ensure the sustainability of the conservation and sustainable development activities undertaken in the framework of the CBC
4.1. Instructors of trainers on natural resource management trained to work in the community
4.2. Exchanges between the communities and islands
4.3. Personnel trained in the technical, normative and policy areas

<sup>7</sup> Source: World Health Organisation website, consulted January 2015

<sup>8</sup> Source: World Bank website, consulted January 2015

<sup>9</sup> Source: World Bank website, consulted January 2015

<sup>10</sup> Source: World Bank website, consulted January 2015



4.4. A comprehensive programme of public education and awareness
Objective 5: To facilitate the creation of a tri-national coordination entity to support the creation and development of the Caribbean Biological Corridor
5.1. A tri-national unit of the Caribbean Biological Corridor established
5.2. A liaison mechanism in place at UNEP/ROLAC to handle relations among the various stakeholders
5.3. The Ministerial Policy Tri-National Committee of the CBC in place and functioning
5.4. The technical committee, composed of representatives of the countries, relevant non-governmental organisations and UNEP, established and functioning
5.5. The equipment and supplies needed for the project's functioning acquired

### *C. Target areas/groups*

18. In terms of geography, the Project had several areas of focus:

- at the local level, the targets were the sites where pilot projects were implemented. These were meant to be sites considered important because of their biological diversity (in terms of endemism and connectivity), because of their development and poverty reduction needs, and because of their potential to test and demonstrate methodologies, approaches and results. In practice, however, it seems that these criteria were not applied rigorously and that other considerations also guided the selection; this is discussed in the following section of this report;
- field activities also included the provision and promotion of alternative sources of energy in several locations, as well as the establishment, refurbishing or enhancement of plant propagation centres and training facilities (one in each country);
- at the national and tri-national levels, the focus was on areas considered important for connectivity, and eventually included in the CBC delimitation produced by the Project. The whole of Haiti, the eastern Provinces of Cuba and the western regions of the Dominican Republic were therefore most directly concerned with knowledge production and management work, and by the capacity building programmes and field activities;
- conceptually, the entire insular Caribbean was a target area of the CBC Project and remains that of the CBC Initiative, since the purpose is to create and manage a corridor that currently encompasses three countries (two islands) but may be broadened in the future.

19. In environmental, social and institutional terms, the Project had several primary targets, which can be presented as components of a set of concentric circles:

- at the centre, the targets were the maintenance of biological diversity, the ecosystem services, the communities and the institutions in the sites where pilot projects and other field activities were implemented;
- directly connected to this centre were the organisations and professionals involved in facilitating and implementing the pilot projects and other field activities. Most of these provided services to the CBC Project, but they were at the same time the beneficiaries of its support, activities and linkages;

- the third concentric circle is that of the national institutions with responsibility for biodiversity conservation, natural resource management and related development processes, notably the three ministries responsible for the environment as well as their agencies.

#### ***D. Milestones/key dates in project design and implementation***

20. *The process that eventually led to the design of this project is particularly important and relevant to this evaluation, as it reveals a number of important factors, relationships and contributions.* While there were specific actors and moments that were particularly determinant in formulating the CBC concept and designing the CBC Initiative, and while some of these actors do claim credit for initiating the process, the milestones and events listed below suggest that the CBC Initiative and Project are the products of a convergence of factors, and principally: (a) increased collaboration between the Dominican Republic and Haiti on environmental matters, and discussions aimed at establishing a biological corridor between these two countries, (b) a scientific and political impulse provided by Cuba and especially by its *Centro Oriental de Ecosistemas y Biodiversidad* (BIOECO) located in Santiago, and (c) a growing interest in transboundary conservation and ecosystem-based management among organisations in the region, notably The Nature Conservancy (TNC), partially inspired by the experience of the Mesoamerican Biological Corridor. The CBC Project was also designed at the time when the Critical Ecosystem Partnership Fund (CEPF) was preparing the Ecosystem Profile for the Caribbean Islands Hotspot (BirdLife International 2009), but it appears that there were only limited synergies between the two processes.

21. The list below notes the most important, milestones, dates and events in project design and implementation, as well as selected external events that had significant impact on or relevance to the design of the CBC Initiative and Project, and to the implementation of this project.

2004

- May: major flooding with severe impacts on communities of Fonds Verrettes and Mapou in Haiti and on the other side of the border in the Dominican Republic, prompting closer dialogue between environmental agencies, experts and leaders in the two countries
- September: Haiti's Ministry of the Environment sends delegation to observe meeting of the management committee of the Biosphere Reserve in the Dominican Republic
- November: agricultural fair in Azui, attended by Ministers of the Environment of the Dominican Republic (Max Puig) and Haiti (Yves-André Wainright), cooperation issues high on agenda

2005

- December: Jacmel, Haiti workshop on the establishment of a Biosphere Reserve and Corridor between the Dominican Republic and Haiti (Haiti 2005), with the issuance of a Declaration providing for the establishment of a biological corridor between the two countries

2006

- Cuba signs separate framework agreements with the Dominican Republic and Haiti, providing for cooperation in several areas, including environment

2007

- technical meetings held with the three participating countries to begin formulation of concept and project
- technical and ministerial meeting convened by UNEP, leading to the issuance of the Declaration of Santo Domingo
- The Nature Conservancy releases a report entitled "Biodiversity Conservation Assessment of the Insular Caribbean Using the Caribbean Decision Support System", which includes specific

information and recommendations directly relevant to a biological corridor (Huggins et al. 2007)

2008

- January: technical meeting held in the Dominican Republic under the auspices of the Global Environment Facility (GEF), countries take the opportunity to advance discussions on design of a CBC project, and decide to create a technical commission, under the auspices of UNEP, to develop a plan of action
- Haitian expert receives fellowship to observe Mesoamerican Biological Corridor
- four hurricanes hit Haiti (Fay, Gustav, Hanna, and Ike) with very substantial loss of life and damage, while Cuba is affected by three hurricanes (Gustav, Ike and Paloma) and one tropical storm (Fay)
- October: EU-Cuba cooperation is resumed

2009

- March: ratification of the Declaration of Santo Domingo by the representatives of Cuba, the Dominican Republic, Haiti, Cuba and UNEP
- August: release of the Plan of Action for the CBC
- December: signing of the contribution agreement between the EU and UNEP

2010

- 12 January: earthquake in Haiti
- March: 1st Technical and Ministerial Meetings
- March: first revision of the agreement and no-cost extension
- August: IT Specialist at ROLAC spends 10 days in Barahona to set up equipment and communication systems at TNO
- September: opening of TNO in Barahona
- October: outbreak of cholera epidemic in Haiti

2011

- June/July: first EU monitoring mission and report
- 2nd Technical and Ministerial Meetings, Barahona, Dominican Republic

2012

- February: Nicasio Viña is appointed Technical Director
- April: 1st addendum to the agreement between the EU and UNEP, with extension of project duration to 42 months
- May – July: mid-term evaluation (report dated 3 August)
- June: opening of the propagation centre in Dosmond, Haiti
- June/July: second EU monitoring mission and report
- July: responsibility for project coordination at ROLAC is transferred from Mark Griffith to Isabel Martinez
- 18-20 September: 3rd Technical and Ministerial Meetings in Montrouis (Haiti), selection of three of the pilot project sites in Haiti (Caracol, Fort Drouet and La Gonâve), approval of indicators for demarcation (based on report released by TNO in August 2012)
- 25 October: Hurricane Sandy hits south-east Cuba

2013

- May: 4th Technical and Ministerial Meetings
- June: 2nd addendum to the agreement between the EU and UNEP, with extension of project duration to 54 months, and with revised project description, logical framework and budget
- August: opening of the propagation centre in Pedro Santana, Dominican Republic
- 7 December: formal launch of the pilot project in Dosmond, Haiti
- 10 December: formal launch of the pilot project in Bassin Bleu, Haiti

2014

- February: signing of Jimani cooperation agreement between the Dominican Republic and Haiti in environmental matters, with specific reference to the CBC
- May: 3<sup>rd</sup> addendum to the agreement between the EU and UNEP, with extension of project duration to 60 months, and with revised project description, logical framework and budget
- 19 June: formal launch of the pilot project at Caracol, Haiti
- 1 July: formal launch of the pilot project at La Gonâve, Haiti
- 8 July: formal launch of the pilot project at Fort Drouet, Haiti
- 11 – 13 November: 5<sup>th</sup> Technical and Ministerial Meetings in Santo Domingo (Dominican Republic)

#### ***E. Implementation arrangements***

22. The main elements of implementation arrangements were as follows:

- the agreement financing the project and governing its execution was signed between the Delegation of the EU to the Dominican Republic and UNEP (grant contract 203-175). This agreement designated this Delegation of the EU as the representative of the contracting authority;
- under this agreement, UNEP ROLAC was the designated implementing agency. In this implementation, ROLAC was guided by and reported to Technical and Ministerial Meetings that were held annually, but there was no formal instrument to govern these meetings and the relationship between UNEP ROLAC and the countries<sup>11</sup>. These meetings received progress and financial reports, reviewed and approved work plans and budgets, and considered the issues and proposed decisions placed on their agendas. In 2012, 2013 and 2014, the decisions made at these meetings were formally recorded and documented;
- each participating country designated a National Focal Point, or two in the case of Cuba, where there was a Technical Focal Point at BIOECO in Santiago who also supervised the field projects, while the National Focal Point was actually based at the *Ministerio de Ciencia, Tecnología y Medio Ambiente* (CITMA) in Havana;
- at ROLAC, there was a Programme Officer designated as Project Manager / Coordinator (Mark Griffith until July 2012, Isabel Martinez since then), who reported to the Regional Director and Representative. The other ROLAC personnel who have been most directly involved in supporting Project implementation were one Liaison Officer (Franklyn Bethancourt, replaced by Paulett James-Castillo in April 2013), and an Administrative Assistant (Maybeth Fuentes since February 2014). Other members of the ROLAC Team who provided occasional support to the Project were those responsible for communications, information technology and financial management and reporting;
- day-to-day operations and project execution were the responsibility of a Tri-National Office (TNO) led by a Technical Director, with an understanding

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<sup>11</sup> This implies that, legally, UNEP was only accountable to the EU, even if the Ministerial Meetings served as the *de facto* higher organ of governance of the Project. At the beginning of the Project, discussions were held between the Government of the Dominican Republic and ROLAC regarding an agreement for the hosting of the TNO, but these were not finalized. The first formal agreement is therefore the one signed in November 2014.

among Project partners that this position would be filled by a Cuban national. It is however not until March 2012 that this decision was implemented and that a permanent Technical Director (Nicasio Viña) was appointed<sup>12</sup>. At one point (between February 2012 and November 2013), the TNO had a total staff of ten persons, including four Specialists (Ematel Belance, Nobert Dechanel, Freddy Rodriguez and Roberto Vargas), one Communications Specialist (Blanca Romaña), two Project Assistants (Ketty Alphonse and Eunice Merillien) and two Drivers (Manuel Feliz and Jean Harry Sinous);

- collaboration with selected non-governmental organisations was governed by memoranda of understanding (MOU), and three such MOUs were signed, with *Grupo Jaragua* in the Dominican Republic in January 2013, with *Welthungerhilfe* (WHH, also known as *Agro Acción Alemana*) in July 2013 and with the *Fundación Antonio Nuñez Jimenez para la Naturaleza y el Hombre* (FANJ) in Cuba in April 2014. These were broad institutional cooperation agreements that did not specify activities and did not have financial implications;
- execution of specific activities were governed by small-scale financing agreements (SSFA) between UNEP and partners, and in total there were eight six such agreements:
  - December 2010, with the *Université Quisqueya* in Haiti, for technical assistance in setting up and managing the Community Based Propagation and Training Centre at Dosmond, USD 105,000, amended to USD 113,197 in October 2012;
  - July 2012, with the Ministry of the Environment and Natural Resources of the Dominican Republic, for the establishment of a Community Based Propagation Centre, USD 55,000;
  - April 2013, with the *Asociación Mundial de Radios Comunitarias para América Latina y el Caribe* (AMARC ALC), for the production of radio spots, USD 34,600;
  - October 2013, amended May 2014, with WHH, for the pilot projects in Bassin Bleu and Dosmond, USD 137,300;
  - November 2013, amended May 2014, with the *Centro para el Desarrollo Agropecuario y Forestal* (CEDAF) in the Dominican Republic, for three pilot project activities in Pedro Santana, USD 87,366;
  - January 2014, with the Ministry of the Environment and Natural Resources of the Dominican Republic, for the establishment of a photovoltaic system in Las Palmas, USD 15,000;
  - March 2014, amended June 2014, with BIOECO, for pilot projects in Baitiquirí and Siga (Verraco) as well as establishment of propagation centre, USD 30,483.75;
  - May 2014, with the Ministry of the Environment of Haiti, for pilot projects at Caracol, Fort Drouet and La Gonâve, USD 125,000.

## ***F. Project financing***

23. The total budget of the project was EUR 2,882,835.00, with EUR 2,774,835.00 contributed by the European Union and EUR 108,000.00 contributed in kind by UNEP. The original budget did not specify counterpart contributions or co-financing targets, but the contributions of Project partners, both in kind and in cash, were very substantial.

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<sup>12</sup> Before this appointment, an Interim Director served for a period of a little less than one year, followed by one of the Specialists (Norbert Dechanel) acting as Director until March 2012.

Unfortunately, while the UNEP Manual for recommended practice on reporting on co-financing recommends that such inputs be recorded, most of these contributions were not recorded and quantified during the course of the Project. The information provided by UNEP ROLAC and the TNO in this regard is presented in Annex 5.

### ***G. Project partners***

24. Project partners can perhaps be grouped in two categories. First, there were a number of agencies that were formally linked to the Project. These were:

- the European Union as the Contracting Authority, with three Delegations directly concerned, and with the Delegation in the Dominican Republic playing a key role in project supervision and facilitation;
- UNEP as the Implementing Agency, with the involvement of staff and consultants at Headquarters in Nairobi, at ROLAC in Panama and at the TNO in Barahona;
- the United Nations Development Programme (UNDP), as the manager and signatory of seven of the Service Contracts with staff of the TNO;
- the Ministry of Science, Technology and the Environment (CITMA) of Cuba, the Ministry of the Environment and Natural Resources (MARN) of the Dominican Republic and the Ministry of the Environment (MDE) of Haiti, as the primary beneficiaries of and partners in the project and, in the case of MARN and MDE, also as executing agencies of specific SSFAs in the Dominican Republic and Haiti;
- three agencies of CITMA: BIOECO and the *Centro de Aplicaciones Tecnológicas para el Desarrollo Sostenible* (CATEDES), as executing agencies of specific SSFAs in Cuba, and a Technical Focal Point of the Project in the case of BIOECO, as well as the *Centro de Información y Gestión Tecnológica* (CIGET – also known by the acronym MEGACEN) for the design and maintenance of the website;
- CEDAF, *Université Quisqueya* and WHH, as executing agencies of specific SSFAs in the Dominican Republic and Haiti respectively, and as signatory of a broader MoU in the case of WHH;
- AMARC ALC, as the contractor for the production of specific communication materials;
- two other signatories of MoUs, namely FANJ in Cuba and Grupo Jaragua in the Dominican Republic.

25. In addition, the Project involved a significant number of partners that were at the same time beneficiaries on Project activities and sources of technical expertise, notably:

- individuals and community organisations, including local government agencies, in the ten localities where pilot projects and other field activities were implemented;
- the decentralised offices of the lead ministries in the three participating countries, as well as other public sector agencies such as ministries of agriculture in the case of the establishment and management of nurseries, as participants in pilot projects and other field activities;
- a small number of bilateral development partners with interest or involvement in programmes linked to the CBC Project, such as the *Deutsche Gesellschaft für Internationale Zusammenarbeit* (GIZ);
- UNESCO, because of its involvement in the Biosphere Reserves located within the demarcated Corridor;
- UNEP's Marine Environment Regeneration programme in the *Département du Sud* (MER Sud);
- the Caribbean Regional Coordinating Unit (CAR/RCU) of the Caribbean Environment Programme (CEP), which is located in Kingston, Jamaica and serves as the Secretariat of the Cartagena Convention and its various Protocols;

- representatives from Jamaica and Puerto Rico who participated as observers in Technical and Ministerial Meetings and expressed interest in collaborating with the CBC Project and Initiative.

#### *H. Changes in design during implementation*

26. The establishment of the CBC was designed as a concerted regional cooperation framework and as a strategy to address biodiversity loss by shared ecosystems and for the creation of livelihood opportunities in rural communities for sustainable development and poverty alleviation, particularly in Haiti (see EU Contribution Agreement with an International Organization contract 2009/203 175). This Contribution Agreement was subject to review and adjustments in three successive amendments (signed in April 2012, June 2013 and May 2014) that extended its duration and allowed for adjustments in the planning and scheduling of activities and in the corresponding budget lines.

27. The main changes made (in addition to the extensions in duration) were the following:

- editing and improved consistency of the original document, addressing the issues in the logical framework pointed out by the EU's 2011 and 2013 monitoring reports. In particular a revised logical framework was prepared (February 2013). While maintaining the core CBC Project objectives, this new framework reworded the specific objectives in more detail, with the five objectives and respective expected results as they appear in Table 4 of this report. It also revised the "sources and means of verification" in a more cohesive manner and in keeping in line with the expected results. It further introduced the elaboration of an Operative Plan of Action for the implementation of the CBC, as a tool in the process of planning and monitoring of implementation (original July 2013- June 2014 and revised July-December 2014);
- the original design of the Project envisaged a total of seventeen field projects. This was later reduced to ten, a wise decision considering the limited resources available and the complexity and cost of project execution;
- the original design envisaged the establishment of a regional training facility in Cuba, but the first Technical and Ministerial Meetings of March 2010 reviewed this matter and agreed that the training facility would be located in Dosmond, Haiti;
- the original reference to the World Food Programme (WFP) was removed, since consultation with that organisation between October 2012 and January 2013 identified no concrete opportunities for synergies at the time;
- Objective 2, regarding the strengthening of a network of protected areas within the CBC, was simplified, given its projected reliance on other protected area projects of relevance to CBC countries, such as those financed by the GEF, and consequently no CBC funds were assigned to this objective;
- updating to reflect achievements and activities that had been completed (for example the establishment of the TNO, more active coordination with the national focal points), in particular a summary of the status of the pilot projects was given, following agreements on the selection and overall design of these projects at the 4th Technical and Ministerial Meetings (May 2013), including changes in the selection of pilot projects in Haiti and the strengthening of cooperation with external partners (e.g. CEDAF in the Dominican Republic and WHH in Haiti).

## *I. Reconstituted Theory of Change (ToC)*

28. The diagram below represents the Project's reconstituted ToC as presented in this evaluation's inception report. Because the original project document did not contain a ToC and because its logical framework was weak<sup>13</sup>, this reconstitution is somewhat tentative and relies on both the original project document and interviews with individuals involved in the preparation of that project document. In this reconstituted ToC, the outputs are based on the objectives of the original project document, but worded in a language more consistent with results-based management, and are treated as outcomes in the tables below:

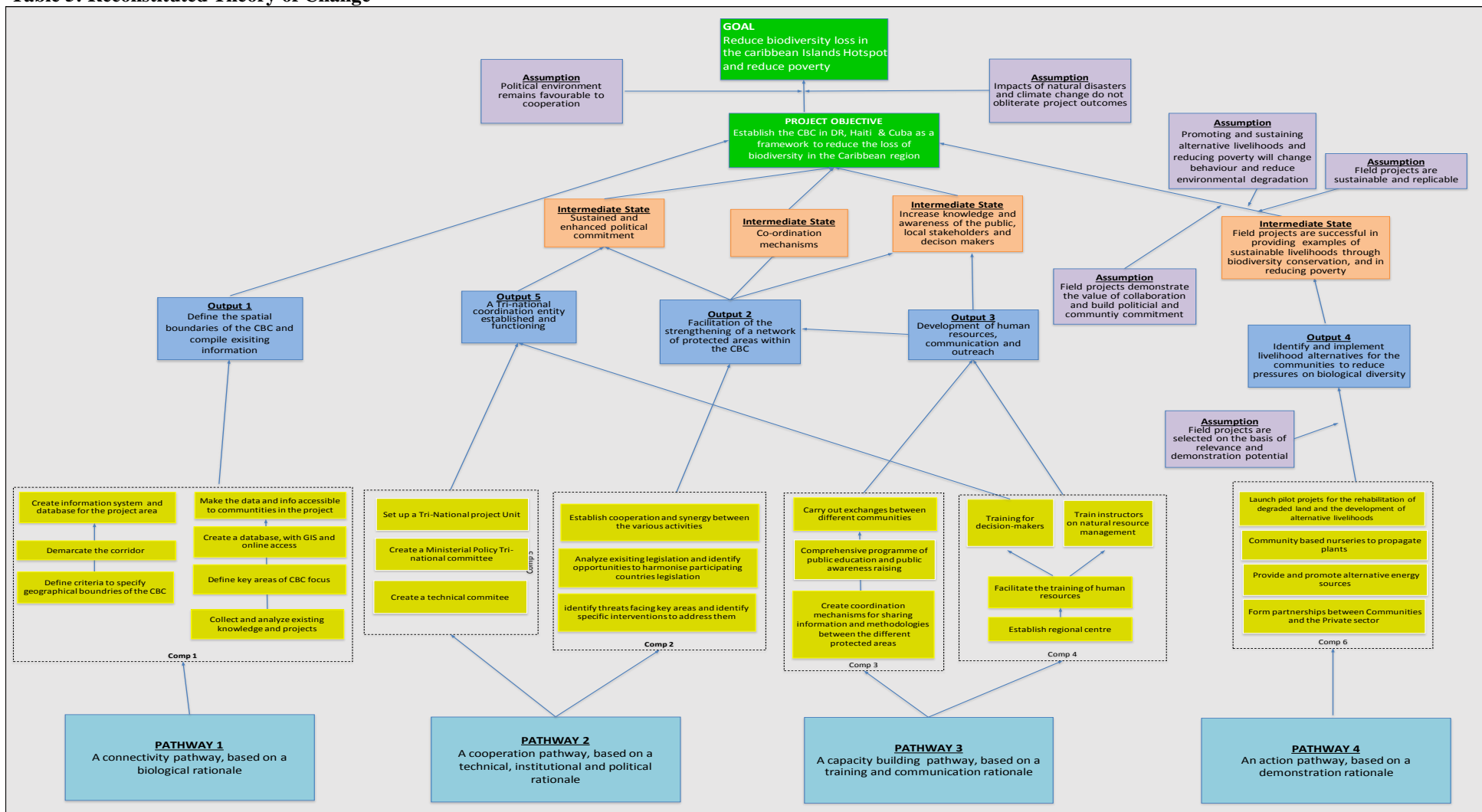
- poverty reduction remains a goal in the reconstituted ToC, since this was the original intent spelled out in the project document, but it is also noted as an assumption (that poverty reduction contributes to biodiversity conservation and environmental sustainability), as this evaluation has concluded that poverty reduction could not be a realistic goal of this project and that the Project's ambition could only have been to use poverty reduction and alternative livelihoods as vehicles for enhanced conservation;
- this is why this reconstituted ToC proposes that all field activities, notably the pilot projects and the provision and promotion of alternative sources of energy, are primarily justified for their demonstration and replication potential (Pathway 4);
- under Pathway 2, the reconstituted ToC gives great importance to cooperation, as this is at the core of the CBC concept, both as an output and outcome of Project activities, and as a strategy to achieve these;
- political commitment, which is clearly at the origin and at the core of the Project, is also presented here as an intermediary state, and as a condition to achieve the Project objective.

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<sup>13</sup> One of the participants in the design process noted that the logical framework used by UNEP in the project document was different from the one developed and approved by the participating countries.



**Table 5: Reconstituted Theory of Change**



## IV. EVALUATION FINDINGS

### A. Strategic relevance

29. *The CBC Initiative and the CBC Project, as conceived, are highly relevant to the needs and priorities of the region.* This relevance resides primarily at seven levels: (a) the Caribbean Islands, and especially the Greater Antilles, have a very rich biodiversity that must be conserved and managed, especially considering the high levels of endemism, (b) some of that terrestrial biodiversity, essentially the avifauna, relies on the connectivity between habitats located on different islands and countries, (c) biodiversity conservation cannot be achieved outside of its social and economic context, (d) strengthening conservation and reducing poverty in Haiti are priorities, (e) the three participating countries have complementary and converging capacities and needs that can be well served by increased South-South cooperation, (f) such cooperation is consistent with and contributes to the agenda of regional integration in the Caribbean, and (g) the CBC offers the possibility to build a framework for cooperation on environment in order to share relevant information and increase capacity in the participating countries.

30. *The CBC Project is also fully consistent with UNEP mandate and policies.* This is discussed further in Section IV.G below.

31. *In practice the CBC Project has lost some of its original relevance.* This is primarily due to two factors: (a) while connectivity should be at the heart of the concept of biological corridor, as part of a broader approach to also considers endemism and the linkages between biodiversity and livelihoods, some of this necessary focus on connectivity has been lost, to some extent, during the course of project design and execution, because some of the pilot projects have limited relevance to connectivity, insufficient attention has been paid to the generation of new knowledge on connectivity and related conservation requirements under Objective 1, and some of the main actors in conservation in the Dominican Republic and Haiti have played only a marginal role in the project; and (b) as mentioned elsewhere in this report, the CBC Project's ambitions with respect to poverty reduction in Haiti may have been far too high and its approaches may not have been entirely suitable. The Project however remains relevant to the priorities of the participating countries and institutions, as testified by the level and quality of engagement at technical and political levels.

32. *The CBC Project's activities in knowledge generation and management (Objective 1), in capacity development and networking (Objectives 2 and 4) and in networking (Objective 4) were all highly relevant to the needs of the participating countries.* The main observations that can be made in this regard are as follows;

- for a number of historical, political and institutional reasons, prior to this project the three participating countries did not have a functioning and coordinated mechanism for the management of information on biodiversity, and lacked a centralised inventory of documents, on-going projects and institutions. Many of the activities under Objective 1 therefore aimed at responding to these needs, and all interventions planned and executed in knowledge management were highly relevant;
- one weakness, however, is that the design of Objective 1 may have assumed that the information required to delimitate the corridor was already available, and thus did not include new research, which would have been needed to address and enhance connectivity. Connectivity indicators were certainly applied in delimitation, but only on the basis of previously available information;
- coordination and networking, especially among protected areas, are directly relevant to biodiversity conservation and connectivity;

- training activities as designed were all relevant, especially as they aimed to target various levels, but with the challenge of ensuring that new capacities and expected behavioural changes are informed by and consistent with the local cultural context.

33. *The field projects present varying degrees of relevance.* Observations made on each of the field projects are summarised in Table 7 below, with more detailed information provided in Annex 7. Taken collectively, the field project sites have limited relevance to the core objective of managing biological connectivity, but they usefully complement the main conservation areas in Haiti (Massif de la Selle and Massif de la Hotte). The relevance of the CBC Project’s activities in alternative energy sources is particularly questionable. Surely, installing photovoltaic lights in Dosmond (Haiti) and on public buildings in the community of Las Palmas (Pedro Santana, Dominican Republic) or distributing stoves in La Gonâve (Haiti) can be beneficial to the recipient institution, community or household, but the CBC Project’s interventions in these domains are not different from those of many other organisations, they do not add value or innovation to what is already being done by actors more specialised and experienced in these fields, they do not help transform the policy and market environment which is the determining factor in energy use in those countries, and the expected impacts of these activities on biodiversity conservation is unclear.

### ***B. Achievement of outputs***

34. The project’s success in producing expected results is presented and discussed in the table below. This table follows the structure of the original project document and of the most recently revised logical framework, and its purpose is to determine the extent to which the project achieved the activities and results it intended to achieve.

**Table 6: Achievement of outputs**

Results	Achievements	Discussion
Objective 1: To define the CBC spatially and compile the relevant existing information		
1.1. Collection and analysis of existing knowledge and projects in execution, and identification of gaps in knowledge	Bibliography compiled with over 2,000 entries  Pilot project sites characterised  Inventory of institutions prepared with 335 entries  Field assessments conducted in Cuba	The Project has compiled a large amount of information (maps, bibliography, data base)  There is no available publication that compiles and communicates the identification of gaps in knowledge  Much of the characterisation work has focused on the pilot project sites, which are small and limited in scope and do not provide a significant coverage of the CBC’s biodiversity. Only in Cuba has the Project carried out new field research in Core Zones
1.2. Analysis of existing legislation	National reports on legislation produced  Recommendations for institutional arrangements formulated	Taken together, the studies and reports contain a very large number of valid recommendations, but it is not clear if there is a demand for these recommended changes, and there is no explicit strategy or any ranking of priorities. Considering the complexity of legal reform process, it is not certain that these analyses will lead to significant changes in the short to medium term
1.3. Definition of the specific areas that are central to the CBC	CBC delimited, with Core Zones and Connectivity Zones	CBC delimitation has been done on the basis of available information, which is based more on endemicity and local conservation priorities than on connectivity  This evaluation did not gather any evidence that

Results	Achievements	Discussion
		the Ecosystem Profile produced by the Critical Ecosystem Partnership Fund (CEPF) was used in the delimitation process
1.4. Creation of an information system and data base	<p>Website created, with access to the data base and maps</p> <p>At least 973 data layers of GIS data collated</p>	<p>Website has many links that were not functional at the time this report was being written</p> <p>There are no explicit arrangements for continued maintenance and updating of the website and the data base</p> <p>The data base and map of sites of interest only has information related to the project</p> <p>This evaluation did not see evidence of linkages between the CBC's Geographic Information System (GIS) and the national data bases in the participating countries</p> <p>This evaluation did not receive evidence that the data base is used to any significant extent by scientists, planners, managers and policy-makers, and the scale at which the geographic information is presented may be unsuitable for planning and decision-making</p>
1.5. Creation of an updated Action Plan for the CBC	<p>Proposal for establishment of a Secretariat produced, with six options identified and assessed</p> <p>Agreement to establish a Secretariat signed in November 2014 at the 5<sup>th</sup> Ministerial Meeting</p>	<p>The revised logical framework of February 2013 (original Spanish) expresses this result as the formulation of a long-term strategic plan. The Project has not produced an updated action plan nor a strategic plan (but elaborated an Operative Plan of Actions), and the agreement to establish the Secretariat does not provide any guidance on vision, strategy, programming or governance of the CBC</p> <p>In response to a Decision of the 4<sup>th</sup> Ministerial meeting, the TNO prepared and submitted, at the 5<sup>th</sup> meeting, a paper on identification of funding sources, but this only identified two sources, both from the EU</p>
<b>Objective 2: To facilitate the strengthening of a network of protected areas within the CBC</b>		
2.1. Coordination mechanisms between the different systems of protected areas established	Bi-national scientific workshop on Biosphere Reserves in the Dominican Republic and Haiti held	<p>This objective is vaguely defined in the project document and successive logical frameworks, and the budget did not make specific allocations for activities aimed at this objective and the project originally alludes to the role of GEF and the need for cooperation in this regard, but the projects that were expected through GEF funding did not materialise</p> <p>The Project has helped in fostering some collaboration between protected area managers, but the value it has added to other regional initiatives is questionable</p> <p>The Project has facilitated the exchange of expertise, especially through the technical assistance provided by Cuban institutions</p>
<b>Objective 3: To identify and implement livelihood alternatives for the communities and reduce pressures on biological diversity</b>		

Results	Achievements	Discussion
3.1. Pilot demonstration projects conducted to rehabilitate degraded land and develop alternative livelihoods	10 pilot projects implemented, see Table 7 for more detailed information	<p>Projects have been implemented over a very short time frame, in most cases too short to expect significant impacts</p> <p>Restoration of degraded land is underway (recent plantations and erosion control) in all projects where forecasted</p> <p>Livelihoods have been significantly enhanced in only one instance (through agricultural production in Verraco, Cuba), but potential exists in all cases if processes are sustained and enhanced</p> <p>The projects have not been designed and implemented as true pilots, i.e. with documentation and sharing, except to some extent in one case (Verraco, Cuba)</p>
3.2. Nurseries functioning for the propagation of plants	<p>Nurseries established and functioning effectively in the three participating countries</p> <p>Training centre established in Siboney, Cuba</p>	<p>National agencies have been involved and are now providing resources to ensure that the nurseries are managed and maintained in operations</p> <p>The facility in Siboney is located within a well-managed protected area and has great potential as a training centre of national and regional significance, because of the expertise available locally, the existence of effective and sustained conservation programmes, and the quality of the training and accommodation infrastructure established or restored by the Project</p>
3.3. Alternative energy sources in use	<p>Renewable energy projects implemented in Las Palmas (Dominican Republic) , Baitiquirí (Cuba), and Dosmond and La Gonâve (Haiti)</p> <p>Stoves modified (charcoal) and/or distributed in Dosmond and La Gonâve</p>	<p>The contribution of these projects to the goals of a biological corridor is questionable</p> <p>Three of the four photovoltaic equipment projects are actually components of pilot projects implemented under Result 3.1</p>
3.4. Partnerships between communities and the private sector in place	Collaboration with formal or informal user groups and community organisations in the pilot projects in Cuba, Haiti, and the Dominican Republic	<p>It is doubtful that the original intent was to limit this result to collaboration with community groups in the pilot projects, as the project description refers to investments by the private sector and the creation of a Revolving Micro Enterprise Fund. This may however have been too ambitious, and unrealistic considering the realities of the three countries and of the pilot sites, despite the value and importance of partnerships with the private sector for sustainability</p> <p>At the third Technical Meeting in September 2012, the TNO noted the challenges associated with this result and sought guidance from the meeting, but the recommended decision to expand work in this direction was not approved</p>
Objective 4: To contribute to the development of the human resources needed in the participating		

Results	Achievements	Discussion
countries, so as to ensure the sustainability of the conservation and sustainable development activities undertaken in the framework of the CBC		
4.1. Instructors of trainers on natural resource management trained to work in the community	Two training of trainers courses held	
4.2. Exchanges between the communities and islands	Exchange visit to Cuba for Haitian professionals held	A study tour to Cuba was successfully organised for the benefit of Haitian professionals  There is greater potential for exchanges between the communities involved in the pilot projects
4.3. Personnel trained in the technical, normative and policy areas	18 courses held at the provincial level (4 in Cuba, 8 in Haiti and 6 on the Dominican Republic)	Several courses have been held, mainly at the level of pilot project sites, but the original intent was to design and offer training activities that would build skills and capacity at a scale larger than the pilot projects
4.4. A comprehensive programme of public education and awareness	Website created, newsletter published and distributed, educational materials produced as part of pilot projects, CBC concept and Project promoted	It may have been too ambitious to envisage a comprehensive programme of public education and awareness, and the CBC Project lacked a truly strategic approach with identified target audiences and pathways to meet specific communication objectives  The support provided by the UNEP/ROLAC Communications Office was useful but insufficient, especially considering the challenge of communicating in three languages (Creole, French and Spanish)  The only SSFA signed for communications work was with AMARC ALC, but its performance was somewhat unsatisfactory
Objective 5: To facilitate the creation of a tri-national coordination entity to support the creation and development of the Caribbean Biological Corridor		
5.1. A tri-national unit of the Caribbean Biological Corridor established	Unit established and functional	The TNO has functioned effectively  The location of the office in Barahona has presented a number of practical challenges for operations and day-to-day functions  Conditions of recruitment and systems of human resource management were somewhat complicated, and to some extent unfair to project personnel
5.2. A liaison mechanism in place at UNEP/ROLAC to handle relations among the various stakeholders	Effective project implementation and execution	There were obvious communication challenges until mid-2012, in part due to capacity issues within the TNO, and in part due to diverging opinions and perspectives between the TNO, ROLAC and the participating countries  Delays in the appointment of the permanent Technical Director affected project execution during the first two years  Arrangements since mid-2012 (as described in Section E above) have been efficient and satisfactory, but have placed high demands on

Results	Achievements	Discussion
		time and resources at ROLAC
5.3. The Ministerial Policy Tri-National Committee of the CBC in place and functioning	Ministerial Committee meetings held, with adequate planning and documentation, and with the recording of decisions	The Committee functioned well, but its roles and responsibilities were not explicitly spelled out
5.4. The technical committee, composed of representatives of the countries, relevant non-governmental organisations and UNEP, established and functioning	Technical Committee meetings held	The committee functioned well, with good participation of the three ministries and the main Project partners  There is a feeling among civil society that the opportunities for its participation in the work of the Technical Committee were limited
5.5. The equipment and supplies needed for the project's functioning acquired	Equipment and supplies acquired	The vehicles and other equipment acquired for the TNO have been well maintained  At the end of the Project, the ownership of the vehicles and other major pieces of equipment was appropriately transferred to the countries (December 2014)

35. The construction, establishment and operations of the three propagation centres in Cuba, the Dominican Republic and Haiti, constitute a significant accomplishment by the project. They were conceived to facilitate the rehabilitation of degraded areas and have supported the reforestation efforts in their respective countries, with both native species and fructiferous trees. The centres have been constructed taking into account a few parameters devised to maximize their long term success and contributions to the surrounding communities where they are located, as follows: (a) availability of land to sustain areas for germination, production of composting and humus, office space, storage of equipment and the construction of living quarters for staff; (b) presence of a source of water; (c) easy access and proximity to main roads and (d) proximity to local communities with underutilised labour force.

36. The three facilities were established on public lands, and there has been a good level of institutional engagement and of contributions in maintaining operations of the centres in the three countries by their respective Ministries of Environment or Agriculture, evidenced by the recruitment of staff and the supply of materials. Whereas such levels of contribution have varied in each country over the span of project implementation, the centres have all accomplished their main objective and will remain important tools for the rehabilitation of degraded habitats, especially in the areas where they are located.

37. While it would not be possible for this evaluation to quantify the exact reforestation rates resulting from the centres, it is fair to say that such reforestation is being effective not only because it is being constantly monitored (for pest and fire control), but because it has served as an important vehicle for education and awareness raising in local communities where such activities take place, e.g. Los Rinconcitos, Dominican Republic in the protection of the guano palm sites, in Dosmond, Haiti with the plantation of coffee and reforestation within the village and in Verraco, Cuba with village-based agriculture.

38. Observations made with respect to each pilot project (Result 3.1) are summarised in this table (see Annex 7 for data sheets on all projects elaborated in Spanish and French as the languages of participating countries and for the benefit of local partners).

**Table 7: Summary status of pilot and field projects**

Country	Name of project	Status of pilot project
Cuba	Desarrollo de una rehabilitación ambiental y mejoramiento de calidad de vida en la Reserva Ecológica Baitiquiri	<p>Main objectives: Environmental restoration and enhancement of the quality of life of people living in and near the Ecological Reserve of Baitiquiri, coupled with the installation of a photovoltaic system in the video room of the local primary school</p> <p>Lead agency: BIOECO</p> <p>Main partners: CATEDES and local community institutions</p> <p>Start date: March 2014</p> <p>Relevance: high relevance to biodiversity and to local development needs, critical conservation area, relevance of forest and soil restoration methodologies to local conditions</p> <p>Impact: community awareness increased, management partnerships enhanced, too early to assess impact on natural habitats and biodiversity</p> <p>Implementation: all activities implemented or underway as planned, except for procurement and installation of PV units. Project complemented by successful installation of PV on community centre in the village of Baitiquiri</p> <p>Sustainability: BIOECO, CATEDES and management of Ecological Reserve committed and fully qualified to sustain activities</p>
	Desarrollo de alternativas locales para la gestión y uso sostenible de los recursos agrícolas y conservación de la biodiversidad en la comunidad Verraco, Consejo Popular Sigua	<p>Main objective: Development of local alternatives for income generation, sustainable livelihoods and biodiversity conservation in the community of Verraco</p> <p>Lead agency: BIOECO</p> <p>Main partners: Popular Council</p> <p>Start date: March 2014</p> <p>Relevance: high relevance to local economic development, limited relevance to biodiversity</p> <p>Impact: village farms successfully established and in production, community mobilised</p> <p>Implementation: training and technical assistance provided to farmers, materials produced and distributed</p> <p>Sustainability: farming activities sustainable without external support</p>
Haiti	Contribution à la préservation de la biodiversité dans la zone de Bassin Bleu	<p>Main objective: Contribute to the preservation of biodiversity and sustainable management of the micro watershed of Bassin Bleu through the implementation of improved agricultural techniques, training of tourism guides and quality control of the environment by a local executive committee</p> <p>Lead agency: <i>Welthungerhilfe</i> (WHH) – (German non-governmental organisation also known locally as <i>Agro-Action Allemande</i>)</p> <p>Main partners: Ministries of the Environment and Tourism and the</p>



Country	Name of project	Status of pilot project
		<p>executive committee of ODBJ (<i>Organisme de Développement de Bassin Bleu Jacmel</i>)</p> <p>Start date: December 2013</p> <p>Relevance: site with potential demonstration value for future replication elsewhere in Haiti in the development of a community-based approach to sustainable tourism practices and habitat restoration, limited biodiversity value</p> <p>Impact: increases in number of visitors and guides' income, too early to assess environmental impact</p> <p>Implementation: pre-existing visitor centre improved, training provided to local guides, signage on trails and materials developed, planting initiated towards restoration of site</p> <p>Sustainability: waste management required (solid and liquid) and need for overall enhancement of site (signs, access, materials to be handed out, etc.); control of goats required to minimize waste and erosion to the area and protect plants; sustainability of tourism development efforts dependent on continued involvement of Ministry of Tourism</p>
	<p>Contribution à l'amélioration de la condition de pêche pour la conservation de la biodiversité à Caracol</p>	<p>Main objective: Contribute to the reduction of pressures on biodiversity through capacity building of local communities in habitat rehabilitation methods, in particular sustainable fishing practices.</p> <p>Lead agency: Ministry of the Environment</p> <p>Main partners: Ministry of Agriculture and Natural Resources, and <i>Brigade Maritime en Action</i> (BMA), a local fishing association</p> <p>Start date: June 2014</p> <p>Relevance: area with significant biodiversity but vulnerable, valuable for ecosystem services and sustainable use of resources, socio-environmental relevance</p> <p>Impact: too early to be determined, no change in fisheries methods/practices or gear use</p> <p>Implementation: awareness materials and signs not produced (after the evaluation visit), 30 hectares of mangroves demarcated and cleaned (not accessed during evaluation visit due to flooding in the area), fishers and community leaders trained</p> <p>Sustainability: dependent on enhanced partnerships and continued capacity building</p>
	<p>Réduction de la pression sur la biodiversité par la promotion et de développement des énergies renouvelables dans la localité de Dosmond</p>	<p>Main objective: Contribute to the conservation of biodiversity reducing pressures, especially promoting renewable energy sources and supporting activities related to sustainable coffee production.</p> <p>Lead agency: WHH</p> <p>Main partner: Ministry of the Environment</p> <p>Start date: December 2013</p>

Country	Name of project	Status of pilot project
		<p>Relevance: while the promotion of alternative energy sources is beneficial to the environment (especially to reduce deforestation), linkages between renewable energy development and the specific conservation objectives of the CBC unclear</p> <p>Impact: enhanced community awareness of sustainability issues, short-term employment created</p> <p>Implementation: most planned activities completed, but biogas units constructed still requiring testing; 10 PV lamps installed instead of 30 (not enough funds available by the time units were bought as prices were in reality higher per lamp than forecasted in project design) but 3 biogas units installed instead of one planned; instead of 5,000 coffee plants forecasted, 30.000 planted; community trained for confection of modified stoves</p> <p>Sustainability: presence of organisational capacity and leadership in the community, where strengthening of governance mechanisms (social capital) is identified</p>
	<p>Promotion de l'écotourisme et la conservation de la biodiversité aux alentours du Fort Drouet</p>	<p>Main objective(s): Reduction of environmental degradation, restoration of degraded areas and promotion of ecotourism based on cultural and natural heritage</p> <p>Lead agency: Ministry of the Environment</p> <p>Main partners: ISPAN, CASEC</p> <p>Start date: July 2014</p> <p>Relevance: site likely to be important for connectivity as it is on a high ridge located in bird migration routes, but no documented evidence, important cultural and historical resources, high development potential (heritage tourism)</p> <p>Impact: community mobilised, awareness raised, value of site recognised at local and national levels, short-term employment created</p> <p>Implementation: community sensitised, tour guides and community leaders trained, soil conservation and rehabilitation measures implemented, seedlings planted</p> <p>Sustainability: no clear management authority, potential collaboration with ISPAN, high expectations from local residents</p>
	<p>Réduction de la pression sur la biodiversité à travers la promotion de la production de café, d'énergie photovoltaïque et la protection du bassin versant de la source Nan Café, La Gonâve</p>	<p>Main objectives: Protection of a locally important spring and surrounding biodiversity, with restoration of degraded lands using economically valuable trees (coffee) and provision of alternative sources of energy</p> <p>Lead agency: Ministry of the Environment</p> <p>Main partners: local community organisations</p> <p>Start date: July 2014</p> <p>Relevance: high relevance to local development needs (water supply, coffee production, education), site likely to be important for connectivity but no documented evidence, link between some of the</p>

Country	Name of project	Status of pilot project
		<p>renewable energy components and specific conservation objectives of the CBC Project somewhat weak</p> <p>Impact: too early to assess environmental impact, local office of Ministry of the Environment strengthened (not a specific objective of the pilot project, but a useful by-product), short-term employment created, local government agencies and community organisations mobilised</p> <p>Implementation: training and technical assistance provided to farmers in coffee production, efficient stoves distributed, nurseries established in schools, tour guides and community leaders trained, PV systems installed and functioning</p> <p>Sustainability: commitment of Ministry of the Environment to sustain, but availability of resources will be an issue</p>
República Dominicana	<p>Alternativa sustentable para el manejo de vertedero de basura en el Municipio Pedro Santana</p>	<p>Main objective: Develop a sustainable alternative to the management of the landfill in Pedro Santana, including mitigation measures to environmental impacts such as the implementation of the 3R's (reduce, reuse and recycle).</p> <p>Lead agency: <i>Centro para el Desarrollo Agropecuario y Forestal (CEDAF)</i>, a Dominican non-governmental organisation)</p> <p>Main partners: Provincial Department (Elias Pina) of the Ministry of the Environment</p> <p>Start date: November 2013</p> <p>Relevance: consistency with provincial environmental policies, limited relevance to biological conservation and connectivity</p> <p>Impact: too early to assess</p> <p>Implementation: small number of waste containers installed in Pedro Santana for recyclables</p> <p>Sustainability: potential for strengthened partnerships, and the establishment of a waste management strategy with neighbouring municipality in line with work underway by the Ministry of Environment on waste management; CEDAF has obtained funding to conduct further work</p>
	<p>Uso sostenible de la palma de guano, Los Rinconcitos</p>	<p>Main objective: Develop a sustainable management system for the exploitation of the guano palm in the community of Los Rinconcitos, including reforestation, monitoring and fire control, and capacity building of local guano artisans.</p> <p>Lead agency: CEDAF</p> <p>Main partners: Provincial Department (Elias Pina) of the Ministry of the Environment</p> <p>Start date: November 2013</p> <p>Relevance: improved production practices through elimination of indiscriminate harvest, reforestation and fire control (sustainable use of resources); promotion of local economic initiatives and friendly value chains, restoration actions in connection with propagation centre in Pedro Santana</p>

Country	Name of project	Status of pilot project
		<p>Impact: too early to assess</p> <p>Implementation: partial, viewing tower to monitor possible fires not yet built but planned with funds from the Ministry of Environment</p> <p>Sustainability: dependent on marketing conditions and levels of production</p>
	<p>Instalación de Sistema Fotovoltaico en Las Palmas</p>	<p>Main objective(s): Implement the establishment of solar energy at a small scale in the area of Las Palmas as means of introducing sustainable environmental practices.</p> <p>Lead agency: Centro para el Desarrollo Agropecuario y Forestal (CEDAF) – (Dominican non-governmental organisation)</p> <p>Main partners: Provincial Department (Elias Pina) of the Ministry of Environment</p> <p>Start date: November 2013</p> <p>Relevance: introduction of energy alternatives with solar panels installation benefiting 577 people in the community of Las Palmas.</p> <p>Impact: A total of 3KW of clean energy produced and good level of mobilisation in the community.</p> <p>Implementation: completed, solar system with 12 panels installed at the Centro de Atención Primaria in Las Palmas.</p> <p>Sustainability: potential for expansion in the community and the possibility of exploring partnerships with private sector.</p>
	<p>Establecimiento y manejo de apiarios en el distrito municipal Guayabo de Comendador</p>	<p>Main objective: Establish and manage bee keeping for the sustainable production of honey including the rehabilitation of degraded areas and adoption of best practices.</p> <p>Lead agency: CEDAF</p> <p>Main partners: Provincial Department (Elias Pina) of the Ministry of the Environment</p> <p>Start date: November 2013</p> <p>Relevance: promotion of local economic initiative and knowledge, demonstration work for local ownership, development of local capabilities</p> <p>Impact: too early to assess</p> <p>Implementation: mostly completed, but no generation of income as honey production has not begun yet</p> <p>Sustainability: interest by stakeholders in the establishment of an association of honey producers, would need to be sustained</p>

### *C. Effectiveness: attainment of project objectives and results*

#### *Review of the reconstituted Theory of Change*

39. The reconstituted Theory of Change was included in this evaluation’s inception report; it was based on a review of project documentation and stakeholder interviews. Having completed the evaluation, it has become clear that this reconstituted ToC, while faithful to the original project description and logical framework and to the two revised logical frameworks subsequently adopted by the Project, presents some fundamental weaknesses, all related to the place of poverty reduction in that Theory of Change.

40. The output expected from Project Objective 3 (Component 5 in the reconstituted ToC, see Table 5) is too broad and loosely defined for a project of this size. It reflects the assumption, confirmed by interviews with some of the Project stakeholders, that the enhancement of livelihoods will reduce pressures on biodiversity but, especially in situations of extreme poverty, there is no automatic causal relationship between enhanced livelihoods and changes in behaviour that result in biodiversity conservation.

41. There may therefore be a missing focus in the logic of Project design. As one key figure of the environmental movement in Haiti noted, “the Project was meant to work on the economic value of biodiversity and natural habitats, to demonstrate direct links between biodiversity and livelihoods”. Indeed, this could have been a different project if its focus had been on providing examples of sustainable livelihoods through biodiversity conservation, as opposed to a broader agenda of sustainable livelihoods and biodiversity conservation. The goal of poverty reduction was therefore unattainable, yet it is clear from interviews with individuals involved in the design of this project that there was an ambition that it would contribute significantly to the reduction of poverty and that it would “transform Haiti”.

#### *Direct outcomes from reconstructed ToC*

42. The original project document and description as well as the two revisions of the logical framework do not provide a rigorous results-based management framework, and this evaluation of the achievement of direct outcomes must therefore focus on the five outputs included in the revised ToC, which are based on and consistent with the project objectives. For the purpose of this section of the assessment, the outputs will therefore be termed outcomes, while the reconstituted ToC names them as outputs to remain closer to original project design.

**Table 8: Achievements against outcomes**

Outcome	Evaluation of achievement
Define the spatial boundaries of the CBC and compile existing information	<p>This was done, and there is therefore a mapped delimitation of the Corridor, with Core Zones and Connectivity Zones. This delimitation is a product of the Project and available on its website, but it is not yet an instrument of planning and decision-making. The Geographic Information System (GIS) is complete and particularly useful for information related to the Project, and it could become a useful instrument of regional planning, but it is at a scale that does not make it directly applicable to local-level planning and decision-making.</p> <p>The delimitation produced does not identify clear priorities and opportunities for connecting sites and providing wider landscape-scale connectivity.</p> <p>As a result of the Project, there is now a large and useful compilation of information and a voluminous bibliography.</p>

Outcome	Evaluation of achievement
Facilitate the strengthening of a network of protected areas within the CBC	<p>This has not been achieved. Some useful networking activities and exchanges have occurred, but one cannot say that there is a network of protected areas in the CBC, nor that it has been strengthened.</p> <p>Concurrently with the CBC Project, there have been a number of positive developments in the field of protected areas, notably in Haiti with the designed of the <i>Système National des Aires Protégées</i> (SNAP) and the establishment of the <i>Agence Nationale des Aires Protégées</i> (ANAP), and this has resulted in increased exchanges between the countries, but this cannot be attributed to the CBC Project.</p>
Development of human resources, communication and outreach	<p>Training activities have been held and have been assessed positively by participants, but this evaluation did not find evidence that these activities have resulted in a significant development of human resources. Most of the training activities have been short, and may therefore not be sufficient to transform the practice of biodiversity management at the national level.</p>
Identify and implement livelihood alternatives for the communities to reduce pressure on biological diversity	<p>Taking into account the comments made elsewhere in this report regarding the conceptual weaknesses of the logic leading to this outcome, the main conclusions of the assessment of achievements are as follows:</p> <ul style="list-style-type: none"> <li>• all field projects have brought, and will most likely continue to bring, some benefits to local residents. These benefits are substantial and sustainable in some instances (e.g. Verraco in Cuba), but more fragile in others (e.g. La Gonâve in Haiti);</li> <li>• the projects are based on detailed assessments and characterisation, but without a suitable assessment of vulnerability and development potentials;</li> <li>• the livelihood activities do not constitute true alternatives, they are more additions to existing livelihood strategies than new possibilities or choices capable of replacing current activities;</li> <li>• the field projects have also conducted activities that will contribute to reducing pressure on biological diversity (e.g. reforestation, erosion control, improved waste management), but there is no evidence yet of livelihood activities contributing directly to improved biodiversity conservation, although this will happen in the future in several instance (e.g. when coffee trees planted in Haitian sites become harvestable).</li> </ul>
A tri-national coordination entity established and functioning	<p>Not only has the Project established and operated an effective tri-national office, but it has also given life and substance to the concept of a Corridor. While much more is needed to make this entity permanent and to make its governance arrangements more inclusive and representative, this represents a major step towards the establishment of the CBC as a strong, legitimate, effective and durable cooperation framework. The CBC Initiative and Project have emerged from a strong political engagement, and the Project has contributed significantly to sustaining that commitment and to translate it into tangible political and technical support.</p>

*Likelihood of impact using ROtI and based on reconstructed ToC*

43. The link between outcomes and impacts must first examine the extent to which the Project has resulted in changes in the intermediary states identified in the ToC, and then assess the achievement of the overall project objective. This assessment is provided in the table below.

**Table 9: Assessment of intermediate states**

Intermediate state	Assessment	Likelihood of impact
Sustained and enhanced political commitment	This commitment has undoubtedly been sustained and enhanced, through the participation of ministers in the management and governance of the Project, through the involvement of ministries and public sector agencies in a range of project activities, and through on-going communication between these national institutions, the TNO and ROLAC	This will contribute positively to the strengthening and longevity of the Corridor, as decision-makers are committed to its success, and it should in turn contribute to reducing the loss of biodiversity as decision-makers will be encouraged and supported to make decisions that are consistent with and supportive of the CBC and its objectives
Coordination mechanisms developed and utilised	Increased communication between national focal points, the TNO and UNEP-ROLAC has played an important role in sustaining coordination and implementation of activities and achievement of results	Functional cooperation between the three participating countries is, in itself, a major impact
Increased awareness of the public, local stakeholders and decision makers	While a strategy for communication has not defined target audiences and specific targets, efforts have been made in the dissemination of information on the CBC	Local awareness of the importance of biodiversity and ecosystem services increased, impacting on the potential for sustainability of CBC efforts
Field projects successful in providing examples of sustainable livelihoods through biodiversity conservation, and in reducing poverty	Despite their short duration, pilot projects have mobilised local communities and civil society along with the engagement of public sectors in the three participating countries. More rigour and clearer criteria in their selection would have been desirable	Positive impacts on livelihoods and on biodiversity will depend on: (a) continuity in the execution of the field projects, (b) a stronger focus on the linkages between livelihoods and biodiversity, (c) the documentation and sharing of experiences and lessons learned, and (d) increased partnerships with private sector and other civil society groups

*Achievement of project goal and planned objectives*

44. The preceding sections provide an evaluation of achievements against the Project's own result framework, and this information does not need to be repeated here. To complete the assessment, the table below provides the indicators upon which the evaluation is based, with a focus on the achievement of activities.

**Table 10: Indicators of achievement of goal and objectives**

Results	Achievements	Indicators
<b>Objective 1: To define the CBC spatially and compile the relevant existing information</b>		
1.1. Collection and analysis of existing knowledge and projects in execution, and identification of gaps in knowledge	Bibliography compiled  Pilot project sites characterised  Inventory of institutions  Field assessments conducted in Cuba	2,265 entries in bibliographic data base  80 projects inventoried and described in data base  335 institutions and 710 individuals inventoried in data base  Protocol and methodology for site characterisation developed  10 sites characterised

Results	Achievements	Indicators
		Indicators and criteria for delimitation developed
1.2. Analysis of existing legislation	National reports on legislation produced  Recommendations for institutional arrangements formulated	National reports available for the three participating countries
1.3. Definition of the specific areas that are central to the CBC	CBC delimited, with Core Zones and Connectivity Zones	CBC delimited and demarcation agreed upon by the three participating countries and endorsed by Ministerial Meeting
1.4. Creation of an information system and data base	Website created, with access to the data base and maps	More than 900 data layers created and functional website  GIS in place
1.5. Creation of an updated Action Plan for the CBC	Proposal for establishment of a Secretariat produced, with six options identified and assessed	Operative Action Plans developed and implemented  Agreement to establish a Secretariat signed in November 2014 at the 5 <sup>th</sup> Ministerial Meeting
<b>Objective 2: To facilitate the strengthening of a network of protected areas within the CBC</b>		
2.1. Coordination mechanisms between the different systems of protected areas established	Bi-national and tri-national events and training courses	Bi-national scientific workshop on Biosphere Reserves in the Dominican Republic and Haiti held  Other workshop held  Training courses for protected area managers not held
<b>Objective 3: To identify and implement livelihood alternatives for the communities and reduce pressures on biological diversity</b>		
3.1. Pilot demonstration projects conducted to rehabilitate degraded land and develop alternative livelihoods	10 pilot projects implemented, see Table 7 and Annex 7 for more detailed information	Three propagation centres established and fully functional (one in each participating country) with seedlings used in reforestation programmes underway (but without information available on the extent of reforestation done)  Ten pilot projects implemented  Tourism guides trained, mangroves cleaned  Estimated >2,000 residents benefiting directly
3.2. Nurseries functioning for the propagation of plants	Nurseries established and functioning effectively  Training centre established in Siboney, Cuba	Three nurseries established, staffed by local personnel, capable of jointly producing over 2 million seedlings per annum  Facilities and equipment at training centre in place  Training centre already used by host country
3.3. Alternative energy sources in use	Renewable energy projects implemented in Las Palmas, Baitiquirí, Dosmond and La	More than 25 PV panels installed, estimated 2,385 residents benefiting  Modified stoves and biogas units distributed, estimated 1,265 households benefiting



Results	Achievements	Indicators
	Gonâve  Stoves distributed in Dosmond and La Gonâve	
3.4. Partnerships between communities and the private sector in place	Collaboration with formal or informal user groups and community organisations in the pilot projects in Cuba and the Dominican Republic	Collaboration established local groups and associations, including municipalities, in all pilot sites, with over 500 individuals participating and benefiting  No formal partnerships established with the private sector
<b>Objective 4: To contribute to the development of the human resources needed in the participating countries, so as to ensure the sustainability of the conservation and sustainable development activities undertaken in the framework of the CBC</b>		
4.1. Instructors of trainers on natural resource management trained to work in the community	Two training of trainers courses held	Sessions held at community level, 68 individuals benefiting
4.2. Exchanges between the communities and islands	Exchange visit to Cuba for Haitian professionals held	One visit held, 34 participants
4.3. Personnel trained in the technical, normative and policy areas	Several courses held as part of the pilot projects implemented under Result 3.1	2 workshops held for policy makers, 29 participants  30 workshops held within pilot projects, 1,079 participants
4.4. A comprehensive programme of public education and awareness	Website created, newsletter published and distributed, educational materials produced as part of pilot projects, CBC concept and Project promoted	Strategy produced  Newsletter produced and distributed, 18 issues, two languages  Brochures (1,000 copies in each of two languages) and banners produced  Three sensitisation workshops held  18 TV spots produced  Press releases issued for 68 activities  Video documentary under production
<b>Objective 5: To facilitate the creation of a tri-national coordination entity to support the creation and development of the Caribbean Biological Corridor</b>		
5.1. A tri-national unit of the Caribbean Biological Corridor established	Unit established and functional	TNO office installations operational
5.2. A liaison mechanism in place at UNEP/ROLAC to handle relations among the various stakeholders	Effective project implementation and execution	Staff assigned as project manager at ROLAC
5.3. The Ministerial Policy Tri-National Committee of the CBC in place and functioning	Ministerial Committee meetings	Five Ministerial meetings held with adequate planning and documentation, and with the recording of decisions
5.4. The technical committee, composed of representatives of the	Technical Committee meetings	Five Technical meetings held

Results	Achievements	Indicators
countries, relevant non-governmental organisations and UNEP, established and functioning		
5.5. The equipment and supplies needed for the project's functioning acquired	Equipment and supplies acquired	2 Vehicles acquired and serviced the project TNO fully established and functional

*Review of outcomes towards impact*

45. On the basis of the assessments provided in the preceding sections, it is possible to rate the outcomes, intermediary states and impacts as follows:

**Table 11: Outcomes towards impact – ratings<sup>14</sup>**

Outcomes <sup>15</sup>	Rating	Intermediate states	Rating	Impact	Ratings	Overall
Define the spatial boundaries of the CBC and compile existing information		Sustained and enhanced political commitment		Establish the CBC in DR, Haiti & Cuba as a framework to reduce the loss of biodiversity in the Caribbean region		The overall rate is <b>likely</b>
Facilitation of the strengthening of a network of protected areas within the CBC		Co-ordination mechanisms developed and utilised				
Development of human resources, communication and outreach		Increase knowledge and awareness of the public, local stakeholders and decision makers				
Identify and implement livelihood alternatives for the communities to reduce pressures on biological diversity		Field projects are successful in providing examples of sustainable livelihoods through biodiversity conservation, and in reducing poverty				
A Tri-national coordination entity established and functioning						
Rating justification: see section 44 above	<b>B</b>	Rating justification: see section 44 above	<b>B</b>		<b>BB</b>	

<sup>14</sup> See Annex 6 of the Terms of Reference (in Annex 2 to this report) for the methodology and rating scale for outcomes and progress towards ‘intermediate states’ (with a scale from A to D)

<sup>15</sup> These are the outputs in the reconstituted ToC

*Additional observations on effectiveness*

46. *The main impact achieved by the CBC Project is that it has turned a concept into a reality, and this is its main positive impact to date. As a result of the CBC Project, the political commitment to establish a corridor has been sustained, the CBC exists, and much has been achieved, notably:*

- the knowledge base has improved, even if the CBC Project has not generated a significant amount of new knowledge: it has usefully compiled and made accessible existing information, but its work on corridor delimitation is based primarily on what is or was already known, i.e. more on endemism than on connectivity;
- capacity has been strengthened: while measuring the level of skills improved (at the governmental and community levels) might be difficult at this stage, it is clear that the CBC Project has significantly contributed to, and will continue to have a positive impact on, capacity building and training at different levels, especially through the establishment of training facilities and propagation centres in Dosmond (Haiti), Pedro Santana (Dominican Republic) and Siboney (Cuba) and with the training of local community stakeholders in various economic activities (honey production, modified stove production, ecotourism guiding);
- cooperation has been sustained and has increased: institutions in the three countries, especially the three Ministries of the Environment, have benefited from increased cooperation, exchanges have been facilitated between professionals, institutions and communities (e.g. between Pedro Santana and Dosmond), and skills and human resources have been shared.

47. *The CBC Initiative was born out of a political commitment, and the CBC Project has nurtured and strengthened this engagement, but participation in and support for the corridor remains limited to a small number of partners. “It is the Ministries’ corridor”, says one of the influential actors in conservation in the region, referring specifically to the Ministries of the Environment in the three participating countries, “it is not yet the countries’ corridor”. This comes as a result of a number of factors, including: (a) a legitimate focus of the CBC Project on its collaboration with such Ministries of Environment and other government agencies locally and nationally, (b) a limited involvement of civil society and scientific institutions in the activities and processes of the CBC Project, and (c) because of the very large scope and lack of focus in original design, a brand that makes it difficult for external actors to distinguish the CBC from other initiatives in conservation, sustainable development and poverty reduction.*

48. *There has been a very good rate of execution of activities as per the revised logical framework, but with some gaps, notably:*

- insufficient attention may have been paid to Objective 1, largely because of the pressure to deliver Objective 3 within a very short time frame. But this may also be due to insufficient linkages with the scientific community and with other institutions that have and produce knowledge on conservation priorities, connectivity, key biodiversity areas and other domains highly relevant to a corridor;

- not all activities forecasted for implementation within each pilot project have been accomplished, partly due to pressures on time frame (with a number of activities and procurements still underway at the time of this evaluation’s field visit<sup>16</sup>);
- it is only in mid-2012 that the CBC Project designed a communication strategy, but this strategy did not identify the target audiences and the specific pathways and deliverables to be used, and this may have weakened the level of awareness of the CBC Initiative and Project, the linkages with different stakeholders, and further collaboration opportunities (with sectors such as academia, potential additional donors, other on-going projects, and the private and investment sectors). In addition, the expectations of what this communication strategy would deliver were very high at the time (keeping in mind that, in mid-2012, the CBC Project had not yet been extended beyond 2014) but the resources available did not match these expectations;
- no progress was made on activity 1.5 of Objective 1, namely the formulation of a long-term strategic plan, and this evaluation has concluded that this is one of the main deficiencies of the Project.

49. *While the pilot projects have all executed most of their planned activities, their role within, and contribution to, the overall CBC Initiative is debatable, and there are issues to be addressed in order to optimise their impacts and enhance their sustainability beyond the life of this project.* In this regard, the following should be noted:

- the main impact of the pilot projects on the CBC Initiative is that they have made the Initiative real and have demonstrated that it could bring benefits to communities and local partners, including the ministries and the public agencies;
- while all five pilot project sites in Haiti have value and potential, the criteria for their selection has not been made clear to this evaluation;
- the relevance of most pilot projects to biological connectivity and to biodiversity conservation is low. Most projects refer to the provision of alternatives for communities, but the very concept of “alternative” is unclear;
- the results and achievements have not always been as extensive as claimed in project documents (e.g. revolving fund – 3.1);
- the pilot projects, which were all implemented over a very short period of time and have only recently been completed, will have real impact only if they are able to benefit from continued external support. This will be a challenge in some instances, particularly in Bassin Bleu, Fort Drouet and La Gonâve in Haiti;
- institutional partnerships are one of the conditions of sustainability, but it appears that some opportunities have not been sufficiently explored, for example with the *Institut de Sauvegarde du Patrimoine Naturel* (ISPAN) at Fort Drouet (Haiti) or with the *Parc Industriel* at Caracol (Haiti);
- as is often the case with local development initiatives, some of the pilot projects are in danger of having raised expectations that will be difficult to meet, and that have not been met during the life of the CBC Project (e.g. significant increases in income generation for tour guides at Fort Drouet and Bassin Bleu, effective solid waste management and honey production at Pedro Santana, or sustainable fisheries at Caracol);
- while the field projects are often referred to as “pilot”, they are not designed and implemented as true pilot projects, as they do not have a structured framework for innovation and learning, and as the CBC Project did little to disseminate lessons and methods gained from these projects.

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<sup>16</sup> The field visits took place in late November and early December. The evaluation team understands that all procurements were finalised by the end of the project in December, and that technical and financial reports on all contracts have been submitted and accepted (except one).

50. *The CBC Project has made a good and strategic selection of its main execution partners for the field projects. In BIOECO, the Centro de Aplicaciones Tecnológicas para el Desarrollo Sostenible (CATEDES) and MEGACEN/CIGET (Centre for Information and Technology Management) in Cuba, in CEDAF in the Dominican Republic, and in WHH in Haiti, the CBC Project has found partners that have good capacity, legitimacy at regional, national and local levels, and the ability, collectively, to work in all three countries. These partners have all made very significant counterpart contributions to the project (both in kind and in cash), and they all see the CBC Initiative as a useful framework to which they are fully committed. These partnerships, together with the leadership role played by the three Ministries of the Environment, provide the CBC Initiative with a solid core of constituents. With respect to the establishment and initial operations of the propagation and training centre in Haiti, on the other hand, there were delays and concerns with the performance of the Université Quisqueya, which had been contracted to provide these services.*

51. *In its Objective 3, the CBC Project sought to establish partnerships between communities and the private sector, but this has not been achieved. This is, of course, a complex domain, especially considering the differences that exist between the political structures and production systems of these three countries, but this was an expected result of the project. Several experiences of co-management of natural resources and protected areas gained in the Dominican Republic over the past thirty years, as well as the role played in Haiti by civil society organisations that are almost entirely supported by the private sector (notably the *Société Audubon Haiti*), have demonstrated the relevance and feasibility of such partnerships. Recent developments in Haiti, with the proposed acquisition of critical conservation areas by the private sector for private management, confirm that the sector could play a much greater role than it currently does.*

52. *The issues noted above reflect the fact that it is unusual for UNEP – or at least for UNEP ROLAC – to execute a project of this kind, with a direct involvement in managing small-scale field activities. Indeed, for UNEP ROLAC, this has been a very demanding project, which it was able to execute effectively only because it was an exceptional arrangement and because ROLAC was highly committed to the project and its success. The diversity and nature of activities involved in field projects demand flexibility and agility for field implementation and in logistical arrangements, which are organisational characteristics not inherent to a complex UN administrative system, and possibly better suited to other partners (e.g. non-governmental organisations).*

#### ***D. Sustainability and replication***

53. *The recent agreement to establish a Secretariat is a positive development, but the CBC Initiative still lacks a strategic plan and roadmap on how to become permanent and sustainable. A secretariat is not an institution, it is a management instrument, and the institution has not yet been conceptualised, with the initial Plan of Action of 2007 being practically silent on the overall institutional arrangements, and with the CBC Project not having produced the strategic plan envisaged under item 1.5 of Objective 1. What are its vision and mission? How does it position itself in relation to other mechanisms of cooperation and collective action in the Caribbean? Are the three governments and UNEP its only constituents, or should it broaden its constituency? How will it be governed? How will it be financed, can it be made financially viable and sustainable, and if so how? These are some of the questions that have not yet been answered, but that must be addressed if the processes supported and facilitated by the CBC Project are to be continued and strengthened.*

54. *In the short and medium terms, the CBC Initiative will remain largely dependent on donor funding. The three governments and some of the partners have made and will*

undoubtedly continue to make very substantial financial and in-kind contributions, but this will not suffice, at least not up to the medium term. For a number of reasons, including the demands of project execution and the lack of a permanent institutional arrangement, the CBC Project has up to now directed its efforts at fundraising and donor relations in the direction of one donor, the EU. This may have been the right approach, especially considering the generous decision of the Government of the Dominican Republic to request from the Delegation of the EU in the Dominican Republic a funding allocation covering a period of 13 months from January 2015. A broader and more diverse fundraising strategy however remains needed.

55. *The training and propagation facilities established under the project all benefit from substantial governmental support and conditions are met for them to perform their functions on an on-going basis.* The training facilities rehabilitated in Siboney, Cuba, which include a training room, a laboratory, an interpretation room and accommodation for both trainees and faculty, are excellent, and they are located within a scientific reserve that is directly managed by BIOECO, with competent staff and on-going research and training programmes. The centres at Dosmond and Pedro Santana run satisfactorily and are fulfilling their role, engaging the local communities in various aspects of reforestation, soil conservation and production of organic composting. The three nurseries are located on public lands, are directly managed by the competent ministry, and are suitably staffed (although, in the case of the nursery in Haiti, permanent staff had to be reduced, but this cost-cutting measure should not affect operations as many of the tasks to be performed are seasonal). All these facilities constitute a very substantial legacy of the CBC Project.

56. *The sustainability of processes in the pilot projects is variable, and will be to a large extent dependent on continued involvement by the partner agencies.* The situation is therefore generally encouraging, as all the main actors (the three Ministries of the Environment, BIOECO, CATEDES, CEDAF and WHH) are committed to sustain activities and processes, but there are issues and concerns that need to be considered. The specific status of and prospects for each project has been summarised in Table 7 and detailed in Annex 7. Meanwhile, the establishment of the three propagation centres in each participating country has been a significant accomplishment (see paragraphs 35 and 36 above). They have supported the rehabilitation of degraded areas and reforestation efforts in their respective countries, as well as have a major role to play for training in their respective communities, including on the production of compost and its application in the chain of waste utilisation. Further, exchanges between the centres would be beneficial to share experiences and lessons learned and develop joint strategies for sustainability, expansion and replicability of results elsewhere at the national levels. Given the level of support received from each government involved, it is clear that the centres have great potential for their long term sustainability and for the future generation of collaborative partnership agreements, e.g. with academia and the private sector.

57. *As a contribution to sustainability and capacity development, the CBC Project has made the right decision to collaborate directly with the Haitian Ministry of the Environment in the execution of pilot projects and other activities.* Too often, capacity issues are cited by development partners as their reason – or possibly their excuse – for bypassing public institutions in Haiti, and this only serves to maintain or exacerbate these very issues. While there may have been issues in the selection of some of the pilot projects, the work done in Caracol, Dosmond, Fort Drouet or La Gonâve nevertheless demonstrates that the Ministry of the Environment is perfectly capable of executing projects of this kind, and that these projects in turn contribute to building its own capacity, enhancing its legitimacy at local level, and strengthening partnerships.

## *E. Efficiency*

58. *The progress made and results obtained by the CBC Project in the field are remarkable, especially considering that most of this was achieved in a little over two years.*

The main achievements (see Table 7 for more details) include:

- tangible progress and on-the-ground results in all 10 pilot projects;
- the establishment of the training and/or propagation facilities in Siboney (Cuba), Pedro Santana (Dominican Republic) and Dosmond (Haiti), with substantial commitment and contributions from the national agencies, and with permanent management arrangements;
- strong partnerships with and significant contributions from the main partners (ministries, BIOECO, CATEDES, CEDAF, WHH, municipalities, communities);
- follow-up support and funding secured for some of the pilot projects, notably by CEDAF in the Dominican Republic.

59. *There have been, and there remain, a number of human resource management issues that may have affected project execution and that have certainly been unfair to the project team.* Delays in and obstacles to the appointment of the Technical Director were partly responsible for the slow pace of implementation over the first two years. Different arrangements had to be made within the TNO project team, with some recruited by UNDP as service contractors, while others were UNEP consultants. At one point, some of the contracts could not be renewed because of a change in procedure within the UN system. At the end of the project (December 2014), most team members did not know if and how they would be involved in the next phase. As a result of these and other factors, there was a project team with disparate employment conditions, significant uncertainties, and a need for the Technical Director and ROLAC staff to spend much time and effort on human resource management issues. Considering the importance of this tri-national project and the fact that it was executed by a UN agency with funding from the EC, it is surprising and disappointing to see that it could not be better structured, and UN organisations should do all in their power to ensure that their management procedures and practices do not create excessive difficulties and delays in project execution.

60. *One of the reasons why the CBC Project has been able to achieve so much in spite of these challenges is that it has benefited from very substantial counterpart contributions from the various partners.* More details are provided in Annex 5, and figures when available, are provided in Annex 5. The most significant features are:

- the Governments of Cuba, the Dominican Republic and Haiti, through their respective Ministries of the Environment, have allocated very significant resources to project coordination, to the field projects, to the establishment and management of facilities (Dosmond, Pedro Santana and Siboney) and to other project components;
- from the very early stages of the CBC Initiative, a number of organisations, and notably BIOECO in Cuba, have invested very significant human resources in the conceptualisation of the CBC Initiative and in the design and execution of the CBC Project;
- CEDAF and WHH have invested staff time and other in-kind contributions as well as cash counterpart contributions to pilot and field project implementation;
- many partners have participated in activities and meetings of the CBC Project at their own costs;



- the EU, and particularly its Delegation in the Dominican Republic, played a role that went well beyond that of a financing partner, with a strong commitment to the vision and concept of the CBC, with a good understanding of the issues involved, and with an active engagement that helped to guide the project, especially when critical decisions were needed in 2012;
- UNEP-ROLAC has made contributions that far exceed the level of co-financing identified in the agreement with the EC, because the overheads rate applied by the EU (7%) is lower than the standard UNEP rate (13%), and because ROLAC personnel (both staff and consultants) spent far more time on this project than originally envisaged.

#### ***F. Factors affecting performance***

61. *The CBC Project suffered, at least initially, from weaknesses in its design; while some of these weaknesses were in the form and language of the logical framework, they reflect the larger issue that the Project may have been too broad, too ambitious and insufficiently focused.* In addition to the conceptual issues noted above, the main weaknesses identified by this evaluation are as follows:

- the absence of suitable indicators in the original logical framework, with some referring only to outputs (as opposed to achievements), and with others being immeasurable (e.g. “70% of the communities surrounding the CBC recognize the social, economic and environmental impact resulting from the implementation of the CBC”);
- the inclusion of an important objective (Objective 2) with very limited resources allocated;
- unrealistic expectations with respect to the poverty reduction impacts (Objective 3);
- an objective (Objective 4) that placed together capacity-development and communications activities, with no clear strategy for communications.

These factors resulted in the design of a project that was exceedingly complex and too ambitious.

62. *These weaknesses in project design reflect weaknesses in the original CBC Action Plan.* This Action Plan, which was approved in 2007 by the Ministers of the Environment of the participating countries, is a 150pp document that identifies a large number of projects and actions. In many respects, it was more an agenda for cooperation between the three countries on environmental matters than a plan of action for establishing and managing a biological corridor. As one observer puts it, “it was perhaps better suited to Ministries of Social Affairs than Ministries of the Environment”. In particular, it failed to provide a strategic framework for implementation and to rank proposed actions according to feasibility and urgency.

63. *The many issues and delays that affected the operations of the TNO and the relationships between the main Project partners during the first two years also negatively affected performance.* These included: delays in the appointment of the Technical Director, with interim arrangements that proved unsatisfactory; tensions and diverging views between some of the main actors; reliance on ROLAC staff and consultants for communications work; and delays in the selection of the pilot projects. The reasons for these issues and delays are several, and may include administrative procedures within the participating countries, diverging visions and management styles, and capacity weaknesses at the TNO.

64. *The pilot projects had to be implemented over an extremely short period of time, and with low budgets.* Several factors were responsible for the late start of the pilot projects, including the earthquake of January 2010, the weaknesses of the TNO during the period 2010

- 2011, and changes made in the selection of project sites at the request of participating countries. The first SSFA for pilot projects was signed in October 2013, and the last was signed in May 2014, only seven months before the expected date of completion of the CBC Project. Such short periods are certainly too short to mobilise a community and realise meaningful change in awareness and capacities and to expect noticeable improvements in environmental and economic conditions. The funding allocated to these projects at the time of project design was also small, and this would have been a limiting factor if these pilot projects had been implemented over a longer period of time; in this case, considering the time available, it may have been an advantage that activities and expenditure were at this level.

65. *Even when implementation arrangements were finally in place, the Project suffered from the rigidity and complexity of procedures and processes that were somewhat unsuited to such a project.* The main issues were:

- procurement: the procedures of the executing agency can be complicated and time-consuming, especially in countries or locations where the goods or services to be procured are not easily available, and the participating countries cite frequent delays due to the need to secure approval from UNEP Headquarters in Nairobi. In this instance, additional challenges came for very specific legal and practical reasons, as in the case of some of the equipment destined for Cuba that had to be purchased in the Dominican Republic, taking into account the provisions of the US embargo, and then shipped;
- operations of the TNO: a project coordination and management office was established in Barahona, Dominican Republic, with all the required infrastructure acquired with project funds. This location, which was selected because of its proximity to the Haitian border, made the operations challenging, as the bank used by UNDP in the Dominican Republic does not have a branch in Barahona, some of the services required were not available, and even vehicle maintenance had to be done in Santo Domingo. In spite of this, the office functioned well, thanks to the efforts of staff and to the support provided by ROLAC;
- travel authorisation and payment: given the nature of internal UNEP procedures, particularly with the requirement for prior travel authorisation and processing of payments, but also because of the way these procedures were applied by TNO staff and possibly because of a lack of experience in executing projects of this kind, delays were regularly experienced with respect to the reimbursement of travel expenses, and staff at UNEP ROLAC had to allocate large amounts of time to these issues;
- field projects: the project design and budget did not take sufficiently into account the reality of field project management and monitoring, which would have required more time and resources than what was originally envisaged;
- currency exchange: the overall budget was approved in Euros, but the US dollar was the main currency used in execution and this resulted in some losses (notably with contracts stipulating amounts in Euros but payments made in dollars).

66. *Some of the most active and relevant stakeholders in conservation and sustainable development have not been sufficiently engaged.* With respect to Objective 1, the Project may have suffered from insufficient linkages with the academic and scientific community. These linkages were strong in Cuba, especially in and through BIECO, but weaker in the Dominican Republic and Haiti, and with external scientists and institutions involved in research in the region. This has impacted negatively on the image and knowledge of the CBC Initiative and Project among the scientific community, and on the Project's ability to mobilise valuable expertise. In civil society, it appears that one of the leading organisations in the Dominican

Republic (Grupo Jaragua, which played a key role in the early stages of the CBC Initiative and has signed an MoU with UNEP under the CBC Project) and the main conservation organisation in Haiti (Société Audubon) are now only remotely involved, while the FANJ in Cuba, which is a strong and legitimate actor in conservation and with which UNEP signed an MoU under the CBC, has not been directly engaged in any CBC Project activity, because it is not directly involved in the issues or sites covered by the Project (the MoU however remains justified, considering the role this organisation could play in the future of the CBC).

67. *Project performance was also hampered by a number of external factors entirely beyond the control of Project partners.* Among those, a key factor responsible for the slow rate of implementation at the early stage of the Project has been the impact of the catastrophic earthquake that occurred in Haiti on 12 January 2010, i.e. only days after the signing of the cooperation agreement. In addition, there were a number of other unpredictable external factors that affected Project implementation, including the cholera epidemic in Haiti that began in 2010, Hurricane Sandy which caused substantial damage in south-eastern Cuba in October 2012, and the Chikungunya epidemic of 2014 that has impacted and continues to impact negatively on health and productivity throughout the Caribbean region.

68. *It is however interesting to note that some of the factors that have, or could have, affected performance may have also increased relevance and commitment.* The earthquake in Haiti greatly increased the need for cooperation and support, even if it shifted priorities in the short term, while Hurricane Sandy served as a reminder of the linkages between climate, biodiversity and development, and made the refurbishing work at the Siboney Ecological Station in Cuba even more useful. It should also be noted that there were several changes of Ministers in the three countries, but this did not in any way impact negatively on their commitment and participation.

### ***G. Complementarity with UNEP strategies and programmes***

69. *The project is fully consistent with UNEP's strategies and programmes, and contributes to the achievement of their objectives in the three participating countries and in the region.* The project integrates the ecosystem-based approach, it contributes to the sustainable management of ecosystems while also focusing on restoration, and it helps place protected areas in the wider system of national planning and development. Its objectives and activities are aligned with the Bali Strategic Plan. The approaches and methods used by the project are also consistent with those proposed by UNEP globally, including pilot projects, experimentation and the development of methodologies, partnerships with financial institutions, and monitoring and evaluation. When completed, the project will have contributed to several of the expected accomplishments of UNEP's current medium-term strategy and programme of work, especially with respect to the sub-programme on ecosystem management (increased integration of an ecosystem management approach into development and planning processes, increased capacity to utilise the ecosystem approach) and the sub-programme on environmental governance (increased implementation of national environmental obligations and achievement of national environmental priority goals, targets and objectives through strengthened laws and institutions).

70. *The coherence between this project and the wider programmes, strategies and policies of UNEP is further enhanced by the linkages between the Project and the Regional Coordinating Unit of the Caribbean Environment Programme (UNEP-CAR/RCU).* While the UNEP-CAR/RCU is not directly involved in the coordination of this project, it was consulted at the design stage, it sees this project as a useful contribution to the achievement of the goals and objectives of the Cartagena Convention and the its Protocol on Specially Protected Areas and Wildlife (SPAW), and it participates in the annual Technical and Ministerial Meetings.

One issue that however limits potential synergies is the fact that Haiti has not ratified the Cartagena Convention and its SPAW Protocol.

71. *The project gives specific attention to gender issues in the context of the pilot projects.* The role of women in the implementation of pilot projects has been considered in terms of their involvement in field activities, such as production of compost in the Propagation Centres, in the restoration and monitoring of reforestation efforts (Palma de Guano for example), in the uptake of alternative stoves and other aspects on the day-to-day of project activities, Given the cultural differences between the three countries, it is however not surprising that the extent of gender issues will differ from case to case.

## V. CONCLUSIONS AND RECOMMENDATIONS

### A. *Conclusions*

#### *Overall conclusions*

72. This CBC Project is one of the most important and relevant initiatives undertaken in the insular Caribbean region in the field of conservation and natural resource management in recent years. It was an ambitious project, which sought to achieve more than a single project of this size could reasonably achieve, and which suffered a number of setbacks during the first two years, some caused by external factors, and some caused by internal management and leadership issues. In spite of these challenges, the project has given life to the concept of a biological corridor, it has compiled and made accessible a very useful base of knowledge, it has sustained and further enhanced cooperation between the three participating countries, it has built some capacity and established permanent facilities for propagation and training, and it has supported local conservation and sustainable development initiatives in ten localities. It was a pioneering project that has tested and demonstrated the pertinence of an approach. It is thanks to the quality and efficiency of the project management and execution arrangements in place since 2012 and to the commitment and investments of the primary partners that the CBC Project was able to achieve these remarkable results.

73. But the success of the CBC Project will ultimately be measured, not against the outputs delivered and the results achieved in the past five years, but against the ability of the CBC Initiative to become a permanent and effective instrument of cooperation among the three countries, and eventually on a wider scale. It will also be measured against its ability to add value, on a sustainable basis, to all the other efforts in conservation and natural resource management in the Caribbean region by preserving connectivity, by informing regional, national and local planning decisions, by providing a platform for exchange and cooperation, and by engaging all the relevant actors and interest groups. The next few months will therefore be critical, as decisions made and approaches used in this period will be determinant for the future of the CBC Initiative.

74. This terminal evaluation has been a very interesting exercise, as it has allowed the evaluation team to examine most of the components and activities of the Project, to interact with a large number of stakeholders, and to use the assessment of the Project to formulate recommendations for the future. The process, which involved document reviews, field visits, interviews and the dissemination of a discussion note, may not have been as participatory as desirable, but certainly allowed for a diversity of views to be heard and considered. It is the hope of the evaluation team that the process and this report have been and will be useful to the partners in the CBC Initiative, for the benefit of conservation and sustainable development in the Caribbean region.

Evaluation ratings

**Table 12: Summary ratings table**

Criterion	Summary Assessment	Rating <sup>17</sup>
<b>A. Strategic relevance</b>	Project as designed highly relevant to conservation and development needs, but some of that relevance lost because of insufficient focus on connectivity and difficulty to achieve poverty reduction	<b>S</b>
<b>B. Achievement of outputs</b>	Many achievements against all five project objectives and against pilot projects, many of the expected results delivered, but with significant gaps	<b>MS</b>
<b>C. Effectiveness: Attainment of project objectives and results</b>	Objectives partially attained, reflecting issue in project design, with objectives possibly too ambitious and planned results insufficient to achieve these objectives	<b>MS</b>
1. Achievement of outcomes (as per reconstituted ToC)	Outcomes, expressed as outputs in reconstituted ToC, largely delivered, except for the facilitation of the strengthening of a network of protected areas, which was among the project's objectives, but without a dedicated budget	<b>MS</b>
2. Likelihood of impact	Institutional and capacity impact likely to be high, but direct conservation, reduction of biodiversity loss and poverty reduction limited	<b>ML</b>
3. Achievement of project goal and objectives	Goal not achieved (and too broad in project design to expect achievement and to allow for measurement), objective as in reconstituted ToC achieved, objectives as in project logframe partially achieved	<b>ML</b>
<b>D. Sustainability and replication</b>	Significant progress made towards the establishment of the Corridor; while it is not yet a sustainable entity, the achievements are very significant considering the time available and the challenges involved in setting up such a new cooperation arrangement	<b>S</b>
1. Financial	No arrangement for financial sustainability in place, except for the commitment of countries and some partners to sustain activities	<b>MU</b>
2. Socio-political	Very high commitment at political level in the three countries, but insufficient involvement of civil society and academia	<b>S</b>
3. Institutional framework	Progress made, but attention now needed towards strategic planning and consolidation	<b>MS</b>
4. Environmental	There is no internal factor threatening environmental sustainability	<b>HS</b>
5. Catalytic role and replication	The lessons learned and the experienced gained from the Project will have a catalytic role at the national level and in the region, and have built the base for replication (geographic expansion), but there will be need for a clear strategy towards such expansion	<b>MS</b>
<b>E. Efficiency</b>	Significant issues during the first two years of implementation, increased efficiency thereafter, but some challenges posed by procedures, complexity of managing small scale projects, and specific procurement conditions	<b>MS</b>
<b>F. Factors affecting project performance</b>	Some factors affected positively while others affected negatively	<b>MS</b>
1. Preparation and readiness	Several factors and drivers favourable, good process of country participation in project design, but design too	<b>MS</b>

<sup>17</sup> See rating codes in Table 2

Criterion	Summary Assessment	Rating <sup>17</sup>
	ambitious and may have assumed that the information required to delimitate the corridor was already available, thus did not include new research which would have been useful	
2. Project implementation and management	Slow rate of implementation and management issues during first two years, all addressed since with high rate of implementation since mid-2012	MS
3. Stakeholders participation and public awareness	Very good level of participation of a core group of stakeholders (ministries, direct project partners), but insufficient involvement of civil society, the private sector and the scientific community	MS
4. Country ownership and driven-ness	Very high level of country ownership, and Technical and Ministerial Meetings serving as higher organ of governance	HS
5. Financial planning and management	Satisfactory, except for inadequate provisions to support field projects, and for challenges and delays encountered in procurement and reimbursements of expenses	MS
6. UNEP supervision and backstopping	Excellent since 2012, but some communication and effectiveness issues in 2010 – 2011	S
7. Monitoring and evaluation	Project difficult to evaluate because original design was not built on strong results-based management framework	MS
a. M&E Design	Original design did not include adequate indicators and did not provide a robust framework	MU
b. Budgeting and funding for M&E activities	Adequate	S
c. M&E Plan Implementation	Two EU monitoring missions, a useful mid-term review and a terminal evaluation conducted according to plans	S
<b>Overall project rating</b>	A complex project that was able to deliver many results and to achieve significant objectives in spite of a number of internal and external challenges	MS

## B. Lessons learned

75. *Initiatives that seek to link biodiversity conservation, environmental management, livelihoods and poverty reduction must articulate clearly and realistically the assumptions on which they are based and the logic they want to follow.* These linkages are now commonly expressed in project documents and in the broader development discourse, but they are not as obvious as it seems. In particular, the concept of “alternative” needs to be properly assessed and carefully applied, as the livelihood strategies employed by people and communities – especially those living in poverty – are more than a mere choice between one activity (which may be good for biodiversity) and another (which may not be as good for biodiversity), they are the coherent product of a complex set of cultural, environmental, economic and socio-political conditions. Increasing opportunities from ecotourism or introducing honey production will not change those conditions, and are therefore unlikely to change overall behaviour.

76. *Biodiversity, and broader environmental concerns, can be important factors and channels of international cooperation, even in contexts that are not objectively favourable to such cooperation.* Indeed, in this world few are the groupings of three adjacent countries that offer such diversity in levels of economic development, in political institutions and in systems of production as one can observe between Cuba, the Dominican Republic and Haiti. As noted in Section III.A above, there are a number of other historical, cultural and socio-economic factors that militate against understanding and collaboration between these countries, especially between the Dominican Republic and Haiti. Yet, when it comes to biodiversity and the environment, cooperation and synergies become easier, because species, natural resources

or environmental disasters do not consider political borders, but also possibly because the environment is a cause that easily transcends human tensions.

77. *UN agencies may not be best suited to execute complex projects, especially those that include small-scale pilot activities and field implementation with a multiplicity of partners.* UN officials have recently been quoted as saying that the UN and its agencies must become “fit for purpose” in supporting development in the post-2015 era, but it is questionable if UNEP, given its mandate as a primary enabling and catalytic UN programme, is now fit for the purpose of directly managing a project of this kind. This does not negate the fact that UNEP played a very useful role in convening the partners in this project and that it is a suitable agency for the execution of multi-national initiatives, but the lessons from this project suggest that a different arrangement, perhaps with a greater role of other agencies, including non-governmental organisations, in co-execution, would have made the Project more effective and efficient.

78. *Stakeholder involvement and building governance structures are vital for the challenging task of achieving sustainability.* Successfully managing and conserving biodiversity is highly dependent of the involvement of all relevant stakeholders in a collaborative approach, especially at local community levels. The definition of roles and responsibilities and ensuring that mechanism are in place for the Involvement of government, academia, civil society (e.g. non-governmental organisations), private sector (various sectors and levels) and local community members are vital to addressing environmental, social, economical and cultural issues from different perspectives. Thus, the likelihood of developing successful sustainable strategies is increased, as well of ensuring that governance structures respond to real needs. Further, the involvement of stakeholders in developing plans and strategies increases the likelihood of their participation and the implementation of an empowered governance structure.

### ***C. Recommendations***

79. *As the CBC Initiative enters into a new phase, its biggest challenge at this stage is to ensure that it can realize an effective and progressive transition.* For this transition to be real, it needs to address conceptual issues, it needs to formulate a new programme of work, it must lead to new institutional arrangements with adequate capacity, and it must provide suitable guidance on the future geographic scope of the CBC Initiative. This is a critical and difficult challenge because the next phase will be short (13 months from January 2015), with some programming constraints because of its funding source, and because an eventual longer project arising from this phase should take into account the lessons from the past few years. The next few months must therefore imperatively be realistic, focused and strategic.

80. *At the conceptual level, the CBC Initiative needs a shared and negotiated vision.* It needs a vision that goes beyond the consensus on the benefits of South-South cooperation and the “commitment to work together”, a vision that goes beyond the need to conserve biodiversity and the imperative of poverty reduction, a vision that clearly spells out the mission, uniqueness and ambitions of this biological corridor. This vision should be formulated through a process that engages or re-engages the primary stakeholders in governments, civil societies, the scientific community and international organisations. It may include:

- a greater emphasis on connectivity and on the role of a biological corridor in achieving national and regional conservation and sustainable development objectives;
- a shared understanding of the place and role of field activities and pilot projects in the overall CBC Initiative;

- an agreement on the positioning of the CBC Initiative and its Secretariat on the regional landscape;
- the insertion, where appropriate, of bi-national initiatives within the CBC framework;
- the strengthening of the CBC Initiative as a planning and decision-making framework at national and sub-regional levels;
- a clear and stated contribution of the CBC Initiative to global and regional commitments and agreements.

81. *This new visioning and strategic planning process should lead to a programmatic transition.* Some of the programming elements may include:

- the formulation of a revised action plan that is derived from the new, negotiated vision and that spells out the priorities and the opportunities, through a participatory process that engages or re-engages all the pertinent actors;
- the strengthening of the CBC Initiative as a planning and decision making platform, with functional links to relevant national systems and data bases, zoning priorities based on available information (CBC delimitation maps, Key Biodiversity Areas, Important Bird and Biodiversity Areas, protected area systems, etc.);
- a new approach to field projects that may include: (a) a reduced level of direct involvement in project execution, and stronger partnerships with other agencies executing field work, (b) a greater focus on the linkages between biodiversity, development and poverty reduction, and (c) the development of selection criteria and promotion of common methodologies, instruments, approaches and indicators.

82. *The leadership of the CBC Project has expressed interest in building a stronger cultural dimension in the corridor, and this is an interesting proposition, but one that must be assessed very carefully.* Many of the sites and habitats that are important for connectivity in the three countries, and in the region as a whole, are indeed landscapes that reflect much of the social, economic and environmental history of the Caribbean. The theme of coffee production in particular could provide an interesting link, but it is one that needs to be well conceptualised and articulated, to ensure that the inclusion of the cultural dimension does not cause a loss of focus, that it does not dilute and disperse the effort, and that it remains sustainable.

83. *Perhaps the biggest challenge faced at this time is to move the CBC from being primarily a project to becoming a permanent institution, and this will require an effective transition in governance, capacity and financing.* Some progress was made at the most recent Ministerial Meeting with the signing of a cooperation agreement, but this agreement covers only the establishment of a secretariat. In order for the CBC Initiative to become truly institutionalised it will need, in addition to a stronger and more substantial vision:

- to become a real platform, (a) for knowledge production, sharing and use, (b) for joint programming, (c) for joint action and management and (d) for donor coordination;
- to broaden the engagement of and support from participating governments by involving other ministries and agencies;
- to build linkages with relevant international processes, including multi-lateral environmental agreements, notably through a greater involvement of ministries responsible for external affairs;
- to engage more directly civil society organisations and the scientific community, without complicating governance or losing governmental leadership;
- to adopt a new approach to governance, building upon existing mechanisms (e.g. using the convening of Technical Meetings as forums for technical exchanges);



- to define with clarity the desirable future role and functions of the respective governments and of UNEP in the coordination of the CBC Initiative;
- to enhance efficiency with a leaner, more effective and more efficient Secretariat;
- to sustain the quality of leadership currently available, but with an attention to succession planning;
- to improve the Secretariat's capacity in the field of local development and participatory governance;
- to consider the option of building and / or working through regional centres of excellence;
- to explore and facilitate community – private sector partnerships;
- to build synergies and enhance links with other local initiatives and projects, especially in Haiti;
- to clarify its relationship with and contribution to the Cartagena Convention, its SPAW Protocol, the Caribbean Environment Programme and the RCU;
- to concretise links and synergies with the Biosphere Reserves, in ways that add value to all processes, possibly with a formal agreement on the management of transboundary sites in Hispaniola;
- to develop and implement a comprehensive but realistic communication strategy that identifies the objectives, the audiences, the messages and information to be communicated, and the media to be used in each instance, with greater cohesion and synergies between the communication units of the three ministries;
- to develop, in cooperation with partners and stakeholders, mechanisms and a strategy for funding partnerships and for investments aiming at long term sustainability.

84. *The CBC Initiative also needs a geographic transition, and this is a challenging one, as it raises two difficult questions: should the CBC Initiative incorporate marine areas, and if so how? and should the CBC Initiative expand to other countries and territories in the Caribbean Islands hotspot, and if so how?* Because of its experimental nature, the CBC Project made a judicious choice in focusing on three countries. Now, as expansion is being considered, preliminary suggestions can be offered to assist in answering these questions:

- the approach to geographic expansion should be defined as part of the visioning and strategic planning exercise mentioned above, and decisions should not be made on a case-by-case basis. Instead, they should be made on the basis of the vision, the strategy and clearly defined criteria, with a rigorous assessment of the political, geographic, financial and other implications of any expansion;
- the question of the inclusion of marine areas and marine biodiversity should be resolved first and there are arguments in favour (neighbouring islands share a marine environment and marine biodiversity – including commercially important species -- that require joint management) as well as arguments against (the Caribbean Sea is a single, large ecosystem, the issue is not one of connectivity but one of ecosystem-based management, and there are institutions and processes, especially the Convention for the Protection and Development of the Marine Environment in the Wider Caribbean Region, known as the Cartagena Convention, and the GEF-funded Caribbean Large Marine Ecosystem project, that aim precisely at the joint management of that ecosystem. It is the view of this evaluation that it would be in the interest of the CBC Evaluation to remain focused on terrestrial biodiversity and connectivity, but with adequate collaboration and synergies with on-going processes in the marine environment, and with the possible inclusion of marine and coastal sites that have a very specific and important function in the management of shared resources;

- with respect to the inclusion of additional countries, several countries and territories have been cited as having expressed an interest (Jamaica, Puerto Rico, Guadeloupe, Martinique), but there is a need for a lucid assessment of each expression of interest (who, why, with what expectations), there is a need for criteria to formulate a response (including biological connectivity with existing corridor, political commitment, capacity) and there is need for an agreed process to such eventual inclusion. It would be advisable to consolidate the existing collaborative arrangement between Cuba, the Dominican Republic and Haiti before considering this geographic expansion.

85. *The CBC Initiative should also examine the status of the field projects, and make well-informed decisions that optimise the impact of the investments made to date.* This will require: (a) continued collaboration with the organisations that have facilitated these projects, including BIOECO, CATEDES, CEDAF and WHH; (b) facilitation of linkages between the actors in these projects, within countries and regionally; and (c) new linkages with organisations that have relevant experience in facilitating local conservation and development processes in these countries, and that may have the capacity to assist in sustaining these projects.

86. *In the future, it will be important and useful to ensure that counterpart contributions are properly estimated at design stage and recorded during execution.* Complex projects such as this are dependent on, and lead to the mobilising on, very substantial financial and technical inputs from national governments, civil society, academia and international organisations, and it is important that these contributions be properly taken into account, to provide fair and accurate estimates on investments expected and made, to allow partners to budget properly during and after a given project, and to inform the design of similar initiatives.

## ANNEXES

### *Annex 1: Response to stakeholder comments received but not (fully) accepted by the evaluators*

The consultants responsible for this evaluation prepared and distributed an initial discussion paper with partners of the CBC to present their preliminary findings of the terminal evaluation. This document was not a formal output of the evaluation exercise, and its purpose was to generate feedback and to test the validity of the main findings, prior to completing the evaluation process. It generated useful comments, corrections and discussions. Subsequently, the full draft final report was circulated to all stakeholders. This annex presents the comments that warrant a response from the evaluators.

This report distinguishes between the CBC Initiative and the CBC Project, and has concluded that the Project did not contribute optimally to the growth of the Initiative. One of the reviewers of the draft version of this report however stressed that it was not the purpose of the Project to support the wider Initiative, that its role was purely technical and that other provisions had been made to sustain the political process and engage stakeholders in the wider Initiative. This evaluation however notes that the project document clearly and justifiably gave the CBC Project a role of facilitation, including the formulation of a long-term strategic plan and the convening of annual technical and ministerial meetings.

Several of the comments received on the initial discussion paper and on the draft final report reflect some disagreement with the evaluation's assessment of relevance of the field activities in Haiti, notably those involving the promotion of renewable energy sources. It is indeed true, as stated in these comments, that any increase in the use of solar energy and energy-efficient stove may result in a reduction in the use of biomass for energy production and that this may, in turn, lead to biodiversity conservation through reduced deforestation. This evaluation however remains of the view that small-scale, local interventions in reforestation, renewable energy production or erosion control, however useful and relevant they may be at the level of the communities and sites where they are implemented, are only marginally relevant to the objectives pursued by this project. To some extent, this disagreement reflects a larger issue that this evaluation has addressed, i.e. the fact that the Project focused insufficiently on biological connectivity, which is primarily where it would have added further value to what was and is already being done at national and regional levels.

In the same vein, several reviewers questioned the evaluation's findings regarding the selection of some of the sites for the field projects and insisted that all those sites, including the five in Haiti, were important for and highly relevant to biodiversity conservation, including connectivity. The findings are however based on the evidence provided to and gathered by the evaluation team, which did not get such evidence for the sites in the Dominican Republic and for four of the sites in Haiti (the exception being Caracol). The site visits and the documentation reviewed confirmed the value of these sites, but did not demonstrate with certainty their role in providing regional connectivity between ecosystems, especially for the protection of avifauna.

With reference to paragraph 57, diverging comments were received, with some stakeholders specifically welcoming the view that government agencies in Haiti are too often by-passed by the development partners, while others were concerned that the language used implies that the Ministry of the Environment has capacities greater than is actually the case. While it is true that there are capacity issues, many of these issues can be attributed to factors external to the Ministry, and this evaluation did not reveal any significant difference between the performance of the Ministry as compared to the performance of the other partners involved in the coordination of field projects. The evaluators therefore decided to keep the paragraph in

its current form, and confirm their view that many of the weaknesses of public institutions in Haiti are the product of the policies and practices of their development partners, and that the approach taken by the Project is therefore significant and beneficial<sup>18</sup>.

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<sup>18</sup> For a broader context, see: Klein, Naomi. 2007. *The Shock Doctrine, the Rise of Disaster Capitalism*. New York: Picador, and with specific reference to Haiti: James, Erica Caple. 2010. *Democratic Insecurities: Violence, Trauma, and Intervention in Haiti*. Berkeley: University of California Press.

**Feedback matrix From Isabel Martinez (CBC Program Manager)**

Paragraph	Comment no.	Stakeholder comments	EO comments	EO recommendations	COMMENTS FROM THE EVALUATION TEAM
Paragraph 1, page 18	1	Paragraph 1, page 18: Milestones in 2009 should include Ratification of the 2009 Declaration ( <a href="http://www.cbcnuma.org/files/files/11%20DECLARACION%20POR_LA_BIODIVERSIDAD%20CARIBENA.pdf">http://www.cbcnuma.org/files/files/11%20DECLARACION%20POR_LA_BIODIVERSIDAD%20CARIBENA.pdf</a> ). I know this refers to the Plan of Action but still.		Evaluator to add	Addition made
Paragraph 1, page 19	2	Milestones in 2014: It would be useful to add: Acuerdo de Maná 2014: Acuerdo de Reiteración del compromiso de los gobiernos para la protección ambiental de la Isla Española ( <a href="http://www.cbcnuma.org/files/files/204669000-Acuerdo-de-Reiteracion-del-Compromiso-de-los-Gobiernos-para-la-Proteccion-Ambiental-de-la-Isla%20281%29.pdf">http://www.cbcnuma.org/files/files/204669000-Acuerdo-de-Reiteracion-del-Compromiso-de-los-Gobiernos-para-la-Proteccion-Ambiental-de-la-Isla%20281%29.pdf</a> ) because it makes reference to the CBC initiative		Evaluator to add	Addition made
Paragraph 2, page 20:	3	I just realized that perhaps neither me nor Blanca or any other person informed you about the SFA signed with MARCA (Asociación Mundial de Radios Comunitarias para América Latina y el Caribe) for the laboration of the radio spots (USD 4,600; see SFA attached) and radio spots at: <a href="http://www.cbcnuma.org/es/galeria">http://www.cbcnuma.org/es/galeria</a> . Also, the information about the SFA with University of Quisqueya to build the propagation center in Haiti is missing (see attachments).		Evaluator to comment and include if relevant	Information added in relevant sections
Table 30	4	With respect to the following point in 4. "A comprehensive programme of public education and awareness: Website created, newsletter published and distributed, educational materials produced as part of pilot projects, CBC concept and project promoted/it may have been too ambitious to envisage a comprehensive programme of public education and awareness, and the CBC project lacked a truly strategic approach with identified target audiences and pathways to meet specific communication objectives." If this component could have been effective, further resources and support from UNEP/ROLAC Communications Office could have provided. The challenge of communication in 27 languages (Spanish, French and Creole) was underestimated.	As clearly stated objective the provision of resources needed to accomplish it should have been addressed in the design and planning phase, for the objective should have been described in more detail in the Project document as the description of comprehensive programme is far too broad and open to interpretation.	Evaluator to comment	Both comments (stakeholder and EO) accepted and changes made accordingly
Paragraph 54:	5	It should say from January 2015 rather than February 2015		Evaluator to correct	Correction made
Paragraph 79	6	It should say from January 2015 rather than February 2015		As above	Correction made
Other	7	I guess the document should indicate what the letters of the ratings stand for (MS, ML, HS). I don't think I see this.	This is referred to in the TOR which has not yet been added as an annex but is a good point	Pls add define under the table listing the acronyms	Addition made in footnote
Other	8	The EU, particularly the EU Delegation in RD and particularly Florence Van-Houtte and Sarah Soriano deserve special thanks. They both became extremely engaged in the project. Florence joined EU-RD more times at the same time that I did; I think Sarah was the EU-RD from the start of the project. They were very critical along the process but also extremely supportive, even when they gave us sort of warning in late 2012. They also believe in the CBC Initiative. Perhaps in paragraph 7, table 9, below the row on "Sustained and enhanced political commitment" the report could include an additional row that talks about the donor's engagement beyond purely financial mechanism, for that additional paragraph between paragraphs 8 and 9.	I do not think the evaluation report is the right place to thank the EU delegation. They played a pivotal role in the project and their input directly impacted the project; then it should be mentioned.	Evaluator to add if relevant	It is indeed justified to note the role played by the EU Delegation in the ER, and this was done in section 60 of the report (rather than in table 9)

*Feedback matrix from Norbert Dechanel (CBC Tri-national Office)*

Paragraph	Comment no.	Stakeholder comments	EO comments	EO recommendations	COMMENTS FROM THE EVALUATION TEAM
22	1	In this space it is not necessary to mention the agreement signed between the UNEP and UNIQ for construction of the propagation center in Dosmond	It is the responsibility of the evaluation team to report information that they believe is useful to the evaluation	Evaluator comment	
24	2	In this case it is important to add Quiaqueya University		Evaluator to add if deemed relevant	
Table 6	3	Questionable yes, but you'll get the answer for each question in the field	Given the early stage of some of the projects it may be difficult to assess their contribution to goals at this point in time	Evaluator comment	
Table 7	4	La couverture forestière constitue un élément important dans la conservation de la biodiversité, alors, l'une des causes de la déforestation continue en Haïti est l'usage du bois ou du charbon de bois pour la cuisson. 1- Promouvoir des stratégies visant à diminuer l'usage du bois (rechauds améliorés, rechauds à gaz propane, centre bio gaz) est par conséquent une contribution à la conservation de la biodiversité. La couverture forestière constitue un élément important dans la conservation de la biodiversité, alors, l'une des causes de la déforestation continue en Haïti est l'usage du bois ou du charbon de bois pour la cuisson. 1- Promouvoir des stratégies visant à diminuer l'usage du bois (rechauds améliorés, rechauds à gaz propane, centre bio gaz) est par conséquent une contribution à la conservation de la biodiversité. 2- Promouvoir l'usage des énergies alternatives est aussi liée à la conservation de la biodiversité, même si dans le cas de Dosmond les panneaux sont utilisés pour éclairer certains endroits mais cette démarche contribue à sensibiliser les gens à rechercher d'autres sources d'énergie qui n'affectent pas la biodiversité	I agree that tackling deforestation will contribute to reaching the conservation objectives but the direct link between renewable energy and deforestation is not clear, unless local power plants are using illegally harvested wood as biomass for biogasification or combustion. Propane gas and improved stoves are not the classified under renewable energy	Evaluator comment	
Table 7	5	idem	As above	As above	
People net	6	Le chef de projet de jacme est : Jean Vea Dieudonne et son e-mail est : vea.dieudonne@welthungerhilfe.de	Evaluator please change	Evaluator please change	
Project: La Baie de Caracol, Haïti	7	C'est le contraire, d'abord 1- La baie de Caracol est la plus grande et importante du pays, en terme de conservation l'assainissement de cette surface élimine plusieurs tonnes de déchets de provenance diverse pouvant constituer des sources de contamination pour la flore et la faune de cette Baie et en plus, la sensibilisation, la formation des riverains sur cette question est une garantie de la durabilité de cette démarche étroitement liée à la conservation de la biodiversité 2- Qu'il s'agit des études réalisées dans le cadre de la démarcation du CBC de même que la situation géographique et écologique de la Baie de Caracol, on a toujours souligné que cette zone interconnecte divers endroits du point de vue biologique (manzanillo, parc des trois baies pour ne citer que ceux-là) voir le document de la démarcation.	Evaluator comment	Evaluator comment	
Project: Dosmond, Haïti	8	La couverture forestière constitue un élément important dans la conservation de la biodiversité, alors, l'une des causes de la déforestation continue en Haïti est l'usage du bois ou du charbon de bois pour la cuisson. 1- Promouvoir des stratégies visant à diminuer l'usage du bois (rechauds améliorés, rechauds à gaz propane, centre bio gaz) est par conséquent une contribution à la conservation de la biodiversité. 2- Promouvoir l'usage des énergies alternatives est aussi liée à la conservation de la biodiversité, même si dans le cas de Dosmond les panneaux sont utilisés pour éclairer certains endroits mais cette démarche contribue à sensibiliser les gens à rechercher d'autres sources d'énergie qui n'affectent pas la biodiversité	As previous	As previous	

*Annex 2: Terms of reference of the evaluation*

**TERMS OF REFERENCE**  
**Terminal Evaluation of European Union project**  
**“CARIBBEAN BIOLOGICAL CORRIDOR PROJECT”**

**I. PROJECT BACKGROUND AND OVERVIEW**

**Project General Information<sup>19</sup>**

**Table 1. Project summary**

<b>UNEP approval date:</b>	December 2009	<b>First Disbursement:</b>	Expected by September 2014
<b>Actual start date:</b>	January 2010	<b>Planned duration:</b>	36 months
<b>Intended completion date:</b>	December 2012	<b>Actual or Expected completion date:</b>	31 December 2014
<b>UNEP Co-financing:</b>	Euros 108,000 (in kind)	<b>Total Cost :</b>	Euros 2,882,835
<b>EU Contribution</b>	Euros 2,774,835		
<b>Mid-term review/eval. (planned date):</b>	June 2011	<b>Terminal Evaluation (actual date):</b>	Tentative August-October 2014
<b>Mid-term review/eval. (actual date):</b>	May – June 2012	<b>No. of revisions:</b>	3
<b>Date of last Steering Committee meeting:</b>	May 2013; next will meet in November 2014	<b>Date of last Revision:</b>	30 May 2014
<b>Disbursement as of 31 December:</b>	3 out 4 payments made by EU	<b>Date of financial closure:</b>	Project ends on 31/12/2014 but according to the contribution agreement with donor, the financial closure can be done within the 6 months after the end of project (i.e. 30 June 2015)
<b>Date of Completion:</b>	31/12/2014 (programmatic completion)	<b>Actual expenditures reported as of 30 June 2014:</b>	USD 3,453,460.70
<b>Total co-financing realized as of 30 June 2014:</b>	N/A	<b>Actual expenditures entered in IMIS as of 30 June 2014:</b>	USD 3,453,460.70
<b>Leveraged financing:</b>	Aprox. \$ 130,000		

## ABBREVIATIONS

### Acronym Definition

<b>BPoA</b>	<b>Barbados Programme of Action</b>
<b>CBC</b>	<b>Caribbean Biological Corridor</b>
<b>CEPF</b>	<b>Critical Ecosystem Partnership Fund</b>
<b>DR</b>	<b>Dominican Republic</b>
<b>EC</b>	<b>European Commission</b>
<b>GEF</b>	<b>Global Environment Facility</b>
<b>MDGs</b>	<b>Millennium Development Goals</b>
<b>PV</b>	<b>Photovoltaic</b>
<b>SIDS</b>	<b>Small Island Developing States</b>
<b>SSFA</b>	<b>Small Scale Fund Agreement</b>
<b>TNC</b>	<b>The Nature Conservancy</b>
<b>UNDP</b>	<b>United Nations Development Programme</b>
<b>UNEP</b>	<b>United Nations Environment Programme</b>
<b>UNEP/ROLAC</b>	<b>United Nations Environment Programme / Regional Office for Latin America and the Caribbean</b>
<b>UNICEF</b>	<b>United Nations Children's Fund</b>
<b>WFP</b>	<b>World Food Programme</b>
<b>WWF</b>	<b>World Wildlife Fund</b>



## **Project rationale**

1. The CBC arose out of the need to identify an ecological sound framework for addressing acute environmental degradation and poverty in Haiti. Since the island of Hispaniola is shared by both Haiti and the Dominican Republic, and in essence constitutes a common ecosystem; it became imperative that any effort aimed at establishing a framework involved these countries. This of itself did not provide a sound enough ecological framework for action. However, when viewed in the broader context of the Insular Caribbean it became evident that this framework provided the necessary ecological basis at the macro-planning level to be used as the basis for defining concrete activities to address biodiversity conservation and poverty alleviation, in particular in Haiti. The design of this Project puts special emphasis on transforming Haiti through South-South cooperation, drawing from lessons learned from a number of interventions in the area through analysis undertaken by Cuban, Dominican, and Haitian experts, as well as UN experts (mostly UNEP and WFP). Lessons pointed to major pressure on biodiversity and environmental degradation being linked to acute poverty and lack of alternative livelihood options, in particular for the case Haiti. South-South cooperation was identified as a way to address degradation of shared ecosystems through sharing of experiences and expertise among the three countries.
2. The rationale for its establishment from an ecological perspective lay in the similarity of the terrestrial ecosystems in the three participating countries. The area of the CBC which falls within the Insular Caribbean is one of the most important biodiversity hotspots worldwide and supports exceptionally diverse ecosystems, ranging from mountain cloud forests to cactus scrublands as well as several threatened species, including two species of *Solenodon* (giant shrews). It is one of 25 hotspots hosting 44 percent of plant species and 35 percent of vertebrates in only 1.4 percent of the Earth's surface.
3. The area's biodiversity significance is underscored by the fact that these high levels of biodiversity only covers an area of 234,124 km<sup>2</sup> distributed in close to 7000 islands. Having decided that the Insular Caribbean met the criteria to be considered as a planning framework based on solid ecological, geographical characteristics, it was used as the basis for the conceptualization of the Caribbean Biological Corridor. To achieve this, representatives from the Governments of Haiti, Dominican Republic and Cuba worked with the United Nations Environment Programme Regional Office for Latin America and the Caribbean to further develop the concept.

## **Background**

4. The Caribbean Biological Corridor Initiative (CBC Initiative) started in 2007 under the Santo Domingo Declaration adopted by the Ministers of the Environment of Haiti, Cuba and the Dominican Republic, witnessed by UNEP and ratified in 2009. That year, the ministries of the environment of the three countries also adopted the CBC Plan of Action.
5. The Caribbean Biological Corridor (CBC) is a framework, established by the Governments of the Dominican Republic, Cuba and Haiti in collaboration with the United Nations Environment Programme Regional Office for Latin America and the Caribbean (UNEP/ROLAC), for addressing biodiversity loss, through regional cooperation. The CBC provides a framework for cooperation between the countries of the insular Caribbean for the protection of biodiversity through environmental rehabilitation, particularly in Haiti and the alleviation of poverty as a means of reducing the pressure on biological resources in all three territories. It is also a means of establishing baselines, particularly for environmental rehabilitation, the setting of specific targets and timetables for specific interventions. The framework provided by the CBC covers the ecosystems of the eastern tip of Cuba, the territory of Haiti, and the western half of the Dominican Republic.

6. The Project on the Demarcation and Establishment of the Caribbean Biological Corridor (CBC): as a Framework for Biodiversity Conservation, Environmental Rehabilitation and Development of Livelihood Options in Haiti, the Dominican Republic and the Republic of Cuba funded by the European Union (EU) and supported by UNEP (UNEP/EU CBC Project) aimed to achieve Action 1 component VI (CBC Delimitation and consolidation) of the CBC plan of action.
7. The cooperation agreement signed between the EU and UNEP to implement the project was signed in December 2009 for a total duration of 36 months (i.e., until December 2012). The project had three extensions: one granted in March 2012 for 6 months, another one in June 2013 for 12 months and a final extension granted on May 2014 for 6 months. The current project completion date is 31 December 2014. The purpose of the extensions was to complete work already approved by the EU, utilizing existing funds available in the contribution agreement. The project had a total budget of EUR 2,774,835.
8. The Ministries of Environment of Haiti, Dominican Republic and Cuba were the national partners.
9. The three countries that agreed to jointly develop and implement the UNEP/EU CBC Project share a number of features: the importance of their biodiversity and the hazards they face, similar ecosystems; their interconnectedness and their potential for regional cooperation, particularly with respect to technology transfer and training tools to support environmental sustainability. The demarcation and establishment of a Caribbean Biological Corridor provides a platform for collaboration among all of the initiatives that are being developed, or may be developed, within the specific boundaries of the Caribbean Biological Corridor, thus enhancing long-term integration of conservation actions between these island states and contributing to the preservation of global biodiversity.
10. For the Caribbean Biological Corridor, the pressure on biological resources as a result of natural factors is compounded by human action and, on occasion, their uncontrolled use of the ecosystem. The fragility of the natural richness of the area has been aggravated in recent years by the poverty of its inhabitants, and due to the lack of alternative livelihoods those communities that inhabit the Caribbean Biological Corridor. Significantly, the area of the Biological Corridor is characterized by a high density of inhabitants per square km, compounding the destructive effect of human activity on biodiversity of the area.
11. The CBC Initiative and, therefore, the UNEP/EU CBC Project provide a framework for cooperation between the participating countries for the protection and reduction of biodiversity loss in the Caribbean Region and the American Neotropics.

## **5. Project objectives and components**

12. The **overall goal** of the project was to develop an adequate cooperation platform among all initiatives that were being developed or that could be developed within the specific limits of the CBC, thereby boosting the long-term integration of conservation actions among the insular states, contributing in that way to global biodiversity preservation.
13. The **project objective** was to establish the Caribbean Biological Corridor in the Dominican Republic, Republic of Haiti and Cuba, as a framework to contribute to the reduction of biodiversity loss in the Caribbean Region and the American Neotropics, through environmental rehabilitation, particularly in Haiti and the alleviation of poverty as a means of reducing the pressure on biological resources within the CBC.
14. The project was developed in Cuba, Haiti and the Dominican Republic and had the following objectives:
  - I. Demarcation of the Caribbean Biological Corridor in the Dominican Republic, Haiti and Cuba.
  - II. Strengthening the Network of Protected Areas for the Island of Hispaniola and mitigating

- threats to protected areas.
- III. Public awareness and education.
  - IV. Rehabilitation of degraded areas and identification and implementation of alternative livelihoods for communities.
  - V. Establishment of a Tri-National Coordination Structure to support the implementation of the Caribbean Biological Corridor.
15. The project focused on developing a structured dialogue and cooperation mechanism between the three countries, development of stakeholder networks, establishment of common information and databases, raising awareness and exchanges between countries. At the local level, the project has supported small environmental rehabilitation initiatives, the development of alternative livelihoods, particularly in Haiti, and the alleviation of poverty as a means to reduce pressure on biological resources.
  16. South-South cooperation is a cornerstone of the project, in particular through the transfer of knowledge and successful experiences from Cuba to Haiti and the Dominican Republic on the management of natural resources and protected areas.

**Table 2. Objectives, components and expected outcomes**

Objective	Results	Objectively verifiable indicators
<b>Objective 1:</b> To define the CBC spatially and compile the relevant existing information	1.1 Collection and analysis of existing knowledge and projects in execution, and identification of gaps in knowledge	Existing bibliographical information on the CBC compiled. Projects in execution within the CBC identified and described Institutions carrying out projects in the CBC identified and described. Gaps in knowledge identified. Methodology for socioeconomic description developed. Protocol for information collection in place. Socioeconomic description of selected sites done  Criteria for delimiting boundaries of CBC defined. Memoranda of understanding signed with the main actors identified.
	1.2 Analysis of existing legislation	Document reviewing existing legislation in the countries, and a comparative analysis with a proposal identifying legislation of the countries participating in the CBC that is susceptible to being harmonised.
	1.3 Definition of the specific areas that are central to the CBC	Definition of the areas that are the central focus of the CBC efforts documented and formally adopted by the three countries. Identification and description of threats to the areas that are the central focus of the CBC, and proposed actions to mitigate them.
	1.4 Creation of an information system and database	Database of georeferenced information created and operating, and accessible simply and without charge. GIS developed and operating.
	1.5 Creation of an updated Action Plan for the CBC	CBC Action Plan updated.
<b>Objective 2:</b> To facilitate the strengthening of a network of protected areas within the CBC	2.1 Coordination mechanisms between the different systems of protected areas established	The Tri-National Office has held at least 2 coordination meetings for the three countries' systems of protected areas. The Tri-National Office has conducted at least 2 training courses for personnel of the three countries' protected areas

<b>Objective 3:</b> To identify and implement livelihood alternatives for the communities and reduce pressures on biological diversity.	3.1 Pilot demonstration projects conducted to rehabilitate degraded land and develop alternative livelihoods.	Pilot projects that rehabilitate degraded ecosystems and generate income for the local communities through productive alternatives
	3.2 Nurseries functioning for the propagation of plants	Nurseries inaugurated and operating with resources from the countries
	3.3 Alternative energy sources in use	Photovoltaic systems functioning. Other alternative energy sources in use.
	3.4 Partnerships between communities and the private sector in place	Partnerships between the communities and the private sector, mitigating threats to biodiversity and supporting sustainable development at the local level.

<b>Objective 4:</b> To contribute to the development of the human resources needed in the participating countries, so as to ensure the sustainability of the conservation and sustainable development activities undertaken in the framework of the CBC	4.1 Instructors of trainers on natural resource management trained to work in the community	Instructors prepared, and the training considered relevant by those trained.
	4.2 Exchanges between the communities and islands	Exchanges carried out and considered of value by the participants.
	4.3 Personnel trained in the technical, normative and policy areas	National workshops providing training to decision-makers in key positions in national government and/or large groups are considered valuable by those receiving the training. The workshops have been given at the provincial level and are considered of value by the participants. The community workshops are held, and deemed of value by the participants.
	4.4 A comprehensive programme of public education and awareness.	The Caribbean Biological Corridor's corporate identity has been defined. The communication strategy and a press kit for the project have been developed Graphic materials created. Visibility workshops held in the three countries and considered of value by the participants. Radio and TV spots created and broadcast All the basic activities of the CBC are accompanied by press notes and ongoing dissemination to the media in the three countries Project website functioning and including visual content, news and technical content. Short videos created on the project's actions and themes.
<b>Objective 5:</b> To facilitate the creation of a tri-national coordination entity to support the creation and development of the Caribbean Biological Corridor.	5.1 A tri-national unit of the Caribbean Biological Corridor established	The Unit is operational and coordinates the implementation of the project's activities.
	5.2 A liaison mechanism in place at UNEP/ROLAC, the implementing agency, to handle relations among the various stakeholders	UNEP/ROLAC has the person hired for this function and maintains fluid and efficient relationships with the Tri-National Unit, focal points and other counterparts.
	5.3 The Ministerial Policy Tri-National Committee of the CBC in place and functioning	5 meetings held.
	5.4 The technical committee, composed of representatives of the countries, relevant non-governmental organizations and UNEP, established and functioning.	6 meetings held.
	5.5 The equipment and supplies needed for the project's functioning acquired.	Furniture and computer equipment acquired; office rented or available in the Haiti-Dominican Republic border area.

Source: Project logframe – Project Document Annex B

## 6. Executing Arrangements

17. The main implementing partners (national focal points) included: the Ministry of Science, Technology and Environment of Cuba (CITMA), the Haitian Ministry of Environment and the Ministry of Environment and Natural Resources of the Dominican Republic.
18. Main partners in the field included: the Eastern Centre of Ecosystems and Biodiversity (BIOECO) in Cuba, Welthungerhilfe (WHH, former German Agro Action) in Haiti and the Centre for Agricultural and Forestry Development (CEDAF) in the Dominican Republic, among others.
19. The UNEP/EU CBC Project also had the support of MEGACEN/CIGET (Centre for Information and Technology Management) in Cuba.
20. The Tri-National Office (TNO) located in Barahona, Dominican Republic, was the Project Implementation Unit and benefited from the technical, administrative (e.g. procurement, travel, etc.) and financial support of the UNEP Regional Office for Latin America and the Caribbean (ROLAC) in Panama and also the administrative support of the UNDP offices in Santo Domingo and Port-au-Prince.
21. The TNO staff consisted of a Technical Director, three specialists, two secretaries and two drivers, financed by the project. They liaised directly with implementing partners or directly implemented activities in the three participating countries. On UNEP's side, the project was monitored by a Programme Officer (provided by UNEP/ROLAC), a liaison person (provided by the Project), and by the UNEP/ROLAC Operations Department
22. The project was to report and be accountable to the **Technical and Ministerial Steering Committee** which was expected to convene every 12 months.

## 7. Project Cost and Financing

23. The estimated project costs at design with associated funding sources are presented in Table 3.

**Table 3. Estimated project cost (EUROS)**

Total cost (Euros)	EU contribution	2,774,835
	UNEP contribution	108,000
Aid method / Method of implementation	Project approach Tri-national implementation	

24. Payments are established in the Contribution Agreement as follows:
  - Pre-financing EUR 930,000
  - Forecast second pre-financing EUR 800, 000
  - Forecast third pre-financing EUR 774, 835
  - Forecast Final Payment EUR 270, 000
25. The project duration was scheduled for 36 months. Its effective start was in June 2010 (and not December 2009 as originally agreed) with approval from the EU as compensation for delays caused by an earthquake in Haiti in January 2010 and a later cholera outbreak.
26. In March of 2012, the European Union approved an addendum that extended the duration of the project by 6 months, i.e. until June 2013.
27. Then, the 3<sup>rd</sup> Meeting of the Ministerial Advisory Committee of the UNEP/EU CBC Project held in Montrouis, Haiti on 20<sup>th</sup> September 2012 decided that “the OTN should consult the Ministerial Committee in the course of the month of January 2013 with the goal of submitting to the European Union the possibility of an extension of the project” (decision 18,

<http://cbcinfo.wordpress.com/iii-reunion-ministerial/decisiones/>). In January 2013, the TNO, with UNEP support prepared the paperwork to request the no cost extension of project and consulted concerned countries accordingly. The request was submitted to the EU on the 1<sup>st</sup> of April (the documents are available at: <http://cbcunion.wordpress.com/>). In June of 2013, the European Union approved a second addendum that extended the duration of the project by 12 months, i.e. until June 2014 and; on 30 May 2014 the European Union approved a third no cost extension until 31 December 2014.

28. The purpose of the extensions was to complete work already approved by the EU, utilizing existing funds available in the contribution agreement.

## 8. Implementation Issues

29. The implementation process of the UNEP/UE CBC Project consisted of three phases:

- I. **2009-September 2010:** The start of the process coincided with the January 2010 earthquake in Haiti which meant that Government institutions focused their attention on meeting the needs of the affected population, basic reconstruction and the emergency situation; altering the implementation of the project. Several processes began during this stage including the selection of the Tri-National Office team, the establishment of this office (opened on 6 September 2010 in Barahona, Dominican Republic), and the creation of a Technical and Ministerial Committee for project monitoring.
- II. **October 2010-June 2012:** The mid-term evaluation was carried out in June 2012 along with the second EU monitoring report (also June 2012) and revealed a limited level of performance, as well as highlighting key issues that needed to be addressed. However there were promising prospects for improvement thanks to the consolidation of the management structure in the field (Barahona), improvements in the project document and logical framework, and the development of an Operational Plan of Activities among others.
- III. **July 2012 to date:** Based on specific recommendations of both the mid-term evaluation and the 2<sup>nd</sup> EU monitoring report, as well as the guidelines of the 3<sup>rd</sup> Technical/Ministerial meeting of the UNEP/EU CBC Project held on 20 September in Montrouis (Haiti)<sup>20</sup>, the project continued implementation, backed by the no-cost extension granted by the European Union, based on the formal support of countries to the project (and the CBC Initiative in general).

## TERMS OF REFERENCE FOR THE EVALUATION

### 1. Objective and Scope of the Evaluation

30. In line with the UNEP Evaluation Policy<sup>21</sup>, and the UNEP Evaluation Manual<sup>22</sup>, the Terminal Evaluation of the **Project on the Demarcation and Establishment of the Caribbean Biological Corridor (CBC): as a Framework for Biodiversity Conservation, Environmental Rehabilitation and Development of Livelihood Options in Haiti, the Dominican Republic and the Republic of Cuba** is undertaken after completion of the project to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The evaluation has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP, and their executing

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<sup>20</sup> <http://cbcinfo.wordpress.com/decisiones/>

<sup>21</sup> <http://www.unep.org/eou/StandardsPolicyandPractices/UNEPEvaluationPolicy/tabid/3050/language/en-US/Default.aspx>

<sup>22</sup> <http://www.unep.org/eou/StandardsPolicyandPractices/UNEPEvaluationManual/tabid/2314/language/en-US/Default.aspx>

partners – Ministries of the Environment, non-governmental organizations and other relevant actors. Therefore, the evaluation will identify lessons of operational relevance for future project formulation and implementation. It will focus on the following sets of **key questions**, based on the project's intended outcomes, which may be expanded by the consultants as deemed appropriate:

(a) How and to what extent did the project make a contribution in terms of the definition of the geographical boundaries of the CBC based on the criteria selected? Did the project take account of the area's vulnerability to both natural and anthropogenic processes? How and to what extent did the project advance the compilation of literature, existing projects and stakeholders relevant to the CBC Initiative? How and to what extent did the project set up a platform for collaboration between the various projects undertaken and the institutions operating within the CBC? How has the online database helped to increase knowledge and apply to improve actions to decrease the loss of biodiversity? Has the project contributed to consolidate the institutional aspects and sustainability at large of the CBC Initiative? How, why and what remains to be done?

(b) To what extent have countries shared relevant information on protected areas systems and adopted common or related methodologies?

(c) Has the project contributed to the development of partnerships between communities and the private sector in order to create economic opportunities for the communities and thereby reduce pressure on natural resources? What lessons can be learned from the pilot actions in terms of reduced biodiversity loss or degradation and increase of livelihoods / quality of life of local communities for future interventions in the CBC? How and to what extent have the vegetal propagation centers improved reforestation rates in Cuba, Haiti and the Dominican Republic? What lessons can be derived from forging private partnerships, building large vegetal propagation centres, and introducing kerosene stoves and solar panels?

(d) Is there any evidence on the role of the project played in improving natural resources management at the decision level, technical level and community level and learning good practices from the pilot projects in each of the three countries? What was the projects' impact on targeted audiences (decision-makers, local managers, local leaders, local communities) in their abilities perform their duties with respect to natural resources management? What lessons can be derived from the training component of the project for future interventions at national, bilateral and trinational levels? How has the project increased the visibility and understanding of the CBC Initiative? Has the project contributed to transform lay people's understanding of sustainable uses and conservation of biodiversity? What communication deliverables were produced in each country and at the regional level to convey the CBC messages (radio, TV spots, written material, online bulletins, the website, others)?

(e) How does the project, for a geographical area such as the current CBC, compare overall in terms of project cost, project preparation (effort and time) as well as environmental impact? To what extent has the project influenced harmonious political and technical relations among Cuba, Haiti and the Dominican Republic with respect to environmental management? How has the Tri-national Office of the project helped to adopt and foster a common regional approach to natural resources management? What are the lessons learned with respect to the role and mode of operation of the Trinational Office? How did UNEP/ROLAC contribute to the CBC Initiative from a technical and operative point of view? What best practices and lessons can be identified for UNEP's role in future steps of the CBC Initiative? To what extent has the structure established facilitated South-South cooperation between the participating countries?

## 2. Overall Approach and Methods

31. The Terminal Evaluation of the **Project on the Demarcation and Establishment of the Caribbean Biological Corridor (CBC): as a Framework for Biodiversity Conservation, Environmental Rehabilitation and Development of Livelihood Options in Haiti, the Dominican Republic and the Republic of Cuba** will be conducted by independent consultants under the overall responsibility and management of the UNEP Evaluation Office (Nairobi), in consultation with the UNEP Project Manager at the Regional Office for Latin America and the Caribbean (ROLAC).

32. It 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 to determine project achievements against the expected outputs, outcomes and impacts.
33. The evaluation will include the results achieved as of Phase III (i.e., after the mid-term evaluation conducted in June 2012). The assessment will also refer to the Operational Plan of Activities adopted at the 3rd Ministerial Meeting of the project, held on 20 September 2012 in Port au Prince, Haiti, along with the logical framework, the revised UNEP/EU CBC Project document and recommendations of the external mid-term evaluation and the EU monitoring reports, as well as the decisions of the project's 3rd and 4th Ministerial Meetings.
34. The findings of the evaluation will be based on the following:
  - (a) A **desk review** of project documents and others including, but not limited to:
    - Relevant background documentation, declarations and action plan pertaining to the CBC Initiative;
    - Project design documents; operative action plans, budgets or equivalent; revisions to the logical framework and project documents;
    - Project reports such as progress and financial reports from the Trinational Office / UNEP to the donor (European Union); reports to the Technical and Ministerial Steering Committees; decisions of Ministerial Steering Committee; addenda to the Contribution Agreement (project reviews) and relevant correspondence;
    - Reports from implementing partners (Ministry of the Environment of Haiti, Ministry of the Environment and Natural Resources of the Dominican Republic; Eastern Centre of Ecosystems and Biodiversity (BIOECO) on behalf of the Ministry of Science, Technology and Environment of Cuba (CITMA in Cuba, MEGACEN/CIGET (Centre for Information and Technology Management) in Cuba, Welthungerhilfe (WHH, former German Agro Action) in Haiti, Centre for Agricultural and Forestry Development (CEDAF) in the Dominican Republic, amongst other;
    - Administrative documentation from UNEP/ROLAC and UNDP-Dominican Republic;
    - Documentation related to project outputs.

Interviews with:

- Project management and execution support at the Trinational Office, also in terms of administrative support, interviews with UNDP in the Dominican Republic;
- UNEP Project Manager and Fund Management Officer (UNEP/ROLAC);
- Focal points of the ministries of the environment of the Dominican Republic, Haiti and Cuba;
- Implementing partners such as Welthungerhilfe (WHH, former German Agro Action) in Haiti and the Centre for Agricultural and Forestry Development (CEDAF) in the Dominican Republic, amongst other;
- Representatives of the donor, i.e. the European Union, and particularly, the Delegations in the Dominican Republic (leader), in Haiti and Cuba.
- Representatives of non-governmental and international agencies.

**Country visits.** The evaluation team will visit the Dominican Republic, Haiti and Cuba to interview key stakeholders and observe the operations of the vegetal propagation centres and the results of the pilot projects (3 in the Dominican Republic, 2 to 5 in Haiti, 2 in Cuba) supported by the project.

**Possible participation in the last ministerial meeting to be held in the middle of November in the Dominican Republic.**

### 3. Key Evaluation principles

35. Evaluation findings and judgements should be based on **sound evidence and analysis**, clearly documented in the evaluation report. Information will be triangulated (i.e. verified from different sources) to the extent possible, and when verification was not possible, the single source will be mentioned. Analysis leading to evaluative judgements should always be clearly spelled out.



36. The evaluation will assess the project with respect to a **minimum set of evaluation criteria** grouped in six categories: (1) Strategic Relevance; (2) Attainment of objectives and planned result, which comprises the assessment of outputs achieved, effectiveness and likelihood of impact; (3) Sustainability and replication; (4) Efficiency; (5) Factors and processes affecting project performance, including preparation and readiness, implementation and management, stakeholder participation and public awareness, country ownership and driven-ness, financial planning and management, UNEP supervision and backstopping, and project monitoring and evaluation; and (6) Complementarity with the UNEP strategies and programmes. The evaluation consultants can propose other evaluation criteria as deemed appropriate.
37. **Ratings.** All evaluation criteria will be rated on a six-point scale. However, complementarity of the project with the UNEP strategies and programmes is not rated. Annex 3 provides detailed guidance on how the different criteria should be rated and how ratings should be aggregated for the different evaluation criterion categories.
38. In attempting to attribute any outcomes and impacts to the project, the evaluators should consider the difference between *what has happened with and what would have happened without the project*. This implies that there should be consideration of the baseline conditions and trends in relation to the intended project outcomes and impacts. This also means that there should be plausible evidence to attribute such outcomes and impacts to the actions of the project. Sometimes, adequate information on baseline conditions and trends is lacking. In such cases this should be clearly highlighted by the evaluators, along with any simplifying assumptions that were taken to enable the evaluator to make informed judgements about project performance.
39. As this is a terminal evaluation, particular attention should be given to learning from the experience. Therefore, the “*Why?*” question should be at front of the consultants’ minds all through the evaluation exercise. This means that the consultants needs to go beyond the assessment of “*what*” the project performance was, and make a serious effort to provide a deeper understanding of “*why*” the performance was as it was, i.e. of processes affecting attainment of project results (criteria under category 3). This should provide the basis for the lessons that can be drawn from the project. In fact, the usefulness of the evaluation will be determined to a large extent by the capacity of the consultants to explain “*why things happened*” as they happened and are likely to evolve in this or that direction, which goes well beyond the mere review of “*where things stand*” today.

## 4. Evaluation criteria

### *Strategic relevance*

40. The evaluation will assess, in retrospect, whether the project’s objectives and implementation strategies were consistent with: i) Sub-regional environmental issues and needs; and ii) the UNEP mandate and policies at the time of design and implementation;
41. It will also assess whether the project objectives were realistic, given the time and budget allocated to the project, the baseline situation and the institutional context in which the project was to operate.

### *Achievement of Outputs*

42. The evaluation will assess, for each component, the project’s success in producing the programmed results as presented in Table 2 above, both in quantity and quality, as well as their usefulness and timeliness. Briefly explain the degree of success of the project in achieving its different outputs, cross-referencing as needed to more detailed explanations provided under Section F (which covers the processes affecting attainment of project objectives). The achievements under the regional and national demonstration projects will receive particular attention.

### *Effectiveness: Attainment of Objectives and Planned Results*

43. The evaluation will assess the extent to which the project's objectives were effectively achieved or are expected to be achieved.
44. The evaluation will reconstruct the Theory of Change (ToC) of the project based on a review of project documentation and stakeholder interviews. The ToC of a project depicts the causal pathways from project outputs (goods and services delivered by the project) over outcomes (changes resulting from the use made by key stakeholders of project outputs) towards impact (changes in environmental benefits and living conditions). The ToC will also depict any intermediate changes required between project outcomes and impact, called intermediate states. The ToC further defines the external factors that influence change along the pathways, whether one result can lead to the next. These external factors are either drivers (when the project has a certain level of control) or assumptions (when the project has no control).

45. The assessment of effectiveness will be structured in three sub-sections:

- (a) Evaluation of the **achievement of direct outcomes as defined in the reconstructed ToC**. These are the first-level outcomes expected to be achieved as an immediate result of project outputs.

Assessment of the **likelihood of impact** using a *Review of Outcomes to Impacts* (ROtI) approach as summarized in Annex 8 of the TORs. Appreciate to what extent the project has to date contributed, and is likely in the future to further contribute to changes in stakeholder behaviour as a result of the project's direct outcomes, and the likelihood of those changes in turn leading to changes in the natural resource base, benefits derived from the environment and human living conditions.

Evaluation of the **achievement of the formal project overall objective, overall purpose, goals and component outcomes** using the project's own results statements as presented in original logframe (see Table 2 above) and any later versions of the logframe. This sub-section will refer back where applicable to sub-sections (a) and (b) to avoid repetition in the report. To measure achievement, the evaluation will use as much as appropriate the indicators for achievement proposed in the Logical Framework Matrix (Logframe) of the project, adding other relevant indicators as appropriate. Briefly explain what factors affected the project's success in achieving its objectives, cross-referencing as needed to more detailed explanations provided under Section F.

46. There are some effectiveness questions of specific interest which the evaluation should certainly consider:

Overall political and technical support to the CBC Initiative: Effectiveness of the ministries of the environment as realized over the last 4.5 years of project execution, from the definition of the geographical area of the CBC to the development and implementation of pilot projects.

Geographical definition of the CBC spatially and compilation of existing information: Effectiveness of the compilation of literature, existing projects and stakeholders relevant to the CBC Initiative, the Geographical Information System (GIS) and the institutional aspects of the CBC Initiative to decrease the loss of biodiversity.

Identification and implementation of livelihood alternatives at community level and reduction of pressure on biodiversity: Effectiveness of the operations of the vegetal propagation centres in Haiti, Dominican Republic and Cuba for the provision of seedlings, reforestation for and having secured a source of additional income to local people. Also, effectiveness of pilot projects in participating countries a means of reducing pressure on biodiversity resources and addressing poverty. These pilot projects include: Haiti (Bassin Blue, conservation of biodiversity; Caracoal, sustainable fisheries; La Gonave, coffee production, photovoltaic energy; Fort Drouet, ecotourism; Dosmond, alternative energy); the Dominican Republic (Pedro Santana, waste management; Elías Piña, sustainable use of "palma de guano"; Comendador, apiaries); Cuba (Sigua, biodiversity conservation; Baitiquirí, biodiversity conservation). And, effectiveness of implementation arrangements with different partners (e.g. NGOs, local authorities, national authorities).

Development of the human resources and visibility of the CBC Initiative: The effectiveness of the various training courses. Will they contribute transform daily

national and local management of biodiversity? How effectively were project information and messages on the CBC Initiative disseminated across concerned countries? How has the corporate communications strategy become part of the trinational office's management function?

Creation of a trinational coordination mechanism: How effective has the trinational office and the coordination structure at large (trinational office, liaison mechanism, CBC ministerial committee and the technical committee) been in driving and directing the project and conducting the CBC Initiative at large?

### ***Sustainability and replication***

47. Sustainability is understood as the probability of continued long-term project-derived results and impacts after the external project funding and assistance ends. The evaluation will identify and assess the key conditions or factors that are likely to undermine or contribute to the persistence of benefits. Some of these factors might be direct results of the project while others will include contextual circumstances or developments that are not under control of the project but that may condition sustainability of benefits. The evaluation should ascertain to what extent follow-up work has been initiated and how project results will be sustained and enhanced over time. The reconstructed ToC will assist in the evaluation of sustainability.

48. Four aspects of sustainability will be addressed:

- (a) *Socio-political sustainability.* Are there any social or political factors that may influence positively or negatively the sustenance of project results and progress towards impacts? Is the level of ownership by the main national and regional stakeholders sufficient to allow for the project results to be sustained? Are there sufficient government and stakeholder awareness, interests, commitment and incentives to execute, enforce and pursue the programmes, plans, agreements, monitoring systems etc. prepared and agreed upon under the project?

*Financial resources.* To what extent are the continuation of project results and the eventual impact of the project dependent on continued financial support? What is the likelihood that adequate financial resources<sup>23</sup> will be or will become available to implement the programmes, plans, agreements, monitoring systems etc. prepared and agreed upon under the project? Are there any financial risks that may jeopardize sustenance of project results and onward progress towards impact?

*Institutional framework.* To what extent is the sustenance of the results and onward progress towards impact dependent on issues relating to institutional frameworks and governance? How robust are the institutional achievements such as governance structures and processes, policies, sub-regional agreements, legal and accountability frameworks etc. required to sustaining project results and to lead those to impact on human behaviour and environmental resources? A specific question of interest in the case of the CBC Initiative is to draw lessons learned and recommendations to continue the CBC initiative in the future and increase the quality and impact of future interventions.

*Environmental sustainability.* Are there any environmental factors, positive or negative, that can influence the future flow of project benefits? Are there any project outputs or higher level results that are likely to affect the environment, which, in turn, might affect sustainability of project benefits? Are there any foreseeable negative environmental impacts that may occur as the project results are being up-scaled?

### ***Efficiency***

49. The evaluation will assess the cost-effectiveness and timeliness of project execution. It will describe any cost- or time-saving measures put in place in attempting to bring the project as far as possible in achieving its results within its programmed budget and (extended) time. It will also analyse how delays, if any, have affected project execution, costs and effectiveness. Wherever possible, costs and time over results ratios of the project will be compared with that

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<sup>23</sup> Those resources can be from multiple sources, such as the public and private sectors, income generating activities, other development projects etc.

of other similar interventions. The evaluation will give special attention to efforts by the project teams to 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 all within the context of project execution in Indonesia.

### *Factors and processes affecting project performance*

50. **Preparation and readiness.** This criterion focusses on the quality of project design and preparation. Were project stakeholders<sup>24</sup> adequately identified? Were the project's objectives and components clear, practicable and feasible within its timeframe? Were the capacities of executing agencies properly considered when the project was designed? Was the project document clear and realistic to enable effective and efficient implementation? Were the partnership arrangements properly identified and the roles and responsibilities negotiated prior to project implementation? Were counterpart resources (funding, staff, and facilities) and enabling legislation assured? Were adequate project management arrangements in place? Were lessons from other relevant projects properly incorporated in the project design? What factors influenced the quality-at-entry of the project design, choice of partners, allocation of financial resources etc.?
51. **Project implementation and management.** This includes an analysis of implementation approaches used by the project, its management framework, the project's adaptation to changing conditions (adaptive management), the performance of the implementation arrangements and partnerships, relevance of changes in project design, and overall performance of project management. The evaluation will:
- (a) Ascertain to what extent the project implementation mechanisms outlined in the project document have been followed and were effective in delivering project outputs and outcomes. Were pertinent adaptations made to the approaches originally proposed?
- Evaluate the effectiveness and efficiency of project management by the Trilateral Office and how well the management was able to adapt to changes during the life of the project.
- Assess the role and performance of the national focal points established and the project execution arrangements at all levels.
- Assess the extent to which project management responded to direction and guidance provided by the Ministerial Steering Committee and UNEP supervision recommendations.
- Identify operational and political / institutional problems and constraints that influenced the effective implementation of the project, and how the project partners tried to overcome these problems. How did the relationship between the project management team (Trilateral Office), the national focal points and UNEP/ROLAC develop?
- Assess the extent to which MTE recommendations were followed in a timely manner.
52. **Stakeholder participation and public awareness.** The term stakeholder should be considered in the broadest sense, encompassing project partners, government institutions, private interest groups, local communities etc. The TOC analysis should assist the evaluators in identifying the key stakeholders and their respective roles, capabilities and motivations in each step of the causal pathway from activities to achievement of outputs and outcomes to impact. The assessment will look at three related and often overlapping processes: (1) information dissemination between stakeholders, (2) consultation between stakeholders, and (3) active engagement of stakeholders in project decision making and activities. The evaluation will specifically assess:
- (a) the approach(es) used to identify and engage stakeholders in project implementation. What were the strengths and weaknesses of these approaches with respect to the project's objectives and the stakeholders' motivations and capacities? What was the achieved degree and effectiveness of collaboration and interactions between the various project partners and stakeholders during implementation of the project?

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<sup>24</sup> Stakeholders are the individuals, groups, institutions, or other bodies that have an interest or stake in the outcome of the project. The term also applies to those potentially adversely affected by the project.

the degree and effectiveness of any public awareness activities that were undertaken during the course of implementation of the project; or that are built into the assessment methods so that public awareness can be raised at the time the assessments will be conducted;  
how the results of the project (strategic programmes and plans, monitoring and management systems, sub-regional agreements etc.) promote participation of stakeholders, including users, in decision making in the environmental sector

53. **Country ownership and driven-ness.** The evaluation will assess the performance of government agencies involved in the project, the ministries of the environment of the Dominican Republic, Haiti and Cuba:

- (a) In how far has the Government assumed responsibility for the project and provided adequate support to project execution, including the degree of cooperation received from the various public institutions involved in the project and the timeliness of provision of counter-part funding to project activities?

To what extent has the political and institutional framework of the Dominican Republic, Haiti and Cuba been conducive to project performance?

How responsive were the government partners to the Trilateral Office coordination and guidance, and to UNEP supervision?

54. **Financial planning and management.** Evaluation of financial planning requires assessment of the quality and effectiveness of financial planning and control of financial resources throughout the project's lifetime. The assessment will look at actual project costs by activities compared to budget (variances), financial management (including disbursement issues), and co-financing. The evaluation will:

- (a) Verify the application of proper standards (clarity, transparency, audit etc.) and timeliness of financial planning, management and reporting to ensure that sufficient and timely financial resources were available to the project and its partners;  
(b) Appreciate other administrative processes such as recruitment of staff, procurement of goods and services (including consultants), preparation and negotiation of cooperation agreements etc. to the extent that these might have influenced project performance;

Describe the resources the project has leveraged since inception and indicate how these resources are contributing to the project's ultimate objective. Leveraged resources are additional resources—beyond those committed to the project itself at the time of approval—that are mobilized later as a direct result of the project. Leveraged resources can be financial or in-kind and they may be from other donors, NGO's, foundations, governments, communities or the private sector.

55. Analyse the effects on project performance of any irregularities in procurement, use of financial resources and human resource management, and the measures taken by the Trilateral Office or UNEP to prevent such irregularities in the future. Appreciate whether the measures taken were adequate.

56. **UNEP supervision and backstopping.** The purpose of supervision is to verify the quality and timeliness of project execution in terms of finances, administration and achievement of outputs and outcomes, in order to identify and recommend ways to deal with problems which arise during project execution. Such problems may be related to project management but may also involve technical/institutional substantive issues in which UNEP has a major contribution to make. The evaluators should assess the effectiveness of supervision and administrative and financial support provided by UNEP including:

- (a) The adequacy of project supervision plans, inputs and processes;  
The emphasis given to outcome monitoring (results-based project management);  
The realism and candour of project reporting and ratings (i.e. are PIR ratings an accurate reflection of the project realities and risks);  
The quality of documentation of project supervision activities; and  
Financial, administrative and other fiduciary aspects of project implementation supervision.

57. **Monitoring and evaluation.** The evaluation will include an assessment of the quality, application and effectiveness of project monitoring and evaluation plans and tools, including an assessment of risk management based on the assumptions and risks identified in the project

document. The evaluation will appreciate how information generated by the M&E system during project implementation was used to adapt and improve project execution, achievement of outcomes and ensuring sustainability. M&E is assessed on three levels:

- (a) *M&E Design.* Projects should have sound M&E plans to monitor results and track progress towards achieving project objectives. An M&E plan should include a baseline (including data, methodology, etc.), SMART indicators and data analysis systems, and evaluation studies at specific times to assess results. The time frame for various M&E activities and standards for outputs should have been specified. The evaluators should use the following questions to help assess the M&E design aspects:
- Quality of the project logframe (original and possible updates) as a planning and monitoring instrument; analyse, compare and verify correspondence between the original logframe in the Project Document, possible revised logframes and the logframe used in Project Implementation Review reports to report progress towards achieving project objectives;
  - SMART-ness of indicators: Are there specific indicators in the logframe for each of the project objectives? Are the indicators measurable, attainable (realistic) and relevant to the objectives? Are the indicators time-bound?
  - Adequacy of baseline information: To what extent has baseline information on performance indicators been collected and presented in a clear manner? Was the methodology for the baseline data collection explicit and reliable?
  - Arrangements for monitoring: Have the responsibilities for M&E activities been clearly defined? Were the data sources and data collection instruments appropriate? Was the frequency of various monitoring activities specified and adequate? In how far were project users involved in monitoring?
  - Arrangements for evaluation: Have specific targets been specified for project outputs? Has the desired level of achievement been specified for all indicators of objectives and outcomes? Were there adequate provisions in the legal instruments binding project partners to fully collaborate in evaluations?
  - Budgeting and funding for M&E activities: Determine whether support for M&E was budgeted adequately and was funded in a timely fashion during implementation.

*M&E Plan Implementation.* The evaluation will verify that:

- the M&E system was operational and facilitated timely tracking of results and progress towards projects objectives throughout the project implementation period;
- annual project reports and Progress Implementation Review (PIR) reports were complete, accurate and with well justified ratings;
- the information provided by the M&E system was used during the project to improve project performance and to adapt to changing needs.

### ***Complementarities with UNEP strategies and programmes***

58. The evaluation should present a brief narrative on the following issues:

- (a) *Linkage to UNEP's Expected Accomplishments and POW 2010-2011, PoW 2012-2013 and PoW 2014-2015.* The UNEP MTS specifies desired results in six thematic focal areas. The desired results are termed Expected Accomplishments. Using the completed ToC/ROI analysis, the evaluation should comment on whether the project makes a tangible contribution to any of the Expected Accomplishments specified in the UNEP MTS..

*Alignment with the Bali Strategic Plan (BSP)*<sup>25</sup>. The outcomes and achievements of the project should be briefly discussed in relation to the objectives of the UNEP BSP.

*Gender.* Ascertain to what extent project design, implementation and monitoring have taken into consideration: (i) possible gender inequalities in access to and the control over natural resources; (ii) specific vulnerabilities of women and children to environmental degradation or disasters; and (iii) the role of women in mitigating or adapting to environmental changes and engaging in environmental protection and rehabilitation.

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<sup>25</sup> <http://www.unep.org/GC/GC23/documents/GC23-6-add-1.pdf>

Appreciate whether the intervention is likely to have any lasting differential impacts on gender equality and the relationship between women and the environment. To what extent do unresolved gender inequalities affect sustainability of project benefits?

*South-South Cooperation.* This is regarded as the exchange of resources, technology, and knowledge between developing countries. Briefly describe any aspects of the project that could be considered as examples of South-South Cooperation.

### **The Consultants' Team**

59. For this evaluation, the evaluation team will consist of one team leader and one supporting consultant. One consultant shall be an expert in natural resources management; the other consultant shall be an expert in environmental law or governance (public policy, institutional framework, legislation). Both consultants should have:

- Proven experience in environment-related issues.
- Proven experience in project evaluation, international cooperation project/programme design and management.
- Good command of social research techniques.
- Knowledge of the institutional context and the reality of Cuba, Haiti and Dominican Republic.
- Proven experience in development cooperation.

#### **Skills**

- **Professionalism** — Particularly in evaluation of environmental projects
- **Communication** — Excellent communication skills, both oral and written, including the ability to draft and edit technical reports, research papers, and to articulate ideas in a clear, concise and substantive style.
- **Teamwork** — Good personal skills and teamwork. Ability to establish and maintain networks and teams. Willingness to work in a multicultural and diverse environment, showing respect and sensitivity for others.

#### **Education**

- **Education** — University degree (Master's Degree or postgraduate training an asset), in Integrated Natural Resource Management, public policy or environmental law.
- **Experience** — At least ten (10) years in the area of sustainable development. Comprehensive and excellent knowledge of formulation and development of public policies is required, in particular, sustainable development policies for the sectors present in the project. Knowledge of the social and environmental situation of Cuba, Haiti and Dominican Republic.
- **Language** — Excellent command of Spanish (written and spoken) is required, command of French is an asset.

60. The Team Leader will coordinate data collection and analysis, and the preparation of the main report for the evaluation, with substantive contributions by the supporting consultant. Both consultants will ensure together that all evaluation criteria are adequately covered.

61. By undersigning the service contract with UNEP/UNON, the consultants 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.

### **Evaluation Deliverables and Review Procedures**

62. The evaluation team will prepare an **inception report** (see Annex 2(a) of TORs for Inception Report outline) containing a thorough review of the project context, project re-design quality, a draft reconstructed Theory of Change of the project, the evaluation framework and a tentative evaluation schedule.

63. The review of the re-design quality will cover the following aspects (see Annex 9 for the detailed project design assessment matrix):

Strategic relevance of the project  
 Revised logical framework (see paragraph 25);  
 Financial planning (see paragraph 30);  
 M&E design (see paragraph 33(a));  
 Complementarities with UNEP strategies and programmes (see paragraph 34);  
 Sustainability considerations and measures planned to promote replication (see paragraph 23).

64. The inception report will also present a draft, desk-based reconstructed Theory of Change of the project. It is vital to reconstruct the ToC *before* the most of the data collection (review of reports, in-depth interviews, observations on the ground etc.) is done, because the ToC will define which direct outcomes, drivers and assumptions of the project need to be assessed and measured to allow adequate data collection for the evaluation of project effectiveness, likelihood of impact and sustainability.
65. The evaluation framework will present in further detail the evaluation questions under each criterion with their respective indicators and data sources. The evaluation framework should summarize the information available from project documentation against each of the main evaluation parameters. Any gaps in information should be identified and methods for additional data collection, verification and analysis should be specified.
66. The inception report will also present a tentative schedule for the overall evaluation process, including a draft programme for the country visit and tentative list of people/institutions to be interviewed.
67. The inception report will be submitted for review and approval by the Evaluation Office before the evaluation team travels to La Española and Cuba.
68. **The main evaluation report** should be brief (no longer than 35 pages – excluding the executive summary and annexes), to the point and written in plain Spanish. The evaluation team will deliver a high quality report in Spanish by the end of the assignment. The team will also provide the executive summary and the conclusions, lessons learned and recommendations section. The report will follow the annotated Table of Contents outlined in Annex 1. It must explain the purpose of the evaluation, exactly what was evaluated and the methods used (with their limitations). The report will present evidence-based and balanced findings, consequent conclusions, lessons and recommendations, which will be cross-referenced to each other. The report should be presented in a way that makes the information accessible and comprehensible. Any dissident views in response to evaluation findings will be appended in footnote or annex as appropriate. To avoid repetitions in the report, the authors will use numbered paragraphs and make cross-references where possible.
69. **Review of the draft evaluation report.** The evaluation team will submit the zero draft report latest two weeks after the country visit has been completed to the UNEP EO and revise the draft following the comments and suggestions made by the EO. Once a draft of adequate quality has been accepted, the EO will share this first draft report with the UNEP Project Manager, who will ensure that the report does not contain factual errors. The UNEP Project Manager will then forward the first draft report to the other project stakeholders, in particular the Trinational Office for review and comments. Stakeholders may provide feedback on any errors of fact and may highlight the significance of such errors in any conclusions. It is also very important that stakeholders provide feedback on the proposed recommendations and lessons. Comments would be expected within two weeks after the draft report has been shared. Any comments or responses to the draft report will be sent to the UNEP EO for collation. The EO will provide the comments to the evaluation team for consideration in preparing the final draft report.
70. The evaluation team will submit the final draft report no later than 2 weeks after reception of stakeholder comments. The team will prepare a **response to comments**, listing those comments not or only partially accepted by them that could therefore not or only partially be accommodated in the final report. They will explain why those comments have not or only partially been accepted, providing evidence as required. This response to comments will be shared by the EO with the interested stakeholders to ensure full transparency.



71. Submission of the final Terminal Evaluation report. The final report shall be submitted by Email to the Head of the Evaluation Office, who will share the report with the Director, UNEP/ROLAC Director and Task Manager.
72. The final evaluation report will be published on the UNEP Evaluation Office web-site [www.unep.org/eou](http://www.unep.org/eou).
73. As per usual practice, the UNEP EO will prepare a **quality assessment** of the first draft and final draft report, which is a tool for providing structured feedback to the evaluation consultants. The quality of the report will be assessed and rated against the criteria specified in Annex 4.
74. The UNEP Evaluation Office will assess the ratings in the final evaluation report based on a careful review of the evidence collated by the evaluation consultant and the internal consistency of the report. Where there are differences of opinion between the evaluator and UNEP Evaluation Office on project ratings, both viewpoints will be clearly presented in the final report.

### **Logistical arrangement**

75. This Terminal Evaluation will be undertaken by independent evaluation consultants contracted by the UNEP Evaluation Office. The consultants will work under the overall responsibility of the UNEP Evaluation Office and will consult with the Evaluation Office on any procedural and methodological matters related to the evaluation. It is, however, the consultants' individual responsibility to arrange for their travel, visa, obtain documentary evidence, plan meetings with stakeholders, organize field visits, and any other logistical matters related to the assignment. The UNEP Project Manager and the Trinational Office will, provide logistical support (introductions, meetings, transport etc.) for the country visit, allowing the consultants to conduct the evaluation as efficiently and independently as possible.

### **Schedule of the evaluation**

Activity	Date
Start of the evaluation	21 October 2014
Inception report	1 November 2014
Comments from Evaluation Office	5 November 2014
Field visits	10 November 2014
Zero Draft report	18 December 2014
Comments from Evaluation Office	22 December 2014
First draft report	20 January 2015
Comments from stakeholders	4 February 2015
Final report	21 February 2015

76. The consultants may visit the participating countries and the UNEP/UNCT offices to conduct interviews with relevant stakeholders, including Ministries and other actors. The schedule of the field visits and the choice of countries will be discussed with the UNEP Task Manager and the Evaluation Office.
77. Consultations will be held between the consultants, Evaluation Office staff, the UNEP, the UNCT of the relevant countries, and key members of the project execution team. These consultations will seek feedback on the proposed recommendations and lessons.

**Submission of the final evaluation report:** The final report shall be submitted by email to:

**Mr. Michael Spilsbury**  
Chief  
UNEP Evaluation Office  
Email: [michael.spilsbury@unep.org](mailto:michael.spilsbury@unep.org)

The Head of Evaluation will share the report with the following persons:

**Isabel Martínez, Oficial de Programa**

Programme Officer  
Programa de las Naciones Unidas para el Medio Ambiente  
Regional Office for Latin America and the Caribbean  
PANAMÁ  
Tel.: (507) 305-3173 (dir) Fax: (507) 305-3105  
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78. The final evaluation report will be published on the UNEP Evaluation Office web-site [www.unep.org/eou](http://www.unep.org/eou) and may be printed in hard copy.
79. As per usual practice, the UNEP Evaluation Office will prepare a quality assessment of the zero draft and final draft report, which is a tool for providing structured feedback to the evaluation consultants. The quality of the report will be assessed and rated against UNEP criteria as presented in Annex 5.
80. The UNEP Evaluation Office will also prepare a commentary on the final evaluation report, which presents the Evaluation Office ratings of the project based on a careful review of the evidence collated by the evaluation team and the internal consistency of the report.

## 9. Schedule of Payment

81. Both consultants will be hired under an individual Special Service Agreement (SSA). There are two options for contract and payment: lumpsum or “fees only”.
82. **Lumpsum:** The contract covers both fees and expenses such as travel, per diem (DSA) and incidental expenses which are estimated in advance. The consultants will receive an initial payment covering estimated expenses upon signature of the contract.
83. **Fee only:** The contract stipulates consultant fees only. Air tickets will be purchased by UNEP and 75% of the DSA for each authorised travel mission will be paid up front. Local in-country travel and communication costs will be reimbursed on the production of acceptable receipts. Terminal expenses and residual DSA entitlements (25%) will be paid after mission completion.
84. The payment schedule for both consultants will be linked to the acceptance of the key evaluation deliverables by the Evaluation Office:

Final inception report:	20 percent of agreed total fee
First draft main evaluation report:	40 percent of agreed total fee
Final main evaluation report:	40 percent of agreed total fee
85. In case the consultants are not able to provide the deliverables in accordance with these TORs, in line with the expected quality standards by the UNEP Evaluation Office, payment may be withheld at the discretion of the Head of the Evaluation Office until the consultants have improved the deliverables to meet UNEP’s quality standards.
86. If the consultants fail to submit a satisfactory final product to UNEP in a timely manner, i.e. within one month after 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 1. Annotated Table of Contents of the main evaluation deliverables

### INCEPTION REPORT

Section	Notes	Data Sources	Max. number of pages
<b>1. Introduction</b>	Brief introduction to the project and evaluation.		1
<b>2. Project background</b>	Summarise the project context and rationale. How has the context of the project changed since project design?	Background information on context	3
<b>3. Review of project design</b>	Summary of project design strengths and weaknesses. Complete the Template for assessment of the quality of project design (Annex of the Terms of Reference).	Project document and revisions, MTE/MTR if any.	2 + completed matrix in annex of the inception report
<b>4. Reconstructed Theory of Change</b>	The Theory of Change should be reconstructed, based on project documentation. It should be presented with one or more diagrams and explained with a narrative.	Project document narrative, logical framework and budget tables. Other project related documents.	2 pages of narrative + diagram(s)
<b>5. Evaluation framework</b>	The evaluation framework will contain: <ul style="list-style-type: none"> <li>• Detailed evaluation questions (including new questions raised by review of project design and ToC analysis) and indicators</li> <li>• Data Sources</li> </ul> It will be presented as a matrix, showing questions, indicators and data sources.	Review of all project documents.	5
<b>6. Evaluation schedule</b>	<ul style="list-style-type: none"> <li>- Revised timeline for the overall evaluation (dates of travel and key evaluation milestones)</li> <li>- Tentative programme for the country visit (see proposed time schedule by UNEP)</li> </ul>	Discussion with project team on logistics.	2
<b>7. Distribution of responsibilities among within the evaluation team</b>	Distribution of roles and responsibilities among evaluation consultants (may be expanded in Annex)		1
<b>6. Annexes</b>	A- Completed matrix of the overall quality of project re-design B- List of individuals and documents consulted for the inception report C- List of documents and individuals to be consulted during the main evaluation phase		

### MAIN REPORT

<b>Project Identification Table</b>	An updated version of the Table 1 (page 1) of these TORs
<b>Executive Summary</b>	Overview of the main findings, conclusions and recommendations of the evaluation. It should encapsulate the essence of the information contained

	in the report to facilitate dissemination and distillation of lessons. The main points for each evaluation parameter should be presented here (with a summary ratings table), as well as the most important lessons and recommendations. Maximum 4 pages.
<b>I. Introduction</b>	A very brief introduction, mentioning the name of evaluation and project, project duration, cost, implementing partners and objectives of the evaluation.
<b>II. The Evaluation</b>	Objectives, approach and limitations of the evaluation
<b>III. The Project</b>	
A. Context	Overview of the broader institutional and country context, in relation to the project's objectives, including changes during project implementation
B. Objectives and components	
C. Target areas/groups	
D. Milestones/key dates in project design and implementation	
E. Implementation arrangements	
F. Project financing	Estimated costs and funding sources
G. Project partners	
H. Changes in design during implementation	
I. Reconstructed Theory of Change of the project	
<b>IV. Evaluation Findings</b>	
A. Strategic relevance	This chapter is organized according to the evaluation criteria presented in section II.4 of the TORs and provides factual evidence relevant to the questions asked and sound analysis and interpretations of such evidence. This is the main substantive section of the report. Ratings are provided at the end of the assessment of each evaluation criterion.
B. Achievement of outputs	
C. Effectiveness: Attainment of project objectives and results <ul style="list-style-type: none"> <li>i. Direct outcomes from reconstructed TOC</li> <li>ii. Likelihood of impact using RoTI and based on reconstructed TOC</li> <li>iii. Achievement of project goal and planned objectives</li> </ul>	
D. Sustainability and replication	
E. Efficiency	
F. Factors affecting performance	
G. Complementarity with UNEP strategies and programmes	
<b>V. Conclusions and Recommendations</b>	
A. Conclusions	This section should summarize the main conclusions of the evaluation, told in a logical sequence from cause to effect. It is suggested to start with the positive achievements and a short explanation why these could be achieved, and, then, to present the less successful aspects of the project with a short explanation why. The conclusions section should end with the overall assessment of the project. Avoid presenting an "executive summary"-style conclusions section. Conclusions should be cross-referenced to the main text of the report (using the paragraph numbering). The overall ratings table should be inserted here (see Annex 2).
B. Lessons Learned	Lessons learned should be anchored in the conclusions of the evaluation. In fact, no lessons should appear which are not based upon an explicit finding of the evaluation. Lessons learned are rooted in real project

	<p>experiences, i.e. based on good practices and successes which could be replicated or derived from problems encountered and mistakes made which should be avoided in the future. Lessons learned must have the potential for wider application and use. Lessons should briefly describe the context from which they are derived and specify the contexts in which they may be useful.</p>
C. Recommendations	<p>As for the lessons learned, all recommendations should be anchored in the conclusions of the report, with proper cross-referencing. Recommendations are actionable proposals on how to resolve concrete problems affecting the project or the sustainability of its results. They should be feasible to implement within the timeframe and resources available (including local capacities), specific in terms of who would do what and when, and set a measurable performance target. In some cases, it might be useful to propose options, and briefly analyse the pros and cons of each option.</p> <p>It is suggested, for each recommendation, to first briefly summarize the finding it is based upon with cross-reference to the section in the main report where the finding is elaborated in more detail. The recommendation is then stated after this summary of the finding.</p>
<b>Annexes</b>	<p>These may include additional material deemed relevant by the evaluator but must include:</p> <ol style="list-style-type: none"> <li>1. Response to stakeholder comments received but not (fully) accepted by the evaluators</li> <li>2. Evaluation TORs (without annexes)</li> <li>3. Evaluation program, containing the names of locations visited and the names (or functions) and <u>contacts (Email)</u> of people met</li> <li>4. Bibliography</li> <li>5. Summary co-finance information and a statement of project expenditure by activity (See annex of these TORs)</li> <li>6. Brief CVs of the consultants</li> </ol>

### **Important note on report formatting**

Reports should be submitted in Microsoft Word .doc or .docx format. Use of Styles (Headings etc.), page numbering and numbered paragraphs is compulsory from the very first draft report submitted. Examples of UNEP Terminal Evaluation Reports are available at [www.unep.org/eou](http://www.unep.org/eou).

## Annex 2. Evaluation Ratings

The evaluation will provide individual ratings for the evaluation criteria described in section II.4 of these TORs.

Most criteria will be rated on a six-point scale as follows: Highly Satisfactory (HS); Satisfactory (S); Moderately Satisfactory (MS); Moderately Unsatisfactory (MU); Unsatisfactory (U); Highly Unsatisfactory (HU). Sustainability is rated from Highly Likely (HL) down to Highly Unlikely (HU).

In the conclusions section of the report, ratings will be presented together in a table, with a brief justification cross-referenced to the findings in the main body of the report.

Criterion	Summary Assessment	Rating
<b>A. Strategic relevance</b>		HS → HU
<b>B. Achievement of outputs</b>		HS → HU
<b>C. Effectiveness: Attainment of project objectives and results</b>		HS → HU
1. Achievement of direct outcomes		HS → HU
2. Likelihood of impact		HS → HU
3. Achievement of project goal and planned objectives		HS → HU
<b>D. Sustainability and replication</b>		HL → HU
1. Financial		HL → HU
2. Socio-political		HL → HU
3. Institutional framework		HL → HU
4. Environmental		HL → HU
5. Catalytic role and replication		HS → HU
<b>E. Efficiency</b>		HS → HU
<b>F. Factors affecting project performance</b>		
1. Preparation and readiness		HS → HU
2. Project implementation and management		HS → HU
3. Stakeholders participation and public awareness		HS → HU
4. Country ownership and driven-ness		HS → HU
5. Financial planning and management		HS → HU
6. UNEP supervision and backstopping		HS → HU
7. Monitoring and evaluation		HS → HU
a. M&E Design		HS → HU
b. Budgeting and funding for M&E activities		HS → HU
c. M&E pPlan Implementation		HS → HU
<b>Overall project rating</b>		HS → HU

**Overall project rating.** The overall project rating should consider parameters ‘A-E’ as being the most important with ‘C’ and ‘D’ in particular being very important.

**Rating for effectiveness: Attainment of project objectives and results.** An aggregated rating will be provided for the achievement of direct outcomes as determined in the reconstructed Theory of Change of the project, the likelihood of impact and the achievement of the formal project goal and objectives. This aggregated rating is not a simple average of the separate ratings given to the evaluation sub-criteria, but an overall judgement of project effectiveness by the consultants.

**Highly Satisfactory (HS):** The project had no shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.

**Satisfactory (S):** The project had minor shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.

**Moderately Satisfactory (MS):** The project had moderate shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.

**Moderately Unsatisfactory (MU):** The project had significant shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.

**Unsatisfactory (U)** The project had major shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.

**Highly Unsatisfactory (HU):** The project had severe shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.

**Ratings on sustainability.** All the dimensions of sustainability are deemed critical. Therefore, the overall rating for sustainability will be the lowest rating on the separate dimensions.

On each of the dimensions of sustainability of the project outcomes will be rated as follows.

**Highly Likely (HL):** There are no risks affecting this dimension of sustainability.

**Likely (L):** There are very few risks affecting this dimension of sustainability.

**Moderately Likely (ML):** There are moderate risks that affect this dimension of sustainability.

**Moderately Unlikely (MU):** There are significant risks that affect this dimension of sustainability

**Unlikely (U):** There are severe risks that affect this dimension of sustainability.

**Highly Unlikely (HU):** There are very severe risks that affect this dimension of sustainability.

**Ratings of monitoring and evaluation.** The M&E system will be rated on M&E design, M&E plan implementation, and budgeting and funding for M&E activities (the latter sub-criterion is covered in the main report under M&E design). M&E plan implementation will be considered critical for the overall assessment of the M&E system. Thus, the overall rating for M&E will not be higher than the rating on M&E plan implementation.

**Highly Satisfactory (HS):** There were no shortcomings in the project M&E system.

**Satisfactory(S):** There were minor shortcomings in the project M&E system.

**Moderately Satisfactory (MS):** There were moderate shortcomings in the project M&E system.

**Moderately Unsatisfactory (MU):** There were significant shortcomings in the project M&E system.

**Unsatisfactory (U):** There were major shortcomings in the project M&E system.

**Highly Unsatisfactory (HU):** The Project had no M&E system.



### Annex 3. Project costs and co-financing tables

#### Project Costs

Component/sub-component	Estimated cost at design	Actual Cost	Expenditure ratio (actual/planned)

#### Co-financing

Co financing (Type/Source)	IA own Financing (mill US\$)		Government (mill US\$)		Other* (mill US\$)		Total (mill US\$)		Total Disbursed (mill US\$)
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	
- Grants									
- Loans									
- Credits									
- Equity investments									
- In-kind support									
- Other (*) - -									
<b>Totals</b>									

\* This refers to contributions mobilized for the project from other multilateral agencies, bilateral development cooperation agencies, NGOs, the private sector and beneficiaries.

## Annex 4. Quality Assessment of the Evaluation Report

All UNEP evaluation reports are subject to a quality assessment by the Evaluation Office. The quality assessment is used as a tool for providing structured feedback to the evaluation consultants. The quality of the draft evaluation report is assessed and rated against the following criteria:

Substantive report quality criteria	UNEP EO Comments	Draft Report Rating	Final Report Rating
<b>A. Strategic relevance:</b> Does the report present a well-reasoned, complete and evidence-based assessment of strategic relevance of the intervention?	Draft report:  Final report:		
<b>B. Achievement of outputs:</b> Does the report present a well-reasoned, complete and evidence-based assessment of outputs delivered by the intervention (including their quality)?	Draft report:  Final report:		
<b>C. Presentation Theory of Change:</b> Is the Theory of Change of the intervention clearly presented? Are causal pathways logical and complete (including drivers, assumptions and key actors)?	Draft report:  Final report:		
<b>D. Effectiveness - Attainment of project objectives and results:</b> Does the report present a well-reasoned, complete and evidence-based assessment of the achievement of the relevant outcomes and project objectives?	Draft report:  Final report:		
<b>E. Sustainability and replication:</b> Does the report present a well-reasoned and evidence-based assessment of sustainability of outcomes and replication / catalytic effects?	Draft report:  Final report:		
<b>F. Efficiency:</b> Does the report present a well-reasoned, complete and evidence-based assessment of efficiency?	Draft report:  Final report:		
<b>G. Factors affecting project performance:</b> Does the report present a well-reasoned, complete and evidence-based assessment of all factors affecting project performance? In particular, does the report include the actual project costs (total and per activity) and actual co-financing used; and an assessment of the quality of the project M&E system and its use for project management?	Draft report:  Final report:		
<b>H. Quality and utility of the recommendations:</b> Are recommendations based on explicit evaluation findings? Do recommendations specify the actions necessary to correct existing conditions or improve operations ('who?' 'what?' 'where?' 'when?'). Can they be implemented?	Draft report:  Final report:		
<b>I. Quality and utility of the lessons:</b> Are lessons based on explicit evaluation findings? Do they suggest prescriptive action? Do they specify in which contexts they are applicable?	Draft report:  Final report:		
<b>Other report quality criteria</b>			
<b>J. Structure and clarity of the report:</b> Does the report structure follow EO guidelines? Are all requested Annexes included?	Draft report:  Final report:		
<b>K. Evaluation methods and information sources:</b> Are evaluation methods and information sources clearly described? Are data collection methods, the triangulation / verification approach, details of	Draft report:  Final report:		

stakeholder consultations provided? Are the limitations of evaluation methods and information sources described?			
<b>L. Quality of writing:</b> Was the report well written? (clear English language and grammar)	Draft report: Final report:		
<b>M. Report formatting:</b> Does the report follow EO guidelines using headings, numbered paragraphs etc.	Draft report: Final report:		
<b>OVERALL REPORT QUALITY RATING</b>		0.00	0.00

A number rating between 1 and 6 is used for each criterion: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, Highly Unsatisfactory = 1.

## **Annex 5. Documentation list for the evaluation to be provided by the UNEP Task Manager**

- Project design documents
- Project supervision plan, with associated budget
- Correspondence related to project
- The 2012 Mid Term Evaluation Report
- Supervision mission reports
- Steering Committee meeting documents, including agendas, meeting minutes, and any summary reports
- Project progress reports, including financial reports submitted
- Cash advance requests documenting disbursements
- Annual Project Implementation Reports (PIRs)
- Management memos related to project
- Other documentation of supervision feedback on project outputs and processes (e.g. comments on draft progress reports, etc.).
- Project revision and extension documentation
- Updated implementation plan for the recommendations of the Mid-Term Evaluation
- Project Terminal Report (draft if final version not available)

## Annex 6. Introduction to Theory of Change / Impact pathways, the ROTI Method and the ROTI Results Score sheet

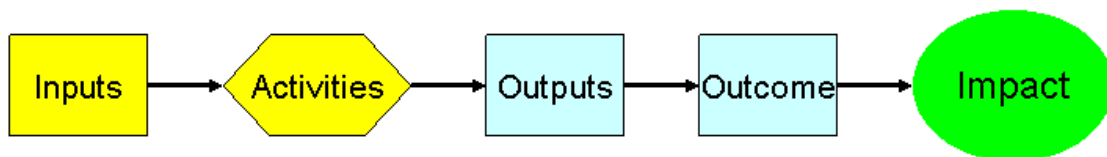
(This Evaluation format is currently under revision)

Terminal evaluations of projects are conducted at, or shortly after, project completion. At this stage it is normally possible to assess the achievement of the project's outputs. However, the possibilities for evaluation of the project's outcomes are often more limited and the feasibility of assessing project **impacts** at this time is usually severely constrained. Full impacts often accrue only after considerable time-lags, and it is common for there to be a lack of long-term baseline and monitoring information to aid their evaluation. Consequently, substantial resources are often needed to support the extensive primary field data collection required for assessing impact and there are concomitant practical difficulties because project resources are seldom available to support the assessment of such impacts when they have accrued – often several years after completion of activities and closure of the project.

Despite these difficulties, it is possible to enhance the scope and depth of information available from Terminal Evaluations on the achievement of results through rigorous review of project progress along the pathways from outcome to impact. Such reviews identify the sequence of conditions and factors deemed necessary for project outcomes to yield impact and assess the current status of and future prospects for results. In evaluation literature these relationships can be variously described as 'Theories of Change', Impact 'Pathways', 'Results Chains', 'Intervention logic', and 'Causal Pathways' (to name only some!).

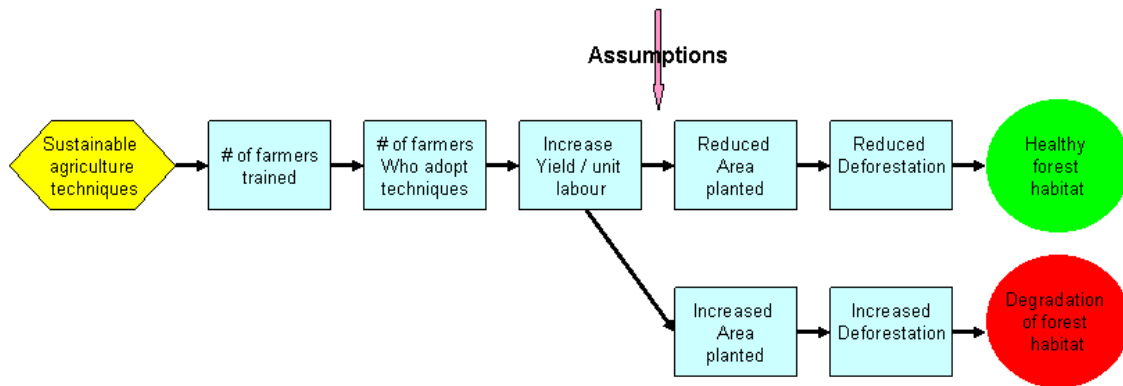
### Theory of Change (ToC) / impact pathways

Figure 1 shows a generic impact pathway which links the standard elements of project logical frameworks in a graphical representation of causal linkages. When specified with more detail, for example including the key users of outputs, the processes (the arrows) that lead to outcomes and with details of performance indicators, analysis of impact pathways can be invaluable as a tool for both project planning and evaluation.



**Figure 1. A generic results chain, which can also be termed an 'Impact Pathway' or Theory of Change.**

The pathways summarise casual relationships and help identify or clarify the assumptions in the intervention logic of the project. For example, in the Figure 2 below the eventual impact depends upon the behaviour of the farmers in using the new agricultural techniques they have learnt from the training. The project design for the intervention might be based on the upper pathway assuming that the farmers can now meet their needs from more efficient management of a given area therefore reducing the need for an expansion of cultivated area and ultimately reducing pressure on nearby forest habitat, whereas the evidence gathered in the evaluation may in some locations follow the lower of the two pathways; the improved farming methods offer the possibility for increased profits and create an incentive for farmers to cultivate more land resulting in clearance or degradation of the nearby forest habitat.



**Figure 2. An impact pathway / TOC for a training intervention intended to aid forest conservation.**

The GEF Evaluation Office has recently developed an approach to assess the **likelihood of impact** that builds on the concepts of Theory of Change / causal chains / impact pathways. The method is known as Review of Outcomes to Impacts (ROtI)<sup>26</sup> and has three distinct stages:

- a. Identifying the project's intended impacts
- b. Review of the project's logical framework
- c. Analysis and modelling of the project's outcomes-impact pathways: reconstruction of the project's Theory of Change

The **identification of the projects intended impacts** should be possible from the 'objectives' statements specified in the official project document. The second stage is to **review the project's logical framework** to assess whether the design of the project is consistent with, and appropriate for, the delivery of the intended impact. The method requires verification of the causal logic between the different hierarchical levels of the logical framework moving 'backwards' from impacts through outcomes to the outputs; the activities level is not formally considered in the ROtI method<sup>27</sup>. The aim of this stage is to develop an understanding of the causal logic of the project intervention and to identify the key 'impact pathways'. In reality such processes are often complex: they might involve multiple actors and decision-processes and are subject to time-lags, meaning that project impact often accrues long after the completion of project activities.

The third stage involves analysis of the 'impact pathways' that link project outcomes to impacts. The pathways are analysed in terms of the '**assumptions**' and '**drivers**' that underpin the processes involved in the transformation of outputs to outcomes to impacts via **intermediate states** (see Figure 3). **Project outcomes** are the direct intended results stemming from the outputs, and they are likely to occur either towards the end of the project or in the short term following project completion. **Intermediate states** are the transitional conditions between the project's direct outcomes and the intended impact. They are necessary changes expected to occur as a result of the project outcomes, that are expected, in turn, to result into impact. There may be more than one intermediate state between the immediate project outcome and the eventual impact.

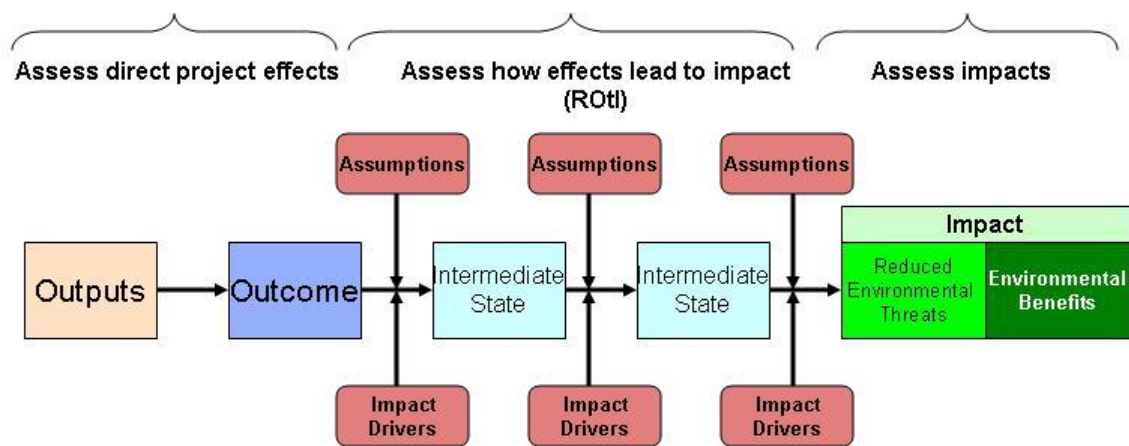
**Drivers** are defined as the significant, external factors that if present are expected to contribute to the realization of the intended impacts and **can be influenced** by the project / project partners & stakeholders. **Assumptions** are the significant external factors that if present are expected to contribute to the realization of the intended impacts but are largely **beyond the control of the project** / project partners & stakeholders. The drivers and assumptions are considered when assessing the likelihood of impact, sustainability and replication potential of the project.

<sup>26</sup> GEF Evaluation Office (2009). ROtI: Review of Outcomes to Impacts Practitioners Handbook. [http://www.gefweb.org/uploadedFiles/Evaluation Office/OPS4/Roti%20Practitioners%20Handbook%2015%20June%202009.pdf](http://www.gefweb.org/uploadedFiles/Evaluation%20Office/OPS4/Roti%20Practitioners%20Handbook%2015%20June%202009.pdf)

<sup>27</sup> Evaluation of the efficiency and effectiveness in the use of resources to generate outputs is already a major focus within UNEP Terminal Evaluations.

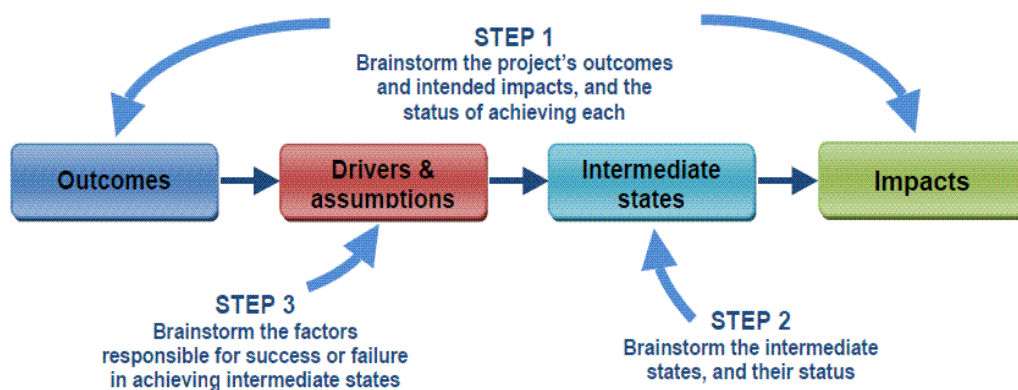
Since project logical frameworks do not often provide comprehensive information on the processes by which project outputs yield outcomes and eventually lead, via ‘intermediate states’ to impacts, the impact pathways need to be carefully examined and the following questions addressed:

- Are there other causal pathways that would stem from the use of project outputs by other potential user groups?
- Is (each) impact pathway complete? Are there any missing intermediate states between project outcomes and impacts?
- Have the key drivers and assumptions been identified for each ‘step’ in the impact pathway.



**Figure 3. A schematic ‘impact pathway’ showing intermediate states, assumptions and impact drivers<sup>28</sup> (adapted from GEF EO 2009)**

In ideal circumstances, the Theory of Change of the project is reconstructed by means of a group exercise, involving key project stakeholders. The evaluators then facilitate a collective discussion to develop a visual model of the impact pathways using cards and arrows taped on a wall. The component elements (outputs, outcomes, intermediate states, drivers, assumptions, intended impacts etc.) of the impact pathways are written on individual cards and arranged and discussed as a group activity. Figure 4 below shows the suggested sequence of the group discussions needed to develop the ToC for the project.



<sup>28</sup> The GEF frequently uses the term “impact drivers” to indicate drivers needed for outcomes to lead to impact. However, in UNEP it is preferred to use the more general term “drivers” because such external factors might also affect change processes occurring between outputs and outcomes.

**Figure 4. Suggested sequencing of group discussions (from GEF EO 2009)**

In practice, there is seldom an opportunity for the evaluator to organise such a group exercise during the inception phase of the evaluation. The reconstruction of the project’s Theory of Change can then be done in two stages. The evaluator first does a desk-based identification of the project’s impact pathways, specifying the drivers and assumptions, during the inception phase of the evaluation, and then, during the main evaluation phase, (s)he discusses this understanding of the project logic during group discussions or the individual interviews with key project stakeholders.

Once the Theory of Change for the project is reconstructed, the evaluator can assess the design of the project intervention and collate evidence that will inform judgments on the extent and effectiveness of implementation, through the evaluation process. Performance judgments are made always noting that project contexts can change and that adaptive management is required during project implementation.

The Review of Outcomes towards Impact (ROtI) method requires ratings for outcomes achieved by the project and the progress made towards the ‘intermediate states’ at the time of the evaluation. According to the GEF guidance on the method; *“The rating system is intended to recognize project preparation and conceptualization that considers its own assumptions, and that seeks to remove barriers to future scaling up and out. Projects that are a part of a long-term process need not at all be “penalized” for not achieving impacts in the lifetime of the project: the system recognizes projects’ forward thinking to eventual impacts, even if those impacts are eventually achieved by other partners and stakeholders, albeit with achievements based on present day, present project building blocks.”* For example, a project receiving an “AA” rating appears likely to deliver impacts, while for a project receiving a “DD” this would be very unlikely, due to low achievement in outcomes and the limited likelihood of achieving the intermediate states needed for eventual impact (see Table 1).

**Table 1. Rating scale for outcomes and progress towards ‘intermediate states’**

<b>Outcome Rating</b>	<b>Rating on progress toward Intermediate States</b>
D: The project’s intended outcomes were not delivered	D: No measures taken to move towards intermediate states.
C: The project’s intended outcomes were delivered, but were not designed to feed into a continuing process after project funding	C: The measures designed to move towards intermediate states have started, but have not produced results.
B: The project’s intended outcomes were delivered, and were designed to feed into a continuing process, but with no prior allocation of responsibilities after project funding	B: The measures designed to move towards intermediate states have started and have produced results, which give no indication that they can progress towards the intended long term impact.
A: The project’s intended outcomes were delivered, and were designed to feed into a continuing process, with specific allocation of responsibilities after project funding.	A: The measures designed to move towards intermediate states have started and have produced results, which clearly indicate that they can progress towards the intended long term impact.

Thus a project will end up with a two letter rating e.g. AB, CD, BB etc. In addition the rating is given a ‘+’ notation if there is evidence of impacts accruing within the life of the project. The possible rating permutations are then translated onto the usual six point rating scale used in all UNEP project evaluations in the following way.

**Table 2. Shows how the ratings for ‘achievement of outcomes’ and ‘progress towards intermediate states translate to ratings for the ‘Overall likelihood of impact achievement’ on a six point scale.**

Highly Likely	Likely	Moderately Likely	Moderately Unlikely	Unlikely	Highly Unlikely
AA AB BA CA BB+ CB+ DA+	BB CB DA DB AC+	AC BC CC+ DC+	CC DC AD+ BD+	AD BD CD+ DD+	CD DD



DB+	BC+				
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In addition, projects that achieve documented changes in environmental status during the project’s lifetime receive a positive impact rating, indicated by a “+”. The overall likelihood of achieving impacts is shown in Table 11 below (a + score above moves the double letter rating up one space in the 6-point scale).

The ROTI method provides a basis for comparisons across projects through application of a rating system that can indicate the expected impact. However it should be noted that whilst this will provide a relative scoring for all projects assessed, it does not imply that the results from projects can necessarily be aggregated. Nevertheless, since the approach yields greater clarity in the ‘results metrics’ for a project, opportunities where aggregation of project results might be possible can more readily be identified.

Results rating of project entitled:							
Outputs	Outcomes	Rating (D – A)	Intermediate states	Rating (D – A)	Impact (GEBs)	Rating (+)	Overall
1.	1.				1.		
2.	2.		2.		2.		
3.	3.		3.		3.		
	<b>Rating justification:</b>		<b>Rating justification:</b>		<b>Rating justification:</b>		

### Scoring Guidelines

The achievement of **Outputs** is largely assumed. Outputs are such concrete things as training courses held, numbers of persons trained, studies conducted, networks established, websites developed, and many others. Outputs reflect where and for what project funds were used. These were not rated: projects generally succeed in spending their funding.

**Outcomes**, on the other hand, are the first level of intended results stemming from the outputs. Not so much the number of persons trained; but how many persons who then demonstrated that they have gained the intended knowledge or skills. Not a study conducted; but one that could change the evolution or development of the project. Not so much a network of NGOs established; but that the network showed potential for functioning as intended. A sound outcome might be genuinely improved strategic planning in SLM stemming from workshops, training courses, and networking.

#### Examples

*Funds were spent, outputs were produced, but nothing in terms of outcomes was achieved.* People attended training courses but there is no evidence of increased capacity. A website was developed, but no one used it. (Score – D)

*Outcomes achieved but are dead ends; no forward linkages to intermediate states in the future.* People attended training courses, increased their capacities, but all left for other jobs shortly after; or were not given opportunities to apply their new skills. A website was developed and was used, but achieved little or nothing of what was intended because users had no resources or incentives to apply the tools and methods proposed on the website in their job. (Score – C)

***Outcomes plus implicit linkages forward.*** Outcomes achieved and have *implicit forward linkages* to intermediate states and impacts. Collaboration as evidenced by meetings and decisions made among a loose network is documented that should lead to better planning. Improved capacity is in place and should lead to desired intermediate outcomes. Providing implicit linkages to intermediate states is probably the most common case when outcomes have been achieved. (Score - B)

***Outcomes plus explicit linkages forward.*** Outcomes have *definite and explicit forward linkages* to intermediate states and impacts. An alternative energy project may result in solar panels installed that reduced reliance on local wood fuels, with the outcome quantified in terms of reduced C emissions. Explicit forward linkages are easy to recognize in being concrete, but are relatively uncommon. (Score A)

**Intermediate states:**

The **intermediate states** indicate achievements that lead to Global Environmental Benefits, especially if the potential for scaling up is established.

***“Outcomes” scored C or D.*** If the outcomes above scored C or D, there is no need to continue forward to score intermediate states given that achievement of such is then not possible.

***In spite of outcomes and implicit linkages, and follow-up actions, the project dead-ends.*** Although outcomes achieved have *implicit forward linkages* to intermediate states and impacts, the project dead-ends. Outcomes turn out to be insufficient to move the project towards intermediate states and to the eventual achievement of GEBs. Collaboration as evidenced by meetings and among participants in a network never progresses further. The implicit linkage based on follow-up never materializes. Although outcomes involve, for example, further participation and discussion, such actions do not take the project forward towards intended intermediate impacts. People have fun getting together and talking more, but nothing, based on the implicit forwards linkages, actually eventuates. (Score = D)

***The measures designed to move towards intermediate states have started, but have not produced result, barriers and/or unmet assumptions may still exist.*** In spite of sound outputs and in spite of explicit forward linkages, there is limited possibility of intermediate state achievement due to barriers not removed or unmet assumptions. This may be the fate of several policy related, capacity building, and networking projects: people work together, but fail to develop a way forward towards concrete results, or fail to successfully address inherent barriers. The project may increase ground cover and or carbon stocks, may reduce grazing or GHG emissions; and may have project level recommendations regarding scaling up; but barrier removal or the addressing of fatal assumptions means that scaling up remains limited and unlikely to be achieved at larger scales. Barriers can be policy and institutional limitations; (mis-) assumptions may have to do with markets or public – private sector relationships. (Score = C)

***Barriers and assumptions are successfully addressed.*** Intermediate state(s) planned or conceived have feasible direct and explicit forward linkages to impact achievement; barriers and assumptions are successfully addressed. The project achieves measurable intermediate impacts, and works to scale up and out, but falls well short of scaling up to global levels such that achievement of GEBs still lies in doubt. (Score = B)

***Scaling up and out over time is possible.*** Measurable intermediate state impacts achieved, scaling up to global levels and the achievement of GEBs appears to be well in reach over time. (Score = A)

**Impact:** Actual changes in environmental status

“Intermediate states” scored B to A.

Measurable impacts achieved at a globally significant level within the project life-span. . (Score = ‘+’)

## Annex 7. Template for the assessment of the Quality of Project Design – UNEP Evaluation Office September 2011

<b>Relevance</b>		<b>Comments</b>	<b>Reference</b>
Are the intended results likely to contribute to UNEPs Expected Accomplishments and programmatic objectives?			
Does the project form a coherent part of a UNEP-approved programme framework?			
Is there complementarity with other UNEP projects, planned and ongoing?			
Are the project's objectives and implementation strategies consistent with:	i) Sub-regional environmental issues and needs?		
	ii) the UNEP mandate and policies at the time of design and implementation?		
	iii) the relevant UNEP focal areas, strategic priorities and operational programme(s)? (if appropriate)		
	iv) Stakeholder priorities and needs?		
<b>Overall rating for Relevance</b>			
<b>Intended Results and Causality</b>			
Are the objectives realistic?			
Are the causal pathways from project outputs [goods and services] through outcomes [changes in stakeholder behaviour] towards impacts clearly and convincingly described? Is there a clearly presented Theory of Change or intervention logic for the project?			
Is the timeframe realistic? What is the likelihood that the anticipated project outcomes can be achieved within the stated duration of the project?			
Are the activities designed within the project likely to produce their intended results?			
Are activities appropriate to produce outputs?			
Are activities appropriate to drive change along the intended causal pathway(s)?			
Are impact drivers, assumptions and the roles and capacities of key actors and stakeholders clearly described for each key causal pathway?			
<b>Overall rating for Intended Results and causality</b>			
<b>Efficiency</b>			
Are any cost- or time-saving measures proposed to bring the project to a successful conclusion within its programmed budget and timeframe?			
Does the project intend to 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?			
<b>Overall rating for Efficiency</b>			
<b>Sustainability / Replication and Catalytic effects</b>			
Does the project design present a strategy / approach to sustaining outcomes / benefits?			
Does the design identify the social or political factors that may influence positively or negatively the sustenance of project results and progress towards impacts? Does the design foresee sufficient activities to promote government and stakeholder awareness, interests, commitment and incentives to execute, enforce and pursue the programmes, plans, agreements, monitoring systems etc. prepared and agreed upon under the project?			

If funding is required to sustain project outcomes and benefits, does the design propose adequate measures / mechanisms to secure this funding?			
Are there any financial risks that may jeopardize sustenance of project results and onward progress towards impact?			
Does the project design adequately describe the institutional frameworks, governance structures and processes, policies, sub-regional agreements, legal and accountability frameworks etc. required to sustain project results?			
Does the project design identify environmental factors, positive or negative, that can influence the future flow of project benefits? Are there any project outputs or higher level results that are likely to affect the environment, which, in turn, might affect sustainability of project benefits?			
Does the project design foresee adequate measures to catalyze behavioural changes in terms of use and application by the relevant stakeholders of (e.g.):	i) technologies and approaches show-cased by the demonstration projects;		
	ii) strategic programmes and plans developed		
	iii) assessment, monitoring and management systems established at a national and sub-regional level		
Does the project design foresee adequate measures to contribute to institutional changes? [An important aspect of the catalytic role of the project is its contribution to institutional uptake or mainstreaming of project-piloted approaches in any regional or national demonstration projects]			
Does the project design foresee adequate measures to contribute to policy changes (on paper and in implementation of policy)?			
Does the project design foresee adequate measures to contribute to sustain follow-on financing (catalytic financing) from Governments, or other donors?			
Does the project design foresee adequate measures to create opportunities for particular individuals or institutions (“champions”) to catalyze change (without which the project would not achieve all of its results)?			
Are the planned activities likely to generate the level of ownership by the main national and regional stakeholders necessary to allow for the project results to be sustained?			
<b>Overall rating for Sustainability / Replication and Catalytic effects</b>			
<b>Risk identification and Social Safeguards</b>			
Are critical risks appropriately addressed?			
Are assumptions properly specified as factors affecting achievement of project results that are beyond the control of the project?			
Are potentially negative environmental, economic and social impacts of projects identified?			
<b>Overall rating for Risk identification and Social Safeguards</b>			
<b>Governance and Supervision Arrangements</b>			
Is the project governance model comprehensive, clear and appropriate?			
Are roles and responsibilities clearly defined?			
Are supervision / oversight arrangements clear and appropriate?			
<b>Overall rating for Governance and Supervision Arrangements</b>			
<b>Management, Execution and Partnership Arrangements</b>			
Have the capacities of partners been adequately assessed?			

Are the execution arrangements clear?			
Are the roles and responsibilities of internal and external partners properly specified?			
<b>Overall rating for Management, Execution and Partnership Arrangements</b>			
<b>Financial Planning / budgeting</b>			
Are there any obvious deficiencies in the budgets / financial planning?			
Is the resource utilization cost effective? Is the project viable in respect of resource mobilization potential?			
Are the financial and administrative arrangements including flows of funds clearly described?			
<b>Overall rating for Financial Planning / budgeting</b>			
<b>Monitoring</b>			
Does the logical framework: <ul style="list-style-type: none"> <li>• capture the key elements of the Theory of Change for the project?</li> <li>• have 'SMART' indicators for outcomes and objectives?</li> <li>• have appropriate 'means of verification'?</li> <li>• identify assumptions in an adequate manner?</li> </ul>			
Are the milestones and performance indicators appropriate and sufficient to foster management towards outcomes and higher level objectives?			
Is there baseline information in relation to key performance indicators?			
Has the method for the baseline data collection been explained?			
Has the desired level of achievement (targets) been specified for indicators of outcomes and are targets based on a reasoned estimate of baseline?			
Has the time frame for monitoring activities been specified?			
Are the organisational arrangements for project level progress monitoring clearly specified?			
Has a budget been allocated for monitoring project progress in implementation against outputs and outcomes?			
Overall, is the approach to monitoring progress and performance within the project adequate?			
<b>Overall rating for Monitoring</b>			
<b>Evaluation</b>			
Is there an adequate plan for evaluation?			
Has the time frame for evaluation activities been specified?			
Is there an explicit budget provision for mid term review and terminal evaluation?			
Is the budget sufficient?			
<b>Overall rating for Evaluation</b>			

*Annex 3: Evaluation programme, locations visited and people met*

*Programme*

Date	MB	YR
29 October – 7 November	Contractual arrangements, preparation of travel, interviews with UNEP Evaluation Office, Project Manager and TNO Technical Director	
9 November		Travel to Santo Domingo
10 November		Meeting with TNO Project team and UNEP Programme Officer, confirmation of schedule and logistical arrangements, review of documents
11 – 13 November		Observation of Technical and Ministerial Meetings, interviews with participants and other Project stakeholders
14 November	Travel to Santo Domingo	Interviews in Santo Domingo
15 November	Preparation of inception report and finalisation of arrangements for field visits	
16 November	Travel to Pedro Santana	Travel to Port au Prince
17 November	Field visits and interviews in Pedro Santana, ending in Barahona with interviews with office staff	Interviews in Port au Prince
18 November		Field visit to Fort Drouet
19 November	Travel to Port au Prince	Interviews in Port au Prince
Evening of 19 November	Consultants meet in Port au Prince to share findings, assess progress and finalise reconstituted Theory of Change	
20 – 21 November	Field visit to Bassin Bleu, return to Port au Prince	Interviews in Port au Prince
22 November	Port au Prince	
23 November	Travel from Port au Prince to Ouanaminthe	
24 November	Field visits Caracol and Dosmond, and return to the Dominican Republic	Travel to Santiago de Cuba
25 November		Interviews in Santiago
26 November	Travel to Santo Domingo	Visits of and interviews in pilot projects
27 November	Departure from Santo Domingo (early morning)	Completion of interviews in Santiago, and overnight travel to Havana
28 November		Interviews in Havana
29 November		Travel to Panama
30 November	Preliminary analysis of findings, and preparation of de-briefing presentation to UNEP ROLAC	
1 December	Online participation in de-briefing session	Presentation of de-briefing session at ROLAC and conduct of additional interviews
2 December		Departure from Panama
8-9 December	Interviews conducted in Nairobi with UNEP staff of offices relevant to the evaluation, taking advantage of participation in a workshop for another project	

Since the completion of the field visits and the de-briefing session, activities and schedule have been as follows:

- preparation of discussion paper, review by Project Manager and CBC Technical Director, and distribution to CBC Project partners (mid December – 20 January);
- conduct of additional telephone and online interviews as required (mid December – January);
- submission of the zero draft of main evaluation report to the EO on 21 February 2015, and receipt of comments from the EO on 2 April 2015;
- submission of this revised draft integrating comments received from the EO.

#### *Locations visited*

##### Cuba<sup>29</sup>:

- Santiago de Cuba: interviews with CITMA, BIOECO and CBC Project Technical Coordinator
- Guantanamo: interviews with CATEDES
- Baitiquirí: visit to field project in Baitiquirí Ecological Reserve
- Reserva Ecologica y Estación Siboney-Juticí: visit of facility, interviews with Director and personnel of the Reserve
- Verraco, Consejo Popular Sigua: visit to field project, interviews with community participants and beneficiaries, including [insert names]
- Havana: interviews with CITMA

##### Dominican Republic:

- Santo Domingo: observation of Ministerial and Technical Meetings, interviews with Ministries of International Cooperation and Environment and Natural Resources, Delegation of the European Commission, AFD, GIZ, CEDAF and UNEP
- Comendador: interviews at the Regional Office of the Ministry of Environment, with Regional Director (Fernán Gonzalez Sanchez) and technical staff (Kennedy Díaz); field visits to: (a) a coffee plantation site, (b) two honey production sites with interviews with respective beneficiaries (Nicasio Rosario and Francisco “Santes” Contreras); (c) Palma de Guano plantation area
- Pedro Santana: field visit to Propagation Centre and solid waste dumpsite.

##### Haiti:

- Port au Prince: interviews with Ministry of the Environment, UNDP, Société Audubon
- Fort Drouet: visit to field project, interviews with community participants, including CASEC Pierre Jean-René and tour guides Nicholas Lucius, Ceneus Sanier, Julien Francois and Altenor Ceneus
- Bassin Bleu: Interviews with WHH staff at Jacmel (Veo Nacjaer) and visit to field project, including Jean Robert Geslin, Vice-President of ODBJ and tourism guides, Ricardo François, Arnoud Colin and Makenson Cherry.
- Caracol: visit to field project with interviews with staff of the Brigade Maritime en Action (BMA) including André G. Morency, Secretary of BMA; Cadet Jackson, Coordinator BMA; and Renaud Morency, member of BMA.

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<sup>29</sup> In Cuba, a visit had also been planned to the propagation centre, but this was cancelled because of a tragic accident that occurred on the previous day and that resulted in the death of one person from the Ministry of Agriculture, and in serious injuries to others.

- Dosmond: Interviews with WHH staff at Ouanaminthe (Aide Apollon and Agame Joseph) and visit to field project (coffee plantation, photovoltaic lamps, biogas units, enhanced stove units and Propagation Centre) with interviews in the community with beneficiaries, including Johnny Dumassair, Chief Propagation Centre; Gener Flovil; Security Propagation Centre; Felix Louis, Pierre Sancelin and Pierre Louis Islin; trained community members.

### *People met*

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*Annex 5: Summary of co-finance information and statement of project expenditure*

**Financial contributions of the counterparts in the pilot projects and propagation centres<sup>30</sup>**

Country	Activity	Counterpart	Project financing (USD)	Government counterpart (USD)	NGO counterpart (USD)
Haiti	Propagation centre, Dosmond	Université Quisqueya	105,000	93,355	45,351
	Pilot projects in Caracol, Fort Drouet, La Gonâve	Ministry of the Environment	125,000	64,203	0
	Pilot projects in Dosmond, Bassin Bleu	WHH	137,330	6,000	40,000
Dominican Republic	Propagation centre, Pedro Santana	Ministry of the Environment	55,000	62,000	0
	PV system, Las Palmas)	Ministry of the Environment	15,000	1,500	0
	Pilot projects, Pedro Santana	CEDAF and Ministry of the Environment	87,366	132,400	6,740
<b>Total</b>			<b>524,696</b>	<b>359,458</b>	<b>92,091</b>

**Technical assistance and human resources provided by the participating governments (in addition to the activities of the National Focal Points)**

Country	Person / Institution	Area or activity	Cost to CBC Project
Cuba	BIOECO	Pilot projects and propagation centre, coordination, supervision and staffing of propagation centre	No cost (except use of vehicle)
Cuba	MEGACEN	Website and data base	No cost
Cuba	Adonis Rodriguez Fernández, Ma. Elena Estévez Ramírez de Megacén	Data base	Air fares and perdiem, travel from Cuba to DR
Cuba	CATEDES	PV installation, supervision and technical assistance	No cost
Cuba	Mayelín Silot Leyva; Giraldo Acosta Alcolea; Claudio Carracedo; Ramón A. Martínez, Helmut Betancourt.	Resource persons in training activities	Air fares and perdiem, travel from Cuba to DR
Cuba	Ricardo Téllez Pérez	GIS design	Air fare and perdiem, travel from Cuba to DR
Haiti	Astrel Joseph, Exil Lucienna,	Supervision of three	No cost, except use of

<sup>30</sup> Cuba is not included in this table because the cash value of the counterpart contributions made by the Government of Cuba would not reflect the true and full extent of that contribution. It should however be noted that this contribution has been very substantial.

Country	Person / Institution	Area or activity	Cost to CBC Project
	Sener Alvert Daphinis, Neland Sylvaince, Ministry of the Environment	pilot projects and propagation centre	vehicle on occasion
Dominican Republic	Berkis Fernández (Encargada de Planificación y Formulación de Proyectos) Fernán Félix González (Director Provincial Elías Piña) Francisco Cuevas (Encargado Producción de Plantas)	Supervision of three pilot projects and propagation centre	No cost

**Technical assistance and human resources provided by the participating governments (in addition to project coordination as provided in the cooperation agreement)**

Unit	Quantity	Role	Estimate
ROLAC, Regional Director and Deputy	2 senior management	Oversight of Project, participation in Ministerial Meetings, relations with governments	5% of time, travel and overhead costs
Administrative team	4 officers	Travel, human resources, financial management, reporting	10% of time, travel and overhead costs
Communication team	2 communication officers	Review of materials, branding products, press releases, support to strategy formulation	5% of time, travel and overhead costs
Information technology (IT)	1 IT specialist	Installation of equipment at TNO, negotiation of contracts for Internet, setting up email accounts, maintenance of servers in Santiago, Cuba and at the TNO, trouble-shooting and technical assistance as needed	Significant effort during TNO installation and website construction, otherwise 5% of time, travel and overhead costs

## ***Annex 6: Brief CVs of the consultants***

### ***Monica Borobia***

Brazilian biologist with a graduate degree in management of renewable resources from McGill University, Montreal, worked for 9 years for the United Nations Environment Programme (UNEP) in different countries and positions in Kenya, Jamaica and the Netherlands and currently working as an independent consultant. Career has included coordination and project management, consultancies and research programs involving the various aspects of integrated environmental management to public and private sectors, with interfaces in the areas of participatory planning, monitoring and environmental assessment, policy development and strategies for conservation natural resources and biodiversity.

Broad experience in conducting studies and projects for multidisciplinary management and evaluation of environmental and social impacts at local municipal level. Conservation of natural resources and sustainable tourism occupy a prominent place among the initiatives promoted, through processes of strategic planning and management. Organizing, conducting and chairing of conferences, workshops and training courses. Expert supervision, coordination of teams, committees and working groups.

### ***Yves Renard***

Yves Renard currently works as an independent consultant in sustainable development policy and participatory natural resource management (programme evaluation, policy analysis, facilitation of policy formulation and participatory training exercises, and review and development processes within organisations involved in resource management and sustainable development). He has a particular interest and extensive experience in linking natural resource governance, poverty reduction and social development, and in the design of institutions that foster participation and empowerment. Between 1992 and 2001, Yves Renard served as Executive Director of the Caribbean Natural Resources Institute (CANARI), a non-governmental organisation that works to foster the development and adoption of policies and programmes in support of increased participation and collaboration in natural resource management.

Since 2002, Yves Renard has been involved in a range of activities, including: the facilitation of poverty reduction, social policy, land policy and environmental policy processes in several Caribbean countries: scoping studies for programme design and investment strategies in the Caribbean and East Africa; the coordination of research projects on poverty and the environment, sustainable tourism and participatory governance; the conduct of several project evaluations at national and local levels (e.g. Botswana, Grenada, Guinea-Bissau, Mauritania, Rwanda, Saint Lucia) and the evaluation of regional programmes and institutions in Europe, West Africa and Oceania; and the design and conduct of training programmes, institutional audits and reviews on behalf of local, national and international organisations.

Yves Renard has served and continues to serve on the governing bodies of a number of international, national and community-based organisations. He has edited books and published guidelines, articles, papers and reports on natural resource management, sustainable development, culture, and community development.



### ***Annex 7: Data sheets on field projects***

In order to facilitate review by and to provide feedback to the various stakeholders, these data sheets have been prepared in the language of the countries concerned.

#### ***Baitiquirí, Cuba***

##### Títulos de los proyectos

Rehabilitación ambiental y mejoramiento de calidad de vida en la Reserva Ecológica Baitiquirí dirigido a disminuir las presiones antrópicas sobre la biodiversidad del área

y

Rehabilitación ambiental y mejoramiento de calidad de vida en la Reserva Ecológica Baitiquirí dirigido a disminuir las presiones antrópicas sobre la biodiversidad del área

Ubicación: Reserva Ecológica Baitiquirí, municipio San Antonio del Sur, Provincia Guantánamo, Cuba

Descripción de los proyectos: La Reserva Ecológica Baitiquirí presenta valores de gran interés nacional e internacional. Sus ecosistemas albergan especies representativas de la flora y fauna silvestre y está considerada como un sitio importante para la conservación de las aves en Cuba. La principal actividad económica del área es la agricultura y existen otras asociadas a la producción de sal y la pesca deportiva. Se consideran bajos los índices económicos y productivos asociados a las bajas fuentes de empleo. Esto potencia el inadecuado manejo que reciben los recursos naturales por parte de los actores locales como vía alternativa de subsistencia, asociado al insuficiente conocimiento e integración entre las estrategias de conservación y los planes de desarrollo socioeconómico. Las problemáticas existentes repercuten de manera negativa sobre los diferentes ecosistemas afectando significativamente a la biodiversidad del área, considerada como un parámetro fundamental para valorar la integridad de los mismos. Existe un desconocimiento total entre los pobladores del área sobre los bienes y servicios que potencialmente brinda el turismo de naturaleza en las áreas protegidas, lo que ha propiciado una banalización de los valores naturales, históricos y culturales de la Reserva Ecológica aledaña a la comunidad.

El objetivo del primer proyecto es contribuir a elevar la calidad de vida de las comunidades vinculadas a la Reserva Ecológica, para disminuir las presiones antrópicas hacia los ecosistemas. Los objetivos específicos son:

- rehabilitar ecosistemas degradados que constituyan hábitats potenciales para la biodiversidad ;
- contribuir al mejoramiento de los indicadores socioeconómicos en la localidad con el objetivo de disminuir la acción del hombre sobre los ecosistemas ;
- fomentar la utilización de fuentes renovables de energía (FRE) y sus beneficios para la biodiversidad ;
- formar capacidades en los actores locales relacionadas con la protección, conservación y manejo de recursos naturales en áreas protegidas ;
- evaluar el impacto socioambiental del proyecto en las diferentes etapas de su desarrollo

El objetivo del segundo proyecto es definir, desarrollar y ejecutar la instalación de un sistema fotovoltaico en la sala de video comunitaria de la comunidad de Baitiquirí, en la provincia de Guantánamo

Implementación: La institución contratante con el PNUMA es el Centro Oriental de Ecosistemas y Biodiversidad (BIOECO), pero el Centro de Aplicaciones Tecnológicas para el Desarrollo Sostenible (CATEDES), basado en Guantánamo, es el organismo ejecutor principal, trabajando junto con BIOECO.

Justificación y proceso de selección: en 2011, PNUMA se comunicó con los tres gobiernos participando en el Proyecto CBC, pidiendo la selección de los sitios de los proyectos piloto. La posición de Cuba en ese momento era que estos sitios deben estar ubicados dentro de las zonas centrales del Corredor, y que por lo tanto era necesario esperar a que la delimitación se terminará. El Comité Nacional del Proyecto considera aún más las opciones, y decidió seleccionar dos sitios que, sin duda, se incluirían en la Zona Núcleo del CBC. La Reserva Ecológica Baitiquirí tiene un valor tan importante para la biodiversidad que fue una selección plenamente justificada. La capacidad técnica e institucional de BIOECO y CATEDES era otra buena justificación para la selección, como BIOECO tiene capacidades fuertes en manejo de áreas protegidas y en investigación científica, y como CATEDES tiene altos conocimientos y experiencias en energías renovables.

Principales actividades: Los informes presentados por BIOECO, la breve visita realizada durante la evaluación y las entrevistas realizadas con los socios del proyecto indican que las siguientes actividades se llevaron a cabo:

- reforestación con especies maderables y frutales (incluyendo el *Guajacum officinale*) de 5.5 ha de suelo degradado, con una participación significativa de la niñez, los cuales plantaron en 3 hectáreas de bosques 100 posturas ;
- plantación de 150 posturas en casa de un campesino y 30 posturas en el patio de la escuela primaria “Patricio Sierra Alta” ubicada en la localidad La Obra, en apoyo a una campaña fomentada por CATEDES y denominada “Un árbol para la vida” ;
- terminación del deterioro de los suelos en 45 ha de terreno, mediante la construcción de tranques con la combinación de barreras muertas y vivas ;
- contratación de 11 comunitarios para recolectar frutos del árbol del Neem durante cinco meses del período de cosecha de este árbol ;
- interpretación de dos senderos, con el diseño, la construcción de todas las señalizaciones de los senderos, así como de las que faltaban en otras áreas de la Reserva ;
- realización de dos talleres sobre manejo y conservación de recursos naturales con la participación de más de 60 campesinos ;
- preparación de cinco activistas ambientales ;
- construcción de 5 km de trochas cortafuegos, las que beneficiaron 523 ha de bosques, y mantenimiento mensual que consistió mayormente en limpieza y reparación ;
- eliminación de 4 micro-vertederos que existían en la comunidad de Baitiquirí y sus alrededores, todos con la participación de los comunitarios ;
- saneamiento de la orilla de la Bahía de Baitiquirí con la presencia de niños y maestros de la escuela primaria de la localidad, trabajadores de la Reserva Ecológica Baitiquirí, trabajadores de la industria salinera ubicada en esta bahía y trabajadores de CATEDES ;
- acondicionamiento y uso de un aula para la formación de capacidades relacionados con temas de biodiversidad y manejo de recursos naturales. Esta sala tiene capacidad para 25 personas y quedó equipada con mesas, sillas, pizarra, proyector y computadora, además de otros medios necesarios para impartir conferencias y realizar talleres, incluyendo cursos de superación a especialistas y comunitarios ;

- habilitación de un local con participación comunitaria para la capacitación en el área protegida y fortalecido, al que se le añadió capacidad de hospedaje para visitantes.

Una actividad que no se ha cumplido es el establecimiento de un bombeo fotovoltaico en la agricultura urbana para mejorar los índices productivos en el área.

Esta porque requiere del sistema de foto-bombeo que debe importarse, y al momento de la redacción de este informe todavía no había llegado a Cuba.

Mientras tanto, el segundo proyecto se ha completado con la instalación del sistema fotovoltaico, y la sala de vídeo es utilizada por la escuela primaria y por el resto de la comunidad.

Impactos del proyecto: es demasiado pronto para evaluar los impactos del proyecto sobre los hábitats naturales y la biodiversidad, pero es muy probable que estos impactos serán importantes, porque la conciencia ambiental de la comunidad ha aumentado, y hay una capacidad fuerte en las instituciones locales. El hecho de que la Reserva y todos sus socios están involucrados en un Corredor regional es también muy importante, ya que valida los esfuerzos de los actores locales y los alienta en su trabajo. La Especialista de CATEDES, Sandra Chapman Stable, es muy competente y tiene una muy buena relación con los socios del proyecto, y su trabajo ha contribuido mucho al éxito del proyecto.

Relevancia: este proyecto tiene una gran importancia para la biodiversidad y para las necesidades de desarrollo local, ya que es una área de conservación crítica y de importancia regional. Las metodologías forestales y de restauración de suelos utilizadas y desarrolladas por el proyecto también son muy relevantes y bien adaptadas a las condiciones locales, con el uso de tecnologías sencillas y de especies locales. El equipo fotovoltaico es directamente útil para la comunidad y contribuye a la educación y la conciencia ambiental.

Sostenibilidad: BIOECO, CATEDES y los responsables del manejo de la Reserva Ecológica (la Empresa Nacional para la Conservación de la Flora y la Fauna) están comprometidos y plenamente cualificados para sostener el proceso del proyecto y asegurar el mantenimiento de las acciones de reforestación y restauración. El proyecto ha preparado un programa que sea sostenible una vez que termine el proyecto, por ejemplo con la preparación de cinco activistas ambientales y con un plan de seguimiento de los activistas, y esto contribuirá a la sostenibilidad.

Recomendaciones:

- mantener el apoyo proporcionado por BIOECO y CATEDES a todas las actividades de conservación y desarrollo en Baitiquirí ;
- desarrollar, en el futuro programa del CBC, un nuevo proyecto destinado a ampliar las actividades realizadas por el proyecto, especialmente en las áreas de investigación y en el desarrollo de técnicas de restauración sencillas y eficaces ;
- utilizar la Reserva Ecológica como un sitio para la formación y capacitación en los futuros programas del CBC.

### ***Comunidad Verraco, Sigua, Cuba***

Titulo del proyecto: Desarrollo de alternativas locales para la gestión y uso sostenible de los recursos agrícolas y conservación de la biodiversidad en el Consejo Popular Sigua: Estudio de caso, comunidad Verraco

Ubicación: Comunidad Verraco, Consejo Popular Sigua, Municipio Santiago de Cuba, Provincia Santiago de Cuba

Descripción del proyecto: la comunidad Verraco está integrada por 352 habitantes distribuidos en 123 viviendas concentradas fundamentalmente en dos áreas, una conocida como las Casas de Piedra y la otra como la Comunidad Artística, ambas con buenas condiciones constructivas. Dentro de las actividades principales que se desarrollan en la comunidad están la agricultura de autoconsumo, cría de ganado caprino, elaboración de carbón y solo en temporada de verano algunos residentes son contratados en una instalación turística que se encuentra cerca de la comunidad.

Verraco se encuentra dentro de la Reserva de Biosfera Baconao y en la zona de amortiguamiento de la Reserva Natural El Retiro. Por tal motivo se hace imprescindible la implementación de actividades que permitan la generación de alternativas y acciones de manejo participativo que vinculen el desarrollo socioeconómico de la población y la gestión sostenible de la biodiversidad local.

Los objetivos del proyecto son disminuir las afectaciones ambientales que los pobladores provocan en el área protegida donde está ubicada, así como desarrollar alternativas productivas sostenibles y ambientalmente seguras en beneficio de los miembros de la comunidad.

Implementación: La institución contratante con el PNUMA y ejecutora principal del proyecto es el Centro Oriental de Ecosistemas y Biodiversidad (BIOECO).

Justificación y proceso de selección: en 2011, PNUMA se comunicó con los tres gobiernos participando en el Proyecto CBC, pidiendo la selección de los sitios de los proyectos piloto. La posición de Cuba en ese momento era que estos sitios deben estar ubicados dentro de las zonas centrales del Corredor, y que por lo tanto era necesario esperar a que la delimitación se terminará. El Comité Nacional del Proyecto considera aún más las opciones, y decidió seleccionar dos sitios que, sin duda, se incluirían en la Zona Núcleo del CBC.

La Reserva de Biosfera Baconao tiene un valor tan importante para la biodiversidad que fue una selección plenamente justificada. La capacidad técnica y institucional de BIOECO era otra buena justificación para la selección, como BIOECO es el gerente de la Reserva de Biosfera y tiene capacidades fuertes en manejo de áreas protegidas y en investigación científica.

Principales actividades: Los informes presentados por BIOECO, la breve visita realizada durante la evaluación y las entrevistas realizadas con los socios del proyecto indican que las siguientes actividades se llevaron a cabo:

- coordinación y ejecución de tres talleres en la comunidad: agroecología en agroecosistemas tradicionales; sistemas agroforestales y biodiversidad; y manejo participativo en áreas protegidas;
- establecimiento de cinco parcelas de cultivos en la comunidad, con el uso de técnicas agroecológicas y uso de otras prácticas amigables con el ambiente, y con montaje, en cada una de las parcelas demostrativas implicadas en el proyecto piloto, de un sistema de riego por aspersión;

- condicionamiento y preparación de áreas y montaje de dos micro-viveros en la comunidad;
- elaboración y distribución de materiales educativos, técnicos y didácticos sobre agroecología, manejo de recursos, y temas generales de medio ambiente y biodiversidad;
- desarrollo de un huerto en la escuela de la comunidad en el que se aplican y demuestran la efectividad de técnicas agroecológicas, en la que participaron los niños y maestros de la escuela;
- realización de monitoreos sobre condiciones de la biodiversidad asociada a las áreas de cultivos;
- presentación de los resultados del proyecto y las experiencias de la agricultura en patios familiares en la comunidad de Verraco en dos eventos científicos nacionales;
- rehabilitación ecológica en áreas boscosas degradadas, con reforestación en la franja hidro-reguladora del sitio piloto y en un parche de unas 6 ha, ambas zonas definidas como degradadas en la comunidad.

Impactos del proyecto: es demasiado pronto para evaluar los impactos del proyecto sobre los hábitats naturales y la biodiversidad, pero las acciones de reforestación todavía han permitido iniciar la recuperación de extensiones de terreno que se encontraban parcial o totalmente deforestadas. Los agricultores ya están produciendo suficiente para suplir sus hogares y compartir con otros miembros de la comunidad, utilizando métodos de cultivo que no dañan el medio ambiente. Los seis agricultores que han establecido parcelas experimentales son todos muy comprometido y muy consciente de los beneficios del proyecto. El hecho de que la comunidad se siente involucrada en un Corredor regional es también muy importante, ya que valida los esfuerzos de los actores locales y los alienta en su trabajo.

Es extraordinario que el proyecto ha sido capaz de lograr tanto en tan poco tiempo, y esto es debido a la calidad de la colaboración entre BIOECO y la comunidad, al dinamismo y compromiso de los agricultores participantes, y a la gran competencia y dedicación de la especialista de BIOECO Mayelín Silot.

Relevancia: este proyecto tiene una gran importancia para la biodiversidad y para las necesidades de desarrollo local, ya que es una área de conservación crítica y de importancia regional. Las metodologías agrícolas utilizadas y desarrolladas por el proyecto también son muy relevantes y bien adaptadas a las condiciones locales. El proyecto es una demostración de cómo se pueden mejorar los medios de vida en las zonas secas de alta biodiversidad, de manera que sean compatibles con los requisitos de conservación.

Sostenibilidad: BIOECO está comprometido y plenamente cualificado para sostener el proceso del proyecto y asegurar el mantenimiento de las acciones de reforestación y restauración. Los agricultores están tan comprometidos que puede que no necesiten más asistencia técnica.

Recomendaciones:

- si sólo se proporcionan pequeños niveles de asistencia técnica, mantener el contacto con la comunidad, y dar aliento a sus iniciativas;
- facilitar la participación de los agricultores en intercambios con otras iniciativas comunitarias;
- transformar este proyecto en un verdadero estudio de caso (como el título del proyecto implica), documentar la experiencia, y utilizar la comunidad Verraco como un sitio y un recurso para la formación y capacitación en los futuros programas del CBC en el área de agricultura familiar sustentable.

## ***Bassin Bleu, Haïti***

Nom du projet : Contribution à la préservation de la biodiversité dans la zone de Bassin Bleu

Localisation : Bassin Bleu, Département du Sud-Est

Description du projet : L'objectif global est de contribuer à la préservation de la biodiversité du micro bassin versant de Bassin Bleu grâce à la mise en place de techniques agricoles améliorées, la formation et le contrôle de la qualité de l'environnement par le comité local en collaboration avec les délégations des Ministères de l'Environnement et du Tourisme. L'objectif spécifique est de renforcer les capacités de la communauté de Bassin Bleu pour une gestion et valorisation durable qui tient compte de la biodiversité du site, y compris des systèmes d'agriculture durables et favorables à la biodiversité et le site est mieux valorisé via les guides formés et un parcours identifié avec:

- Introduction et plantation d'arbres fruitiers et d'espèces endémiques, de modèles de culture en terrasse/lots boisées et des systèmes agro-forestiers durables
- Organisations de 10 séances de formation sur les pratiques antiérosives
- Renforcement de capacités organisationnelles du comité de gestion du site de Bassin Bleu
- Elaboration de brochures sur la biodiversité du site
- Formation de 10 guides touristiques sur les espèces animales et végétales existantes
- Signalisation du parcours et autres points d'intérêt du site

Mise en oeuvre : « Définir, accorder, développer et mettre en œuvre un projet pilote à Bassin Bleu avec la population cible, les techniciens de Welthungerhilfe (WHH) dans le terrain, et le directeur et l'équipe technique du projet PNUE-UE CBC, les autorités compétentes du Ministère de l'Environnement d'Haïti, les autorités locale et le PNUE pour promouvoir des systèmes de gestion d'agro-écotourisme et d'agroforesterie dans les zones de haute valeur de biodiversité pour cette population. »

Dans ce contexte, le WHH, organisation non-gouvernementale, a été responsable de la coordination de la mise en oeuvre du projet sur le terrain et a établi des liens avec la Direction Départementale du Tourisme (DDT) du Sud-Est à Jacmel et le Ministère de l'Environnement (MDE) d'Haïti.

Le projet a été officiellement lancé le 10 décembre 2013, mais avec quelques activités préparatoires engagées dès le mois de novembre. L'accord original prévoyait une mise en œuvre sur une période de 9 mois, mais le projet a ensuite été prolongé de deux mois pour permettre d'achever toutes les activités programmées.

Justification et processus de sélection : Bassin Bleu, situé dans la section de Lavanneau, commune de Jacmel, est considérée comme l'une des principales attractions touristiques de la région, avec un potentiel pour des activités agrotouristiques. Le micro bassin versant est également considéré comme un lieu de valeur symbolique et culturelle.

« Que ce soit le micro bassin versant, le site des cascades ou encore les lagunes, l'ensemble de cet écosystème souffre de plusieurs menaces spécifiques, telles que ;

- (i) une agriculture non durable et un pâturage incontrôlé (chèvres, ânes, et bœufs) qui menace l'équilibre voire la survie des arbres endémiques et arbustes à feuilles persistantes dans les contreforts ouest du ruisseau ;
- (ii) les pratiques agricoles non durables à petite échelle dans la région de la vallée du bassin versant favorisant une perte de sol fertile ;
- (iii) le développement peu contrôlé du tourisme, avec les guides sans formation qui dégradent les zones protégées des différents étangs et cascades du Bassin Bleu. »

Malgré l'importance décrite ci-dessus, le processus spécifique pour la sélection de ce site aurait pu être encore plus claire dans le contexte de l'initiative du CBC.

#### Principales activités :

- Introduction et plantation d'arbres fruitiers et d'espèces endémiques

Au début du mois d'avril 2014, 2600 plantules ainsi réparties : bambou 200, cèdre 300, acajou 220, *Gmelina* 60, arbre à pain 125, kapab 215, cerise 622, avocats 200, mangue 200, orangers 378, ont été mises en terre avec l'appui des agents forestiers du MDE et un groupe de 10 personnes payées par le MDE. Sur les terrains les plus exposés, les plantules ont été protégées par des sacs. A la fin du mois d'août 2014, 500 plantules fruitières (cerise, manguier, oranger) ont été installés des deux côtés de la route d'entrée du site. Environ un quart a succombé à la sécheresse du mois de septembre 2014 et ceci malgré des séances d'arrosage.

- Introduction de modèles de culture en terrasse/lots boisés

Cette activité de culture en terrasse a été changée en lots boisés sur demande du MDE.

La première plantation de lots boisés a été faite le 1<sup>er</sup> août 2014. Au 30 septembre on a réalisé 13 lots. Dans ces lots boisés, les plantules utilisées sont : manguiers (variétés corne et francisque), cerisiers, oranger sur et oranger doux, mandarine greffés. Sur les fortes pentes dénudées, on a été ajouté des semences de canavalia et de velvet bean, qui sont des légumineuses utilisées comme engrais vert dans la régénération de la capacité nutritive des sols.

Une contribution de 1500 gourdes est donnée à une personne de la communauté pour l'arrosage des plantules et la surveillance contre les caprins. Les mois d'août et de septembre n'ont pas été des mois pluvieux et environ 30% des plantules ont succombé à cette période de sécheresse.

- Introduction aux systèmes agroforestiers durables.

Cinq séances de formation sur l'agroforesterie et la biodiversité ont été réalisées par WHH dans divers localités en amont du site, (Briki 16, Grefye 20, Bazin 18, Janette 18, Mabote 22) soit 92 personnes formés pendant deux jours pour une prévision de 50, chaque personne a eu droit à un livret en créole (Diakout Peyizan) sur l'environnement.

- Réalisation de 10 séances de formation sur les pratiques antiérosives.

Ces séances de pratiques antiérosives consistaient en des plantations sur courbe de niveau dans des jardins du site avec la présence de 10 bénéficiaires par jardin ; 9 séances ont eu lieu sur les dix prévues et un total de 90 personnes a participé à ces séances. Les jardins avaient une superficie moyenne d'environ 30 centième soit  $(30 \times 129 \text{ m}^2) = 3870$ , Soit  $9 \times 3870 = 34830 \text{ m}^2$ . Un total de 1400 plantules a été utilisé.

- Renforcement de capacités organisationnelles du comité de gestion du site de Bassin Bleu

Le comité directeur de l'ODBJ (Organisme de Développement de Bassin Bleu Jacmel) est désigné comme comité de gestion du site. Trois réunions ont été organisées avec le comité directeur de l'ODBJ pour discuter des activités du projet et aussi des problèmes auquel le site fait face ainsi que la structure de gestion. Un appui en mobilier et petit matériel de bureau a été donné pour réorganiser le bureau d'accueil des visiteurs sur le site (bureau métallique, chaise de bureau, étagère métallique, tableau d'affichage, cahier d'enregistrement des visiteurs, bordereaux, fiche de satisfaction des visiteurs, papiers,

cartables jaunes, plumes, tampon). 150 maillots avec des photos de l'une des chutes et de la grotte ont été donnés au comité pour être vendus aux visiteurs et ainsi créer un fond de roulement. A ce jour 40 maillots ont été vendus.

Le nombre de visiteurs est noté mensuellement sur le tableau d'affichage. Du 19 au 31 mai : 149, juin : 524, juillet : 855, août : 1185, septembre : 359. Jusque-là, le comité confronte encore des difficultés avec les nationaux (groupes d'élèves, groupes venant des églises, groupes de jeunes) qui ne se considèrent pas comme visiteurs, et ainsi ils ne veulent pas donner d'informations sur le groupe, encore moins se faire accompagner par les guides. Les informations sur ces groupes ne sont donc pas notées.

Des formations ont été données par le projet aux utilisateurs des outils de gestion distribués (cahier d'enregistrement des visiteurs, bordereaux, fiche de satisfaction des visiteurs). Les membres du comité et les guides ont participé au mois de septembre à une formation sur la gestion de conflit, avant que leurs effets ne soient néfastes sur le fonctionnement du groupe.

D'un autre côté, il faut citer l'appui du projet au comité ODBJ pour la conception et l'organisation du premier festival (Festi -Brinel), pour sensibiliser la communauté du site et des environs, sur le niveau de dégradation de la biodiversité, comme un acte important dans le renforcement de la capacité du comité de gestion. Un documentaire a été préparé par le projet en cette occasion.

- Elaboration de brochures sur la biodiversité du site

9600 brochures ont été réalisées, soit 4800 en français et 4800 en créole. Au niveau du bureau d'accueil du site les brochures seront distribuées sur 2 ans à raison de 10 brochures par jour, le reste est distribué aux partenaires, aux bénéficiaires du site et autres.

- Formation de 10 guides touristiques sur les espèces animales et végétales existantes

21 guides du site de Bassin Bleu ont bénéficié de 3 jours de formations sur la biodiversité et les espèces animales et végétales existant au niveau du site.

Pour ce qui a trait, à la manière de protéger ou de valoriser le site, 87 % des personnes enquêtées pensent qu'il y a des activités à entreprendre pour protéger et aussi mieux valoriser le site.

- Signalisation du parcours et autres points d'intérêt du site

Sur 15 panneaux de signalisation prévus, 16 ont été installés. Maintenant il est vraiment plus facile d'accéder au site à partir de Jacmel sans demander son chemin aux passants

Impacts du projet : Il ne fait aucun doute que l'expérience, le dévouement et la présence de WHH ont joué un rôle majeur dans la réalisation des différents résultats escomptés par le projet. Néanmoins, étant donné la durée limitée des activités, il reste beaucoup à faire pour rendre le site dans un état qui peut être considéré comme satisfaisant et durable pour la gestion et le développement du tourisme dans le long terme

Malgré les résultats positifs obtenus dans la mobilisation et la sensibilisation de la communauté locale à Bassin Bleu, aucune stratégie n'a été encore mise au point pour la continuité des efforts au-delà de la durée du projet CBC. En particulier, les partenariats institutionnels sont une des conditions importantes dans le contexte du développement durable, mais il semble que certaines possibilités n'ont pas été suffisamment explorées, par exemple avec le secteur privé de tourisme de Jacmel.



Il est encore trop tôt pour évaluer l'impact environnemental et socio-économique du projet en termes des augmentations en nombre de visiteurs et des revenus des guides, malgré l'amélioration du centre d'accueil, la formation dispensée aux guides locaux, la signalisation sur les sentiers et les matériaux développés, ou les plantations réalisées pour la restauration du site

Pertinence : Les paysages de Bassin Bleu ont souffert de divers impacts environnementaux et ont besoin d'interventions qui peuvent soutenir la réhabilitation et le renforcement des capacités pour permettre au site d'atteindre son potentiel en termes de tourisme durable à petite échelle et de générer des avantages socio-économiques pour les communautés locales concernées.

Durabilité de l'intervention : La durabilité des efforts de développement du tourisme dépendra de l'implication et du support plus intensif et continu du Ministère du Tourisme. Alors que le projet a exécuté la plupart des activités prévues dans une très courte période, leur rôle au sein de l'Initiative globale CBC et leur contribution à cette Initiative sont discutables. Alors que ce projet, ainsi que tous les autres sites pilotes en Haïti, a de la valeur et du potentiel, les critères de sélection n'ont pas encore été clairs et généralement leur pertinence à la connectivité biologique et à la conservation est faible.

Recommandations : Le site peut avoir une valeur de démonstration pour le développement des pratiques de tourisme durable et la restauration des habitats. La valorisation de la biodiversité est encore limitée par la situation actuelle en termes de l'intégrité du paysage et la qualité des bassins d'eau.

Il reste encore à améliorer l'esthétique et les capacités d'accueil du site (signalisation, accès, matériaux à distribuer, etc.); le contrôle de chèvres est indispensable pour minimiser les déchets et l'érosion dans la région et protéger la végétation.

Les actions futures pourraient envisager la continuité et complémentarité aux efforts en cours, en coopération avec des partenaires locaux de la CBC et internationaux, et être insérées dans le cadre du Plan d'action national pour l'environnement – NEAP. Parmi d'autres mesures qui pourraient être mises en œuvre dans l'avenir, il convient de mentionner la promotion de la gestion des connaissances, ainsi que le renforcement des compétences organisationnelles et de résolution des conflits au sein des communautés locales et des groupes cibles. Les efforts de restauration de la couverture végétale et de la réduction de l'érosion, spécialement en réponse aux dégâts causés par les chèvres, devraient être intensifiés.

Le développement d'un plan de gestion complet pour Bassin Bleu en étroite collaboration avec les principales parties prenantes serait une stratégie utile pour promouvoir les capacités et définir les actions prioritaires pour l'avenir et la continuité des activités, comme par exemple la gestion des déchets, à la fois solides et liquides. Un tel plan devrait également envisager des mesures pour la mobilisation des ressources et la viabilité financière ainsi que les besoins institutionnels et d'infrastructure, entre autres.

## ***La Baie de Caracol, Haïti***

Nom du projet : Contribution à l'amélioration de la condition de pêche pour la conservation de la biodiversité à Caracol

Localisation : la Baie de Caracol, Département du Nord-Est

Description du projet : La Baie de Caracol fait partie intégrante du Parc Marin des Trois Baies (déclaré en 2013) et contient ce que beaucoup considèrent comme les écosystèmes côtiers et marins les plus productifs d'Haïti, avec la deuxième plus grande zone de mangrove (avec plus de 5200 ha.), la deuxième plus grande superficie de récifs coralliens, avec plus de 30 km, et des milliers d'hectares d'herbiers. Cette zone comprend également une zone importante pour les oiseaux (IBA).

L'objectif global du projet est de contribuer à réduire la pression sur la biodiversité au niveau des sites de Caracol, Nan Kafé, et Fort Drouet par des actions visant à mettre en œuvre et à offrir des options pour renforcer les capacités locales en matière de techniques de réhabilitation pour améliorer l'environnement et les conditions de vie des populations locales grâce à une gestion durable des ressources naturelles et à la conservation de la biodiversité des sites mentionnés

L'objectif spécifique est de concevoir, définir, convenir, développer et mettre en œuvre un projet pilote à Caracol afin de contribuer à l'amélioration de la condition de pêche pour la conservation de la biodiversité sur ce site grâce à des activités telles que:

- Évaluation de la situation des espèces de poissons, les captures maximales durables et la révision du calendrier de pêche utilisé par les pêcheurs.
- Nettoyage de 30ha de mangroves touchées par les déchets et les plastiques.
- Présentation de modèles de pêche durables et adaptés aux besoins des résidents.
- Réalisation de 6 sessions de formation sur les techniques de pêches durables.
- Former le comité de l'Organisation de la gestion environnementale locale de Caracol (Brigade Maritime en Action – BMA)
- Développement et distribution de dépliants pour faire connaître l'importance de la protection des mangroves pour la conservation de la biodiversité.
- Formation de 90 leaders sur les techniques de réhabilitation et de conservation des ressources marines et côtières.
- Signalisation des toutes les zones couvertes nécessitant une protection et la réhabilitation des mangroves.”

Mise en œuvre : Établir et mettre en œuvre avec la population cible, le directeur et l'équipe technique du Projet CBC PNUE-UE, le Ministère de l'Environnement d'Haïti et les autorités locales, les actions pour la réalisation des résultats attendus des projets pilotes.

Dans ce contexte, le Ministère de l'Environnement d'Haïti a été responsable de la coordination de la mise en œuvre du projet et a établi des liens avec le Ministère de l'Agriculture et des Ressources Naturelles et les associations de pêches intervenant à Caracol.

Justification et processus de sélection : En raison de son écosystème et de son importance socio-économique, la Baie de Caracol a été incluse dans les initiatives régionales telles que le projet du grand écosystème marin des Caraïbes (CLME) et a été classé par la Convention sur la diversité biologique (CDB) en 2012 comme zone d'importance écologique ou biologique marine (ZIEB). Cependant, la région souffre de pressions de développement comme le Parc Industriel de Caracol - malgré les avantages économiques associés, les impacts environnementaux pourront avoir des conséquences négatives sur la zone de mangrove. Avec

une population estimée entre 20.000-30.000, les principales activités génératrices de revenus comprennent la pêche artisanale, et la production de charbon de bois et du sel.

Malgré l'importance décrite ci-dessus, le processus spécifique pour la sélection de ce site aurait pu être encore plus clair dans le contexte de l'initiative du CBC.

Principales activités :

- Etudes sur la situation des ressources côtières marines de Caracol
- Evaluation des activités de pêche au niveau de la baie de Caracol
- Evaluation des ressources halieutiques de la baie de Caracol
- Evaluation des matériels et équipements des pêches utilisés
- Identification des techniques de gestion durable de la pêche
- Mise en place d'un calendrier de pêche

Espèces	Période de pêche
Crevette	01 Juillet au 3 Octobre
Langouste	1 <sup>er</sup> Juin au 30 Octobre
Lambi	1 <sup>er</sup> Mar au 29 Septembre
Poissons	29 Février au 31 Août

Nettoyage de 30 hectares de mangroves (pas vérifié lors de visite d'évaluation en raison des inondations dans la région)

- Formation et sensibilisation environnementale
- Constitution de 2 équipes de 10 personnes/ouvriers opérationnels
- Travaux de délimitation des espaces occupés par les mangroves
- Nettoyage et assainissement des 30 hectares de mangroves
- Transport et entreposage d'environ 150 m3 de déchets plastiques enlevés
- Réduction à 100% des coupes anarchiques de mangroves pour la construction et bois de chauffe.
- Réduction à 70% du taux de pollution des mangroves par des déchets plastiques
- Identification de site de décharge de concert avec la Mairie et les associations
- Mise en place d'une plate-forme de surveillance des 30 hectares de mangroves constituée des associations de pêches et la Mairie

Présentation des modèles de pêche durables et adaptés aux besoins des résidents

- Les associations de pêcheurs (90 pêcheurs), commerçants des produits de mer et leaders communautaires sont formés et sensibilisés sur les techniques et outils pour une gestion et valorisation durable de la pêche en vue de la conservation de la biodiversité
- Présentation de brochures sur la législation existantes sur l'environnement marin
- Sensibilisation sur les techniques de pêche durable et mise en place d'un calendrier de pêche

Réalisation de 6 sessions de formation sur les techniques de pêche

- 4 sessions de formation réalisées pour 80 représentants d'associations de pêches sur l'importance et la protection des mangroves, la conservation de la biodiversité des écosystèmes de mangroves, la Baie de Caracol et ses potentialités, Incluant 4 facilitateurs et animateurs de terrains

Formation du comité de l'Organisation de la gestion environnementale locale de Caracol (Brigade Maritime en Action / BMA)

- Mise en place d'une plate-forme de surveillance environnementale de la baie de Caracol composée des Associations écologiques et les leaders communautaires.

- Des contacts sont en cours avec le Ministère de l'Environnement pour la nomination de 2 agents environnementaux avec l'aide de la Brigade Maritime en Action, à partir d'octobre 2014.
- Développement et distribution de brochures pour faire connaître l'importance de la protection des mangroves pour la conservation de la biodiversité

Impacts du projet : Il est bien trop tôt pour déterminer les impacts, et aucun changement dans les pratiques ou méthodes des pêches, ni dans l'utilisation d'engins, peuvent être encore observés. D'autre part, des résultats positifs sont obtenus dans la mobilisation et la sensibilisation des pêcheurs et de la communauté locale à Caracol.

Pertinence : Alors que le projet a exécuté la plupart des activités prévues dans une très courte période, leur rôle au sein de l'Initiative globale CBC et leur contribution à cette Initiative sont discutables. Alors que ce projet, ainsi que tous les autres sites pilotes en Haïti, a de la valeur et du potentiel, les critères de sélection n'ont pas encore été clairs. Il ne fait aucun doute que ces sites sont prioritaires pour la conservation, et la Baie de Caracol est une zone avec une biodiversité importante et vulnérable, pour les services écosystémiques et les ressources ainsi que la pertinence socio-environnementale. Les études réalisées dans le cadre de la démarcation du CBC ont confirmé l'importance de ce site pour la connectivité biologique.

Durabilité de l'intervention : Au-delà de la durée du projet CBC le suivi sera assuré par le BMA en collaboration avec la Maire sous la tutelle du Ministère de l'Environnement d'Haïti. En particulier, les partenariats institutionnels sont une des conditions importantes dans le contexte du développement durable, mais il semble que certaines possibilités n'ont pas été suffisamment explorées, par exemple avec le Parc Industriel à Caracol ou des agences spécialisées des Nations Unies, comme la FAO. La durabilité est dépend de partenariats et d'un renforcement continu des capacités.

Recommandations : Grâce à sa situation limitrophe avec le parc national de Monte Cristi en République Dominicaine, le site offre une occasion unique de développer des activités de coopération binationale, la promotion de l'échange d'expériences, de compétences, de bonne gouvernance, et de pratiques de gestion, et de maximiser les alternatives socio-économiques pour la durabilité.

Les actions futures pourraient envisager la continuité et complémentarité aux efforts en cours, en coopération avec des partenaires locaux de la CBC et internationaux, et être insérées dans le cadre du Plan d'action national pour l'environnement –NEAP. Parmi d'autres mesures qui pourraient être mises en œuvre dans l'avenir, il convient de mentionner la promotion de la gestion des connaissances, le renforcement des compétences organisationnelles et de résolution des conflits au sein des communautés côtières locales et des groupes cibles, en particulier les femmes, en mettant l'accent sur les processus environnementaux et les problématiques de gestion du littoral et de la mangrove, ainsi que le travail communautaire dans la formation d'associations.

La répliquabilité des pratiques socio-économiques alternatives dans les mangroves (par exemple l'apiculture et la restauration avec la création de pépinières) peut être intéressante pour accroître les capacités locales et comme une première étape dans l'exploration des expériences, pour diffuser les connaissances sur les mangroves et leur rôle pour atteindre le développement socio-économique, et promouvoir le dialogue politique nécessaire à la prise de décision et la bonne gouvernance.

## ***Dosmond, Haïti***

Nom du projet : Réduction de la pression sur la biodiversité par la promotion et de développement des énergies renouvelables dans la localité de Dosmond

Localisation : Dosmond, Département du Nord-Est

Description du projet : L'objectif global est de contribuer à la préservation de la biodiversité dans la localité de Dosmond et l'objectif spécifique est la promotion et développement des énergies renouvelables et des alternatives d'amélioration des conditions de vie pour réduire la pression sur la diversité biologique dans la localité de Dosmond, y compris le soutien aux activités liées à la promotion de la culture de café combinant protection de la biodiversité et développement économique.

Mise en œuvre : Le Welthungerhilfe (WHH), organisation non-gouvernementale, a été responsable de la coordination de la mise en oeuvre du projet sur le terrain et a établi des liens avec le Ministère de l'Environnement d'Haïti. Le projet a été officiellement lancé le 7 décembre 2013.

Justification et processus de sélection : Le site pilote de Dosmond est situé dans la commune de Ouanaminthe, avec 2000 habitants. Il est une zone de transition entre la côte et les hautes terres (700m d'altitude), bénéficiant encore d'un potentiel important en biodiversité, avec une économie basée sur l'agriculture et l'exploitation des ressources naturelles. Le processus spécifique pour la sélection de ce site aurait pu être encore plus clair dans le contexte de l'initiative du CBC.

### Principales activités :

- Il était prévu d'installer 30 lampes solaires ; compte-tenu de la hausse des prix des lampes sur le marché (une sous-estimation du cout de ces lampes à la rédaction du projet; elles coutent en réalité trois fois le budget qui était prévu), le projet a pu en installer 10 (dix). L'identification de points d'installation a été faite de façon participative avec une répartition équilibrée. Ces lampes fonctionnent très bien et permettent à la population un retour à la vie nocturne dans les endroits où elles sont placées.
- 30 panneaux de sensibilisation sont installés, dont 10 panneaux sont attachés aux supports des lampes solaires et les autres 20 panneaux sur des supports métalliques. Ces panneaux jouent un rôle important dans la sensibilisation de la population surtout qu'elle était impliquée dans le choix des messages qui y sont affichés.
- Cinq personnes de la communauté sont formées et équipées pour assurer l'entretien des lampes solaires.
- Trois unités-pilotes de production de biogaz ont été construites, mais elles ne sont pas encore utilisées, en attendant la production de gaz. Un comité composé de membres des familles usagères de production de biogaz est a été constitué pour assurer la gestion du système de biogaz. Deux études de faisabilité ont été commandité (par un consultant haïtien et un expert cubain qu'ont recommandé de construire de petites unités de production de gaz méthane pouvant alimenter en moyenne cinq à six réchauds) .Compte tenu du cout par unité et les conditions environnementales et sécuritaires, le projet n'a pu financer que trois unités capables d'alimenter que 15

réchauds sur 50 distribués à la population. Le choix de l'emplacement de ces trois unités a été fait par l'expert cubain de concert avec la population en fonction de la disponibilité des matériaux nécessaires à la production du gaz.

- 50 réchauds complets à gaz ont été distribués à 50 familles, et 200 foyers améliorés ont été fournis à 200 familles. Ces familles bénéficiaires des réchauds sont formées et les utilisent régulièrement.
- 10 personnes de la localité de Dosmond sont formés et équipés à la confection et réparation des réchauds.
- Trois séances de sensibilisation ont été réalisées dans la localité de Dosmond dans l'objectif de :
  - Informer la population sur le contexte, l'objectif et les résultats attendus du projet.
  - Permettre à la population de participer dans la prise de décision, surtout en ce qui concerne l'installation des lampes solaires, ainsi que la distribution des réchauds à gaz, des réchauds améliorés et des plantules.
  - Comparer le comportement et la performance de plusieurs types de réchauds améliorés avec le réchaud traditionnel, permettant ainsi aux bénéficiaires de connaître leur temps d'ébullition, le rendement thermique et la consommation spécifique de charbon ou du bois.
- Des activités liées à la promotion de la culture de café combinant protection de la biodiversité et développement économique sont soutenues. Un total de trente-huit mille (38,000) plantules dont 32,000 plantules de café et 6,000 plantules d'ombre, ont été acquises et distribuées à cent (100) planteurs qui les ont transplantées de manière dispersée. Elles couvrent une superficie d'environ 50 ha dans la zone amont de Dosmond. Le Centre de Propagation Végétale, qui est sous la responsabilité du Ministère de l'Environnement, a joué un rôle important dans ce contexte et son fonctionnement.
- Le surplus de plantules est dû à la perte d'une quantité de plantules transplantées durant une période de sécheresse; 100 planteurs sont formés sur la production de la culture du café favorable à la biodiversité.
- Deux glacis de séchage ont été construits pour une amélioration post-récolte. Ces glacis ne sont pas seulement utiles au séchage du café mais aussi à toutes les semences qui méritent d'être séchées.

Impacts du projet : Le projet a connu l'implication complète des autorités locales et la forte participation de la population dans l'exécution des activités. Il ne fait aucun doute que l'expérience, le dévouement et la présence de WHH a joué un rôle majeur dans la réalisation des différents résultats obtenus par le projet.

Sauf pour certaines activités, comme la quantité de lampes solaires installées qui est réduite par rapport à la quantité prévue à cause des coûts de marché ou la perte de certaines plantules de café à cause de la période de sécheresse après plantation, toutes les activités ont été réalisées comme prévues. L'indisponibilité de savoir-faire dans le domaine de la construction de système de production biogaz a causé un retard considérable dans la réalisation de cette activité.

Il est encore trop tôt pour évaluer l'impact environnemental et socio-économique du projet, surtout en ce qui concerne la promotion de la culture de café.

Pertinence : Alors que le projet a exécuté la plupart des activités prévues dans une très courte période, leur rôle au sein de l'Initiative globale CBC et leur contribution à cette Initiative sont discutables. Ainsi que tous les autres sites pilotes en Haïti, le projet à Dosmond a de la valeur et du potentiel, les critères de sélection n'ont pas encore été clairs et généralement leur pertinence à la connectivité biologique et à la conservation est faible.

Durabilité de l'intervention : Malgré les résultats positifs obtenus dans la mobilisation et la sensibilisation de la communauté locale à Dosmond, aucune stratégie n'a été encore mise au point pour la continuité des efforts au-delà de la durée du projet CBC. En particulier, les partenariats institutionnels sont une des conditions importantes dans le contexte du développement durable.

La durabilité de ces efforts dépend de l'implication et du support continu du Ministère de l'Environnement dans le contexte des activités du Centre de Propagation et du soutien pour la surveillance et le renforcement des capacités locales à Dosmond.

Recommandations : Il est nécessaire de mieux intégrer les projets pilotes avec les objectifs de la CBC, et de développer une stratégie pour améliorer la cohésion / design (à l'avenir), si la réduction des pressions sur la biodiversité / ressources doit être atteinte, et même plus si la réduction de la pauvreté est envisagée.

Le centre de propagation semble fonctionner de manière satisfaisante et joue bien son rôle, mais il a besoin d'augmenter la capacité des ressources humaines engagées de façon continue pour sa viabilité permanente. Les échanges et les leçons apprises entre les centres en Haïti et la République Dominicaine seraient très bénéfiques.

Les actions futures pourraient envisager la continuité et complémentarité aux efforts en cours, en coopération avec des partenaires locaux de la CBC et internationaux, et être insérées dans le cadre du Plan d'action national pour l'environnement –NEAP. Parmi d'autres mesures qui pourraient être mises en œuvre dans l'avenir, il convient de mentionner la promotion de la gestion des connaissances, le renforcement des compétences organisationnelles des groupes cibles.

En particulier, l'élaboration d'un plan pour le développement durable de Dosmond serait bénéfique, en s'appuyant sur les efforts déjà entrepris par le projet CBC, non seulement pour assurer la continuité des activités mais aussi pour étendre d'autres dimensions (comme par exemple la gestion des déchets), et pour utiliser potentiellement les expériences accumulées pour le but de la reproductibilité ailleurs, comme l'utilisation des sources d'énergie de remplacement.

Alors que la connectivité et de la conservation de la biodiversité dans le cadre d'un concept de corridor biologique est faible dans le contexte du projet, ces besoins pourraient être abordés dans le processus de l'élaboration d'un tel plan de développement, avec l'identification des habitats, des espèces et des services écosystémiques qui exigeraient la préservation. De même, de nouvelles opportunités socio-économiques spécifiquement relevant pour la communauté pourraient également être explorées plus loin, dans le processus de construction d'une vision partagée pour Dosmond. Il y a déjà un bon niveau de mobilisation et de la réceptivité dans la communauté pour permettre un travail intensifié et ciblé.

## ***Fort Drouet, Haïti***

Nom du projet : Contribuer à la promotion de l'écotourisme et la conservation de la biodiversité dans les zones adjacentes de Fort Drouet

Localisation : Fort Drouet, Section Délices, Commune de Arcahaie, Département de l'Ouest, Haïti

Description du projet : Le Fort Drouet est l'une des fortifications construites au lendemain de l'Indépendance pour défendre Haïti contre d'éventuelles attaques de la France, ancienne puissance coloniale. C'est un site exceptionnel du fait de son importance historique et de la qualité de ses paysages, car le fort est situé, à plus de 1300 mètres d'altitude, sur un promontoire qui domine la Vallée de l'Artibonite au Nord et la côte et plaine de l'Arcahaie au Sud. En contrebas du fort se trouvent les ruines d'une imposante habitation caféière (Lamothe/Lamòt), ce qui augmente l'intérêt historique, patrimonial, pédagogique et touristique du site.

C'est une ancienne zone de production caféière, aujourd'hui consacrée à l'agriculture familiale de montagne, caractérisée par une fragilisation des terres (due principalement au morcellement et aux pratiques culturales), par un niveau d'outillage très faible et par la faiblesse, voire l'absence, de bénéfices tirés par les familles paysannes.

Le site a été « découvert » en 2009, à l'occasion de la construction d'une route qui permit à une équipe de l'Institut de Sauvegarde du Patrimoine National (ISPAN) d'accéder au site, de documenter son existence (ISPAN 2009), de demander au Centre National des Equipements de prolonger la route, et de conduire un premier programme de formation de guides.

Dans ce contexte, les objectifs du projet sont de promouvoir des systèmes agricoles durables et propices à la conservation de la biodiversité dans les zones adjacentes au Fort Drouet et de développer l'écotourisme. Le projet a été officiellement lancé le 8 juillet 2014.

Mise en œuvre : le Ministère de l'Environnement a coordonné la mise en œuvre du projet dans le cadre du Projet CBC, la coordination étant assurée conjointement par la Direction des Sols et Ecosystèmes et par la Direction Départementale de l'Ouest de ce Ministère.

Justification et processus de sélection : l'inclusion de ce projet dans le programme de travail du Projet CBC s'est faite lors des Réunions Technique et Ministérielle de Septembre 2012 qui se sont tenues à Montrouis, Haïti, sur recommandation du Ministre de l'Environnement qui présida ces rencontres. La récente « découverte » du site avait suscité un fort intérêt parmi les responsables du Ministère de l'Environnement et autres personnes et institutions intéressées par le patrimoine national.

Principales activités : les rapports soumis par le Ministère de l'Environnement, la visite de terrain et les entretiens réalisés avec les responsables et partenaires du projet indiquent que les activités suivantes ont été réalisées :

- plantation d'arbres fruitiers et forestiers ;
- plantation de café ;
- travaux de conservation des sols avec mise en place d'infrastructures simples (par exemple cordons de pierres) ;
- amélioration de l'accès ;
- appui aux guides touristiques ;
- formation et sensibilisation des résidents et de la collectivité locale ;
- mis en place des panneaux de signalisation et distribution des brochures.



Il convient aussi de noter que le Directeur Départemental de l'Ouest du Ministère de l'Environnement a participé au voyage d'étude organisé à Cuba par le projet CBC, expérience qu'il juge extrêmement positive.

Impacts du projet : il est bien entendu trop tôt pour pouvoir évaluer l'impact environnemental et économique à long terme du projet. Les impacts qui peuvent être observés sont la création de revenus à court-terme pour les personnes employées aux travaux de reboisement et de protection des sols, une bonne mobilisation de la collectivité locale, et un accroissement du nombre de visiteurs (et donc des revenus des guides accrédités par l'ISPAN) du fait d'une plus grande visibilité du site. Un petit nombre de bénéficiaires du projet ont réussi à mener des activités touristiques tout en tirant parti des formations et des appuis techniques du projet dans le domaine agricole, avec des impacts appréciables sur leurs revenus et leur sécurité alimentaire.

Pertinence : le Fort Drouet et l'ancienne Habitation Lamôt<sup>31</sup> sont des sites historiques d'importance considérable, et leur préservation et promotion sont pleinement justifiées. Le projet répondra aussi aux enjeux de développement local s'il résulte en un accroissement des revenus du tourisme, ainsi qu'en une augmentation de la production de café et en une diversification agricole. Du point de vue de la conservation des sols et de la restauration de bassins versants, il est indiscutable que cette zone d'altitude revêt une importance particulière.

En ce qui concerne la biodiversité, il est vraisemblable que ce site a une importance en termes de connectivité, puisque c'est une zone d'altitude située sur le passage de migrations d'oiseaux, mais cette évaluation n'a pu recueillir de documents ni d'opinions scientifiques qui confirment cette observation<sup>32</sup>. Si l'importance du site pour la conservation de l'avifaune est confirmée (ce qui justifierait une classification de la zone du projet en Zone Centrale dans la délimitation du CBC), ce projet a une grande pertinence pour l'Initiative CBC dans son ensemble.

Bien que ce projet soit qualifié de « pilote » dans la documentation du Projet CBC, il ne semble pas y avoir d'activités passées, présentes ou envisagées qui permettraient de capitaliser et de partager d'éventuelles leçons apprises et pratiques développées par le projet.

Durabilité de l'intervention : le Ministère de l'Environnement souhaite rester impliqué dans la gestion et la promotion de ce site, mais les contraintes pratiques (notamment du fait des difficultés d'accès) risquent de limiter son implication. L'un des facteurs de durabilité est l'intérêt du Conseil d'Administration de la Section Communale (CASEC), et c'est un intérêt qu'il conviendra de cultiver. Pour ce qui est de l'activité touristique et de la gestion du patrimoine historique, l'ISPAN a un rôle essentiel à jouer.

#### Recommandations :

- envisager un travail de recherche qui permettrait de déterminer plus précisément l'importance du site pour la biodiversité et en particulier pour l'avifaune, et prendre en compte ces données dans une révision éventuelle de la délimitation du Corridor ;
- encourager une plus grande participation de l'ISPAN ;
- préparer, en concertation avec le CASEC, l'ISPAN, les guides et la population locale un plan d'aménagement du site qui inclut notamment un zonage (zones de protection, zones de reboisement, parking, etc.) ;

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<sup>31</sup> Ainsi qu'une autre ancienne habitation caféière, l'Habitation Dion, située à environ deux kilomètres.

<sup>32</sup> L'ensemble du massif est classé comme Zone de Connectivité dans la délimitation du Corridor effectuée par le Projet CBC, et le site de Fort Drouet n'est inclus dans aucune des Zones Centrales (Core Zone / Zona Núcleo).

- comme déjà en perspective, formuler et mettre en œuvre un petit projet pour la construction d'infrastructures simples mais importantes pour le développement touristique (abri pour les guides, toilettes).

## ***La Gonâve, Haïti***

Nom du projet : Réduction de la pression sur la biodiversité à travers la promotion de la production de café, d'énergie photovoltaïque et la protection du bassin versant de la source Nan Café, La Gonâve

Localisation : Ile de la Gonâve, Département de l'Ouest, Haïti

Description du projet : L'île de la Gonâve compte environ 69.334 habitants (selon recensement de 2003), répartis sur deux communes et 11 sections communales. Le projet est situé sur l'habitation Nan Café, 3ème section de Grand Source, Commune de Anse à Galets. L'habitation, qui se trouve à environ 450m d'altitude, a une source importante pour l'approvisionnement en eau de la population locale, et abrite une riche biodiversité, notamment dans l'avifaune. Le site couvre une superficie d'environ 10 hectares, et c'est une propriété de l'Etat gérée par le Ministère de l'Agriculture. Avant la mise en œuvre de ce projet, la propriété bénéficiait de peu d'activités de gestion, et souffrait donc de déboisements, avec des risques de pollution de la source.

Les objectifs du projet sont donc de réhabiliter le micro-bassin versant, de préserver la source et les bénéfices qu'elle apporte à la population locale, de protéger le milieu et la biodiversité, et de promouvoir des activités économiques compatibles avec les impératifs de protection. De plus, le projet vise à l'installation d'un système photovoltaïque pour les besoins énergétiques de l'école, du centre de santé et de la place publique de Nan Café, ainsi qu'à la promotion de réchauds à kérosène.

Les résultats escomptés par le projet sont :

- le renforcement des capacités des organisations locales et groupements de la société civile par la formation et l'éducation environnementale pour la gestion intégrée de l'environnement ;
- la démonstration d'alternatives d'amélioration de la qualité de vie à travers des modèles de travaux pratiques de terrain pour la conservation des sols ;
- le renforcement de la coopération technique par la synergie entre les acteurs locaux dans la mise en œuvre des microprojets pour garantir le fonctionnement efficient et la diffusion des résultats.

Le projet a été officiellement lancé le 1<sup>er</sup> juillet 2014, avec un démarrage effectif de certaines activités en mai et le premier atelier de formation mi-juillet ; il a donc été mis en œuvre sur une période extrêmement courte.

Mise en œuvre : le Ministère de l'Environnement a coordonné la mise en œuvre du projet dans le cadre du Projet CBC, la coordination étant assurée par le Directeur du Bureau Insulaire de la Gonâve, qui dépend de la Direction Départementale de l'Ouest de ce Ministère.

Justification et processus de sélection : l'inclusion de ce projet dans le programme de travail du Projet CBC s'est faite lors des Réunions Technique et Ministérielle de Septembre 2012 qui se sont tenues à Montrouis, Haïti, sur recommandation du Ministre de l'Environnement qui présida ces rencontres. Le Ministère, notamment au travers du Directeur du Bureau Insulaire, avait auparavant proposé la création d'une aire protégée dans la zone, proposition qui avait été transmise informellement à l'Agence Nationale des Aires Protégées (ANAP). Les divers documents relatifs au projet soulignent l'importance de la biodiversité présente dans ce site, les menaces qui pèsent sur ces milieux et sur le bassin versant du fait de pratiques agricoles non durables et de déboisements, et le potentiel de développement local dans la zone. Les installations photovoltaïques sont quant à elles justifiées par les bénéfices apportés aux

populations, et par l'hypothèse qu'elles permettront la scolarisation d'un plus grand nombre en troisième cycle, et offriront donc aux jeunes une alternative aux déboisements et aux activités agricoles non durables.

Principales activités : les rapports soumis par le Ministère de l'Environnement et les entretiens réalisés avec le coordonnateur du projet indiquent que les activités suivantes ont été réalisées :

- deux ateliers de sensibilisation et de formation pour le renforcement des associations, agriculteurs et leaders communautaires ;
- formation de 40 agriculteurs, guides éco-touristiques et leaders communautaires à Nan Kafé ;
- implication de 20 membres d'organisations locales dans des activités de conservation de sol et de la mise en terre des plantules ;
- création d'emplois directs de 200 hommes / jour de travail pendant deux semaines à Nan Kafé ;
- renforcement de la capacité du Bureau Régional Insulaire du Ministère de l'Environnement basé à La Gonâve avec notamment l'acquisition de matériel de bureau ;
- identification des pépinières locales et appui à la création et/ou au fonctionnement de pépinières scolaires ;
- renforcement des associations dans les techniques de montage des pépinières ;
- travaux de conservation des sols avec mise en place d'infrastructures simples (par exemple cordons de pierres) et mise en terre de plantules ;
- mise en place d'une plate forme locale de surveillance environnementale des acquis du projet à Nan Kafé.
- les équipements photovoltaïques ont avaient été livrés, et un millier de réchauds avaient été distribués.

Le Directeur du Bureau Insulaire et le Directeur Départemental de l'Ouest du Ministère de l'Environnement ont tous deux participé au voyage d'étude organisé à Cuba par le projet CBC, expérience qu'ils jugent extrêmement positive.

Impacts du projet : il est bien entendu trop tôt pour pouvoir évaluer l'impact environnemental et économique à long terme du projet. Les impacts qui peuvent être observés sont la création de revenus à court-terme, le renforcement des capacités et du rôle du Bureau Insulaire, et une bonne mobilisation des collectivités locales et organisations communautaires. L'implication des écoles, par le biais d'actions éducatives et par leur implication dans la création de pépinières, constitue l'un des aspects positifs du projet.

Pertinence : le projet répond bien à des enjeux de développement local qui sont indiscutablement prioritaires (alimentation en eau, production de café, électrification de bâtiments publics). En ce qui concerne la biodiversité, il est vraisemblable que ce site a une grande importance en termes de connectivité, puisque c'est une zone d'altitude moyenne sur une île située sur le passage de migrations d'oiseaux, mais cette évaluation n'a pu recueillir de documents ni d'opinions scientifiques qui confirment cette observation<sup>33</sup>. L'hypothèse d'une causalité entre un accroissement des heures de scolarisation (du fait d'une électrification des écoles) et une baisse des déboisements et de la production de charbon est quant à elle difficilement vérifiable, car c'est la demande du marché, et non la force de travail, qui détermine le volume de production. D'autre part le fait que l'électrification de cet espace

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<sup>33</sup> La délimitation du Corridor effectuée par le Projet CBC identifie deux étroites zones littorales de La Gonâve comme Zones Centrales (Core Zone / Zona Núcleo) tandis que le reste de l'île, y compris le site de ce projet, est délimité comme Zone de Connectivité.

permet à l'établissement scolaire de fonctionner en double vacation et facilite un plus grand nombre d'enfants d'avoir accès à cette institution. De plus, cela facilite aussi l'utilisation de cet espace comme laboratoire de divulgation et sensibilisation sur les aspects relatifs à la conservation de biodiversité, ainsi que des thèmes divers liés à la protection de l'environnement.

Si l'importance du site pour la conservation de l'avifaune est confirmée (ce qui justifierait une classification de la zone du projet en Zone Centrale dans la délimitation du CBC), ce projet a une grande pertinence pour l'Initiative CBC dans son ensemble.

Bien que ce projet soit qualifié de « pilote » dans la documentation du Projet CBC, il ne semble pas y avoir d'activités passées, présentes ou envisagées qui permettraient de capitaliser et de partager d'éventuelles leçons apprises et pratiques développées par le projet.

Durabilité de l'intervention : le Ministère de l'Environnement souhaite poursuivre ce travail et le considère important, le Directeur du Bureau Insulaire est dévoué au projet et restera sans nul doute engagé, mais l'enjeu sera celui de la disponibilité des ressources matérielles et financières nécessaires, d'autant que la période d'intervention a été courte. Une implication de l'ANAP pourrait être un garant d'une plus grande durabilité.

Recommandations :

- envisager un travail de recherche qui permettrait de déterminer plus précisément l'importance du site pour la biodiversité et en particulier pour l'avifaune, et prendre en compte ces données dans une révision éventuelle de la délimitation du Corridor ;
- focaliser le suivi sur les activités qui ont le plus de chances de succès (et de participation locale), notamment les pépinières scolaires, les plantations de café et la protection de la source ;
- poursuivre, autant que possible avec les ressources disponibles, les actions de formation et de sensibilisation ;
- consulter l'ANAP et examiner les possibilités d'une plus grande implication de cette Agence dans l'aménagement et la gestion de ce site.

## ***Pedro Santana, República Dominicana***

Título del proyecto Alternativa sustentable para el manejo de vertedero de basura en el Municipio Pedro Santana

Ubicación : Municipio Pedro Santana, Provincia Elías Piña

Descripción del proyecto :

El objetivo general consiste en implementar actividades que permitan cumplir con las metas planteadas en el proyecto CBC PNUMA-UE dirigidas a la participación de las comunidades de Pedro Santa, Los Rinconcitos y Comendador de la provincia Elías Piña, República Dominicana, en el desarrollo de proyectos piloto para su beneficio.

El objetivo específico consiste en diseñar, ejecutar, monitorear y evaluar actividades concretas que promuevan el desarrollo sustentable y medios de vida alternativos en los Rinconcitos, Pedro Santana y Comendador que son los sitios pilotos del Proyecto PNUMA-UE CBC en la República Dominicana.

Establecer e implementar junto con la población beneficiaria, los técnicos de CEDAF en el terreno, el director y el equipo técnico del Proyecto PNUMA-UE CBC, la Dirección Provincial de Medio Ambiente, las autoridades locales y el PNUMA, las acciones para el logro de los resultados esperados de los proyectos piloto que se explican a continuación:

Definir, acordar, desarrollar y ejecutar un proyecto piloto en Pedro Santana para el desarrollo de una alternativa sustentable para el manejo del vertedero de basura en el municipio Pedro Santana mediante actividades como:

- Mejorar el funcionamiento del vertedero municipal y mitigar su impacto en el medio ambiente y la salud de la comunidad.
- Diseñar y construir obras comunitarias para reciclaje y eliminación de residuos no reciclables.
- Crear las capacidades sociales y técnicas en los actores sociales, comunitarios e institucionales en torno al manejo y reciclaje de los residuos que generan y diseñar un plan de negocio para la generación de ingresos para las comunidades a partir de la gestión adecuada de los residuos.
- Divulgar y evaluar los resultados del proyecto en materia de gestión sostenible de los recursos naturales.

Implementación :El proyecto ha sido ejecutado por el Centro para el Desarrollo Agropecuario y Forestal (CEDAF), como institución contratante con el PNUMA, en cooperación estrecha con la Dirección Provincial (Elías Piña) del Ministerio de Medio Ambiente y Recursos Naturales.

Justificación y proceso de selección : en 2011, PNUMA se comunicó con los tres gobiernos participando en el Proyecto CBC, pidiendo la selección de los sitios de los proyectos piloto. La capacidad técnica e institucional de CEDAF con su fuerte presencia en la región de Pedro Santana bien como las prioridades ambientales señaladas en la “Agenda Ambiental de Provincia de Elías Piña” (julio 2011), que incluyen la reducción de la contaminación por desechos sólidos, fueron tomadas en cuenta en la selección del proyecto.

Principales actividades:

Las siguientes actividades se llevaron a cabo, en base a la documentación verificada, las entrevistas realizadas con la Dirección Provincial de Medio Ambiente en Comendador y la visita de campo a Pedro Santana:

- 10 qq de humus producido/año en tres Unidades de Producción de Lombriz Compost, establecidas, y con proyección de 30 qq de humus producido/año.
- Una (1) lombricompostera familiar, establecida
- 26 comunitarios capacitados en producción de compost.
- 22 estudiantes de 4 a 6 grado de educación básica capacitados en clasificación y aprovechamiento de residuos.
- 13 estudiantes de 7mo a 4to Bachillerato capacitados en clasificación y aprovechamiento de residuos
- 13 amas de casas capacitadas en aprovechamiento de residuos.
- Artesanía elaboradas a partir de residuos, en 2 jornadas, una para escolares y otra para amas de casa.
- 6 Colectores de basura capacitados en gestión y clasificación de RSM.
- Un (1) Comité gestor para dar seguimiento a las acciones implementadas por el proyecto, integrado por comunitarios, creado.
- 4 puntos limpios para inicio de cultura de clasificación de residuos, seleccionados y gestionado por estudiantes de secundaria.
- Entrega de 20 tanques y 4,000 fundas para la clasificación de residuos

Una actividad que no se ha cumplido todavía es el “plan de negocio para la generación de ingresos para las comunidades a partir de la gestión adecuada de los residuos”. Esto requiere una colaboración de las comunidades con socios gubernamentales y del sector privado, como el comercio local y fronterizo con otros municipios y otros sectores como el turismo, bien como la integración del plan de negocio en una estrategia más amplia contemplando la gestión integrada de los residuos sólidos (véase recomendaciones abajo).

Impactos del proyecto : es demasiado pronto para evaluar los impactos del proyecto sobre los cuerpos de agua, el suelo o sobre la biodiversidad local en términos de la manutención y cualidad de los hábitats en el entorno del vertedero de Pedro Santana. Aunque varias actividades de sensibilización y de educación sobre los impactos de contaminación y la importancia del aprovechamiento de residuos han sido llevadas a cabo de forma positiva, tales actividades, por su intensidad y escala, no han todavía afectado de forma significativa el funcionamiento del vertedero municipal o mitigado su impacto en el medio ambiente y la salud de la comunidad. El general la recogida de la basura hecha por el Ayuntamiento es limitada, en cuanto al espacio que cubren, la planificación de las rutas y las frecuencias de recogidas. Algunas comunidades no reciben todavía este servicio, generando un alto porcentaje de quema y disposición inadecuada.

Relevancia : Considerando la importancia del saneamiento para salud ambiental y humana, el manejo adecuado de los residuos sólidos es un elemento crucial a la buena gestión municipal bajo ese contexto. Por lo tanto, el proyecto responde de forma coherente a las políticas ambientales provinciales, pero, sin embargo, teniendo todavía relevancia limitada a la conservación de forma directa y a la conectividad en temas del establecimiento y la manutención de un corredor biológico. Por otro lado, un manejo adecuado de residuos, conlleva por ende aplicar un uso correcto de recursos y promueve el fortalecimiento de la relación de que la integración por aspectos de las comunidades, ayudaran a cementar la visión del CBC.

Sostenibilidad : El compromiso de CEDAF en dar seguimiento a las actividades del proyecto es claro, ya que ha logrado obtener financiación para llevar a cabo trabajo adicional ( de

acuerdo a la información recibida de la Dirección Provincial) , en continuidad a los objetivos del proyecto. Esa oportunidad ofrecería un potencial de fortalecimiento de las capacidades locales a varios niveles y del establecimiento de cooperación con distintos socios relevantes.

#### Recomendaciones :

- mantener el apoyo proporcionado por CEDAF como un socio importante y su papel en la sustentabilidad de las actividades futuras.
- desarrollar, en el futuro, una estrategia integrada para la gestión de los residuos sólidos, en colaboración con las autoridades relevantes y la sociedad, destinada a ampliar las actividades realizadas por el proyecto, sobre todo considerando la posibilidad de fortalecer acuerdos bilaterales con municipios vecinos como Bánica y de la posible reubicación del vertedero de Pedro Santana con un diseño, planificación y saneamiento adecuados. Tal fortalecimiento apoyaría acuerdos existentes a través de la Comisión de Alto Nivel de Relaciones Dominico-Haitianas y como parte a nivel nacional de la Estrategia nacional de Desarrollo al 2030. En adición a eso, el departamento de manejo de residuos sólidos bajo el Ministerio de Medio Ambiente trabaja igualmente junto a las unidades de gestión ambiental de los ayuntamientos, sobre estos temas.

La gestión integral de residuos sólidos es la forma de diseñar, implementar y administrar sistemas de limpieza pública, considerando una amplia participación de los sectores de la sociedad con las dimensiones del desarrollo sostenible y su medio ambiente, social, cultural, económico, político e institucional.

Estos sistemas tienen como objetivo: (1) reducir la generación de residuos, fomentando la aplicación de las "3 erres" de la conciencia ambiental: Reducir (reducir el consumo y evitar el desperdicio), reutilizar (reutilización, evitar jugar al aire libre), de reciclaje (transformar, dando nueva utilidad económica) y la implementación de programas de recolección selectiva de materiales destinados al reciclaje; (2) promover la disposición ambientalmente racional y (3) el servicio universal a toda la población. Por lo tanto, el programa del Ministerio de Medio Ambiente en torno a este tema, bajo el departamento de manejo de residuos sólidos, con aplicación en comunidades pilotos, es muy positivo en ese contexto.

Muchos proyectos tienen sus resultados reducidos por la falta de participación activa de la población involucrada, lo que pone en relevancia la importancia del proceso de toma de conciencia y movilización de la población local como un paso crucial para el éxito de cualquier iniciativa de este tipo.

- incentivar la continuidad del Centro de Propagación de Pedro Santana como un sitio para la formación y capacitación en la comunidad, incluyendo sobre la producción de compost y su valorización en la cadena de aprovechamiento de residuos.



## ***Los Rinconcitos, República Dominicana***

Título del proyecto: Uso sostenible de la palma de guano, Los Rinconcitos

Ubicación : Municipio Comendador, Provincia Elías Piña

Descripción del proyecto :

El objetivo general consiste en implementar actividades que permitan cumplir con las metas planteadas en el proyecto CBC PNUMA-UE dirigidas a la participación de las comunidades de Pedro Santa, Los Rinconcitos y Comendador de la provincia Elías Piña, República Dominicana, en el desarrollo de proyectos piloto para su beneficio.

El objetivo específico consiste en diseñar, ejecutar, monitorear y evaluar actividades concretas que promuevan el desarrollo sustentable y medios de vida alternativos en los Rinconcitos, Pedro Santana y Comendador que son los sitios pilotos del Proyecto PNUMA-UE CBC en la República Dominicana.

Establecer e implementar junto con la población beneficiaria, los técnicos de CEDAF en el terreno, el director y el equipo técnico del Proyecto PNUMA-UE CBC, la Dirección Provincial de Medio Ambiente, las autoridades locales y el PNUMA, las acciones para el logro de los resultados esperados de los proyectos piloto que se explican a continuación:

Definir, acordar, desarrollar y ejecutar un proyecto piloto en Los Rinconcitos para el desarrollo de una alternativa de uso sostenible de la palma de guano, en el paraje Los Rinconcitos municipio Comendador, mediante actividades como:

- Establecer un sistema de protección y vigilancia en la zona de aprovechamiento de la palma de guano.
- Restaurar y reforestar la superficie degradada en la zona de aprovechamiento de la palma de guano.
- Fortalecer las capacidades de la organización local de artesanos de guano, para la gestión y aprovechamiento sostenible de la palma de guano.
- Divulgar los resultados del proyecto en materia de gestión sostenible de los recursos naturales.

Implementación : El proyecto ha sido ejecutado por el Centro para el Desarrollo Agropecuario y Forestal (CEDAF), como institución contratante con el PNUMA, en cooperación estrecha con la Dirección Provincial (Elías Piña) del Ministerio de Medio Ambiente y Recursos Naturales.

Justificación y proceso de selección : en 2011, PNUMA se comunicó con los tres gobiernos participando en el Proyecto CBC, pidiendo la selección de los sitios de los proyectos piloto. La capacidad técnica e institucional de CEDAF con su fuerte presencia en la región de Pedro Santana bien como las prioridades ambientales señaladas en la “Agenda Ambiental de Provincia de Elías Piña” (julio 2011), que incluyen la búsqueda y promoción de alternativas productivas para el desarrollo sostenible y la reforestación de áreas degradadas.

Principales actividades:

Las siguientes actividades se llevaron a cabo, en base a la documentación verificada, las entrevistas realizadas con la Dirección Provincial de Medio Ambiente en Comendador y la visita de campo a Los Rinconcitos:

- 431.5 hectáreas de palmas de guanos delimitadas, para reducir las presiones antropogénicas por parte de los comunitarios que sustentan sus ingresos o economías domésticas en el uso insostenibles de las mismas.
- 45 hectáreas, (715.6 tas) bajo monitoreo, distribuidas en 30 Parcelas georeferenciadas de 1.5 ha/c.u.(23.9 tas), con una población de 535 árboles inventariadas (365 juveniles y 172 adultos) y una densidad de 243 y 115 árboles/ha.
- 2 nuevas rutas alternativas de control de incendio establecidas.
- 2.9 hectáreas establecidas como zona semillera, para garantizar la reproducción y repoblación de guano, con la participación de artesanos y cortadores para conservar esta zona.
- artesanos de guano capacitados, sobre la importancia de la conservación de la palma de guano; los métodos y prácticas para el manejo y aprovechamiento sustentable de la especie, incluyendo 92 familias beneficiarias
- Seleccionado el terreno de la estructura comunitaria para la propagación de plántulas, con una capacidad de producir 100,000 plántulas de especies de palmas de guano, forestales y agroforestales, con fines de restaurar suelos degradados y desforestados y establecer plantaciones con propósitos comerciales.
- Selección del lugar para la construcción de la torre de control de incendio y la caseta de protección y vigilancia, a fin de controlar la quema del bosque en zonas con plantaciones de palmas de guano

Una actividad que no se ha cumplido todavía es la construcción de la torre de control de incendio y la caseta de protección, lo que es importante bajo un programa que permita la vigilancia y protección de la palma de guano. Sin embargo, esa actividad esta pendiente de realizarse con fondos propios del Ministerio de Medio Ambiente.

Impactos del proyecto : es demasiado pronto para evaluar los impactos del proyecto en la sostenibilidad ambiental y social de largo plazo en Los Rinconcitos, aunque se enfoca de manera concreta la remoción de prácticas inapropiadas de extracción de guanos y se haya establecido un programa de protección y restauración. La Dirección Provincial ha tomado acciones de vigilancia (mismo sin la construcción de la torre todavía) contra la quema y corte de la palma de guano, través de brigadas comunitarias constituidas para este fin con el apoyo del Ministerio de Medio Ambiente.

Por otro lado, es notable el compromiso de varios miembros de la población local y el interés en sustentar sus ingresos y economías domésticas con el uso y aprovechamiento sostenible de la palma de guano. Pequeños artesanos y comerciantes de guanos pudieron ser observados en el mercado local de Comendador, con sus artesanías variadas.

Relevancia: El proyecto busca mejorar las prácticas de producción con el uso sostenible de los recursos naturales, en este caso usando la palma de guano a través de la promoción de iniciativas económicas locales y cadenas de valor. Las acciones de restauración/reforestación en Los Rinconcitos también son importantes, tomando en cuenta la producción y el uso de plántulas en estrecha cooperación con el Centro de Propagación en Pedro Santana, que busca facilitar la rehabilitación de áreas degradadas, desarrollando alternativas de sustentos de vida basada en la propagación de plantas de especies forestales y agroforestales endémicas, nativas y/o naturalizadas de alto valor para conservación y usos múltiples.

Sostenibilidad : El reto para lograr una gestión efectiva de la palma de guano se debe a la organización y capacitación de los artesanos ,mediante mejores técnicas y diversificación de productos, incluyendo las condiciones de comercialización y niveles de producción.

Recomendaciones :

- mantener el apoyo proporcionado por CEDAF como un socio importante y su papel en la sustentabilidad de las actividades futuras, incluyendo la construcción de la torre de vigilancia.
- desarrollar, en el futuro un plan de negocios, con la cooperación de los actores principales (instituciones públicas, agricultores, sociedad civil) para los artesanos de pequeña y mediana escala, como mecanismo de búsqueda y promoción de alternativas productivas, de forma a responder a los objetivos de la Agenda Ambiental de la Provincia Elías Piña, documentando la línea de base anterior a las intervenciones del proyecto CBC.
- dar continuidad al funcionamiento del Centro de Propagación construido y habilitado bajo el proyecto CBC, con el mantenimiento y posible expansión de su capacidad de producción de plántulas, no solamente de palma de guano como también de otras especies forestales y frutales a los fines de restauración de áreas y suelos degradados. La continuidad del centro propagación es de suma importancia para el Ministerio de Medio Ambiente, y está dentro de los Planes del Programa Frontera Verde.

## ***Las Palmas, República Dominicana***

Título del proyecto: Instalación de Sistema Fotovoltaico en Las Palmas

Ubicación : Las Palmas, Municipio Pedro Santana, Provincia Elías Piña

Descripción del proyecto : El objetivo general consiste en implementar el desarrollo de energía alternativa, a pequeña escala, para mejorar la salud pública, proteger el medio ambiente, y mejorar la calidad de vida en la sección Las Palmas.

Implementación : El proyecto ha sido ejecutado por el Centro para el Desarrollo Agropecuario y Forestal (CEDAF), como institución contratante con el PNUMA, en cooperación estrecha con la Dirección Provincial (Elías Piña) del Ministerio de Medio Ambiente y Recursos Naturales.

Justificación y proceso de selección : en 2011, PNUMA se comunicó con los tres gobiernos participando en el Proyecto CBC, pidiendo la selección de los sitios de los proyectos piloto. La capacidad técnica e institucional de CEDAF con su fuerte presencia en la región de Pedro Santana. Aunque no haya sido específicamente incluida como una de las prioridades ambientales en la “Agenda Ambiental de Provincia de Elías Piña” (julio 2011), la conservación y el uso sostenible de los recursos naturales es señalado como una política provincial.

### Principales actividades:

Las siguientes actividades se llevaron a cabo, en base a la documentación verificada, las entrevistas realizadas con la Dirección Provincial de Medio Ambiente en Comendador ( no hubo tiempo hábil para visitar el sistema solar durante la visita de campo a Pedro Santana):

- Instalación de un sistema solar de 12 paneles solares
- 6 baterías de 12 Volts-230 amperes hora, con potencia de 5.52 kw,
- 1 inversor de 3.6 kw
- Sistema eléctrico de baja tensión

Impactos del proyecto : Debido a su escala, en pequeño tamaño, el impacto del proyecto ha tenido realmente un efecto “piloto”, demostrando el uso positivo de los paneles fotovoltaicos como fuente energética alternativa, especialmente en términos de la movilización y de conciencia ambiental en la comunidad. Un total de 3KW de energía limpia ha sido producida través de los paneles instalados en el techo del Centro de Atención Primaria en las Palmas.

Relevancia: El proyecto busca introducir la energía solar como una alternativa energética, lo que ha sido logrado, beneficiando un total de 577 personas ubicadas en la Sección de Palmas.

Sostenibilidad : El uso sostenible de alternativas energéticas podría ser expandido en la sección de Palmas y también replicado en otras secciones mediante la exploración de colaboración con posibles patrocinadores del sector privado o otras formas posible como el establecimiento de acuerdos de cooperación con fabricantes y empresas especializadas, entre otros. El interés y la movilización comunitaria sobre el tema sería igualmente importante para sostener y aumentar la conciencia ambiental en la región.

### Recomendaciones

- mantener el apoyo proporcionado por CEDAF como un socio importante y su papel en la sustentabilidad de las actividades futuras.

- Expandir en el futuro, en posible cooperación con el sector energético, sobre todo el sector privado, la promoción de alternativas energéticas, de forma a desarrollar la conservación y el uso sostenible de los recursos naturales en Pedro Santana.

## ***Guayabo de Comendador, República Dominicana***

Título del proyecto: Establecimiento y manejo de apiarios en el distrito municipal Guayabo de Comendador

Ubicación : Municipio Comendador, Provincia Elías Piña

Descripción del proyecto :

El objetivo general consiste en implementar actividades que permitan cumplir con las metas planteadas en el proyecto CBC PNUMA-UE dirigidas a la participación de las comunidades de Pedro Santa, Los Rinconcitos y Comendador de la provincia Elías Piña, República Dominicana, en el desarrollo de proyectos piloto para su beneficio.

El objetivo específico consiste en diseñar, ejecutar, monitorear y evaluar actividades concretas que promuevan el desarrollo sustentable y medios de vida alternativos en los Rinconcitos, Pedro Santana y Comendador que son los sitios pilotos del Proyecto PNUMA-UE CBC en la República Dominicana.

Establecer e implementar junto con la población beneficiaria, los técnicos de CEDAF en el terreno, el director y el equipo técnico del Proyecto PNUMA-UE CBC, la Dirección Provincial de Medio Ambiente, las autoridades locales y el PNUMA, las acciones para el logro de los resultados esperados de los proyectos piloto que se explican a continuación:

Definir, acordar, desarrollar y ejecutar un proyecto piloto en Los Guayabos para el establecimiento y manejo de apiarios en el distrito municipal Guayabo de Comendador, mediante actividades como:

- Aumentar el número de colmenas en los apiarios y realizar buenas prácticas de producción y manufactura.
- Fortalecer las capacidades de los apicultores para mejorar los niveles de la calidad de la miel producida y los ingresos generados.
- Aumentar el potencial apibotánico, mediante la repoblación de áreas degradadas o deforestadas con especies melíferas en zona de desarrollo apícola.
- Divulgar los resultados del proyecto en materia de gestión sostenible de los recursos naturales.

Implementación : El proyecto ha sido ejecutado por el Centro para el Desarrollo Agropecuario y Forestal (CEDAF), como institución contratante con el PNUMA, en cooperación estrecha con la Dirección Provincial (Elías Piña) del Ministerio de Medio Ambiente y Recursos Naturales.

Justificación y proceso de selección : en 2011, PNUMA se comunicó con los tres gobiernos participando en el Proyecto CBC, pidiendo la selección de los sitios de los proyectos piloto. La capacidad técnica e institucional de CEDAF con su fuerte presencia en la región de Pedro Santana bien como las prioridades ambientales señaladas en la “Agenda Ambiental de Provincia de Elías Piña” (julio 2011), que incluyen la búsqueda y promoción de alternativas productivas para el desarrollo sostenible.

Principales actividades:

Las siguientes actividades se llevaron a cabo, en base a la documentación verificada, las entrevistas realizadas con la Dirección Provincial de Medio Ambiente en Comendador y la visita de campo a 2 apiarios y sus beneficiarios:

- 150 colmenas con 150 núcleos con abeja reina fecundada y 4 cuadros de cría cubiertos de abejas, establecidos, distribuidos en 15 apiarios de 10 colmenas cada uno, en caja dobles tipo Langstroth, a igual número de beneficiarios
- 1 Sala de extracción miel habilitada y operando, bajo esquema comunitario, con la entrega:
  - 1 extractor de miel manual, en acero inoxidable grado alimenticio con capacidad para 4 panales
  - Mesa de remoción de opérculos en acero inoxidable grado alimenticio con soportes interiores, filtros y depósito para miel con válvula de 1 1/2".
  - Cuchillos en acero inoxidable para remoción de opérculos.
  - Tanques plásticos grado alimenticio con capacidad para 45 galones de miel con válvula tipo bola, en acero inoxidable.
  - Cubetas plásticas grado alimenticio con capacidad de 5 galones para el trasvase de miel.
- Insumos e instrumentos apícolas entregados (Ahumadores, Cuñas, Cepillos, Velos y Sombreros)
- 2 jornadas de capacitación en manejo de Apiarios y Control Sanitario, la participación de comunitarios como base para la selección de los beneficiarios del proyecto.
- 17 comunitarios capacitados en multiplicación de colmenas y buenas prácticas de manufactura de miel.
- Seleccionado el terreno de la estructura para propagación de plántulas, con capacidad de producir 100,000 plántulas de especies melíferas, forestales y agroforestales, con fines de aumentar y restaurar suelos degradados y desforestados.

Impactos del proyecto : es demasiado pronto para evaluar los impactos del proyecto en la sostenibilidad ambiental y social , puesto que la producción de la miel no ha sido todavía iniciada ni generado ingresos con su comercialización, aunque se haya fortalecido las capacidades de los productores locales en buenas prácticas y manufactura para garantizar el funcionamiento de los apiarios.

Relevancia: El proyecto busca mejorar las prácticas de producción con el proceso de capacitación para apicultores y desarrollar eficientemente sus unidades productivas, complementando ingresos generados por otras actividades agrícolas que también son desarrolladas en el municipio. El proyecto busca igualmente aumentar el potencial apibotánico de la zona, con la producción y repoblación con especies melíferas.

Sostenibilidad: el interés de los beneficiarios en el futuro establecimiento de una asociación de productores de miel es claro y muy positivo, una vez que fortalecería la unificación de los apícolas, la generación de empleos y oportunidades de comercialización, así como la valorización de una cadena productiva verde.

Recomendaciones :

- mantener el apoyo proporcionado por CEDAF como un socio importante y su papel en la sustentabilidad de las actividades futuras, incluyendo facilitar el diálogo e intercambio de conocimientos y experiencias entre los apicultores establecidos y la expansión posible de las actividades con la formación de una asociación de apicultores en el municipio.
- continuar las actividades de producción de la miel y de reforestación con especies melíferas en la zona de Guayabo a fines de consolidar la producción como una realidad.

- desarrollar, en el futuro un plan de negocios, con la participación de los actores principales (instituciones públicas como los Ministerios de Medio Ambiente y de Agricultura, apicultores, sociedad civil). En el marco de la Agenda Ambiental de la Provincia los agricultores constituyen la fuerza productiva de mayor importancia.