1. Project Data

Summary project data			
GEF project ID		1248	
GEF Agency project ID		GFL/QGL-2328-2760-4880	
GEF Replenishment Phase		GEF - 2	
Lead GEF Agency (include all for joint projects)		United Nations Environment Programme (UNEP)	
Project name		Reducing Pesticide Run-off to the Caribbean Sea	
Country/Countries		Colombia, Costa Rica, Nicaragua	
Region		Latin America and Caribbean	
Focal area		International Waters	
Operational Program or Strategic Priorities/Objectives		OP 10 – Contaminant-based	
Executing agencies involved		Secretariat for the Cartagena Convention (UNEP-CAR/RCU) [Lead Executing Agency] with the following National Executing Agencies: Ministry of Environment and Natural Resources, Nicaragua; Ministry of Environment, Energy and Telecommunications, Costa Rica; Ministry of Environment and Sustainable Development, Colombia	
NGOs/CBOs involvement		The TE does not list these, but some of the crop growing cooperatives were the beneficiaries	
Private sector involvement		CropLife, an agrochemical industry association [secondary executing agency in that it had responsibility for the project's training component] Various crop production and marketing enterprises /associations [by consultation] such as: CORBANA (National Banana Corporation), PROAGROIN (Agro-Industrial Development Foundation – Costa Rica) AUGURA (Colombian Banana Growers Association) and BANACOL	
CEO Endorsement (FSP) /Approval date (MSP)		2/28/2005	
Effectiveness date / project start		October 2006	
Expected date of project completion (at start)		November 2009	
Actual date of project completion		December 2011	
Project Financing			
		At Endorsement (US $M)	**At Completion (US $M)**
Project Preparation Grant	GEF funding	0.29	0.29
	Co-financing	0.12	0.12
GEF Project Grant		4.29	4.29
Co-financing	IA/EA own	0	0.07
	Government	5.18	2.20
	Other*	0.44	8.82
Total GEF funding		4.58	4.58
Total Co-financing		5.74	11.21
Total project funding (GEF grant(s) + co-financing)		10.32	15.79
Terminal evaluation/review information			
TE completion date		September – November 2012	
TE submission date		February 2013	

Author of TE	Hugo Navajas
TER completion date	01/15/2014
TER prepared by	Inela Weeks
TER peer review by (if GEF EO review)	Joshua Schneck

*Includes contributions mobilized for the project from other multilateral agencies, bilateral development, cooperation agencies, NGOs, the private sector, and beneficiaries

2. Summary of Project Ratings

Criteria	Final PIR	IA Terminal Evaluation	IA Evaluation Office Review	GEF EO Review
Project Outcomes	HS	S	HS (Note: this rating is likely an error/typo; the rating should be MS based on the comments in the text)	MS
Sustainability of Outcomes	L (Based on the overall risk rating of 'low')	HL	HL	L
M&E Design	MS	MU	MU	MU
M&E Implementation	S	HS	HS	S
Quality of Implementation	Not Rated	S	S	MS
Quality of Execution	Not Rated	S	S	S
Quality of the Terminal Evaluation Report	N/S	N/A	S	S

3. Project Objectives

3.1 Global Environmental Objectives of the project:

The GEO of the project was to reduce the pesticide runoff to the Caribbean Sea in the Mesoamerican Caribbean Basin (MCB) countries of Colombia, Costa Rica and Nicaragua.

It was designed to address environmental threats from chemical-based pest management applied to crops. Pesticide use was actively supported by government policies through subsidies and tax incentives that encouraged farmers to increasingly rely on chemical pest management methods. According to the data obtained during the PDF phase, the assumption was that there were high contamination levels of persistent organic pesticides (PoPs) in the MCB. This assumption was based on: the reports by WWF; rising quantities of pesticide imports (in 1999, 14,600 metric tons of active ingredients were imported); regional production of pesticides (13,000 metric tons produced and applied to 21 crops on 3 million hectares) including insecticides that were restricted or banned in developed countries; and a growing demand for food crops by international markets - agriculture was and remains critical to the economies of MCB countries. The export of agricultural produce remains the principal source of foreign exchange earnings for these countries.

3.2 Development Objectives of the project:

The project was designed with the objective of reducing pesticide runoff to the Caribbean Sea, through the implementation of good agricultural practices (GAP) with emphasis on Integrated Pest Management (IPM) in Colombia, Costa Rica and Nicaragua. The project consisted of four main components, summarized below:

- *Demonstration sites:* The three countries promote GAPs for specific crops that contribute pesticide runoff into the Caribbean Sea, by implementing demonstration projects on farmer parcels. The environmental, social and economic impacts of different practices are analyzed and practices validated with the best practices adopted by an increasing number of farmers.
- *Coastal monitoring and evaluation:* A regional coastal monitoring program established to monitor pesticide runoff into the coastal environment. The capacities of the national research laboratories are strengthened, providing the basis for long-term monitoring and ISO accreditation. Equipment and training are provided to improve data analysis and interpretation. The monitoring findings inform decision-makers.
- *Institutionalization of improved pesticide management:* Activities undertaken to institutionalize improved pesticide management and strengthen the capacity for reducing pesticide runoff. National policy frameworks and regulatory systems for the use and control of pesticides are reviewed and crop certification programs supported. Information on project activities and results are disseminated by various means.
- *Project Coordination:* UNEP-CAR/RCU is responsible for project execution, and a Regional Coordination Unit (RCU) is created with responsibility for overall management and implementation. National Coordination Units (NCUs) get established within the environmental ministries. The project coordination arrangements link the Regional (RCU) and NCUs to the regional Project Steering Committee (PSC) and National Coordination Committees (NCCs).

3.3 Were there any **changes** in the Global Environmental Objectives, Development Objectives, or other activities during implementation?

The TE does not describe any changes to the GEO or PDO. But, it notes that the extended gap between design and implementation weakened the project's start-up phase and required early revisions to the budget and work plans, as well as two project extensions until December 2011. According to the TE, work plans were revised, demonstration projects were redesigned, and costs updated. Revisions to project timelines and budget allocations were developed by the RCU in consultation with NCUs, NCCs and the regional Project Steering Committee. Four budget revisions were approved during the implementation.

Further, there were changes to the "e*stablishment of a crop certification programme" as* the conditions on which this output were based had changed considerably by the time the project started in 2007. International good practice certifications by Global Gap and RainForest Alliance had been established in Colombia and Costa Rica for banana and pineapple growers that

improved access to export markets with higher prices. Due to the new situation, the project shifted attention to existing certification schemes and lowered the budget for this output.

Lastly, the TE evaluated the project based on a set of project outcomes that are identical to the ones outlined in the revised Project Document (dated 2005). However, all of the PIRs use a LogFrame with a set of project outcomes that are different to the ones used by the TE or the Project Document. The TE does not mention at all if and how the project outcomes might have changed, so it remains unclear which set of outcomes is correct.

4. GEF EO assessment of Outcomes and Sustainability

Please refer to the GEF Terminal Evaluation Review Guidelines for detail on the criteria for ratings.

Relevance can receive either a Satisfactory or Unsatisfactory rating. For Effectiveness and Cost efficiency, a six point rating scale is used (Highly Satisfactory to Highly Unsatisfactory), or Unable to Assess. Sustainability ratings are assessed on a four-point scale: Likely=no or negligible risk; Moderately Likely=low risk; Moderately Unlikely=substantial risks; Unlikely=high risk. In assessing a Sustainability rating please note if, and to what degree, sustainability of project outcomes is threatened by financial, sociopolitical, institutional/governance, or environmental factors.

Please justify ratings in the space below each box.

4.1 **Relevance**	Rating: **Satisfactory**

The project was aligned with the GEF OP 10 – contaminant-based operational program, as it aimed to demonstrate practices that assist with overcoming barriers to the adoption of best practices that limit contamination of international waters, i.e., a reduction in agricultural run off in the form of chemical fertilizers and pesticides.

According to the TE, this project was relevant in both concept and approach, as it aimed to validate practices that reduce the need for pesticide applications, raise productivity, are replicable and in many cases cost-effective. It had a high level of sub-regional policy relevance by supporting the implementation of international environmental agreements. According to the Project Document, this project was to implement various provisions of the Cartagena Convention, specifically Annex IV – Agricultural Nonpoint Sources of the Protocol to the Convention Concerning Pollution from Land-based Sources and Activities. In Oct 1999, the Contracting Parties to the Cartagena Convention adopted a Protocol to the Convention Concerning Pollution from Land-based Sources and Activities (LBS Protocol). Annex IV to the LBS Protocol requires that Parties develop national plans to prevent, reduce and control the runoff of pollutants from agricultural lands. Colombia and Costa Rica are parties to the Cartagena Convention and have also signed the LBS Protocol, signaling their intent to ratify it. At the time of the Project Document endorsement, Nicaragua was taking action to accede to the Cartagena Convention and ratify the LBS Protocol simultaneously. This project was to offer the added benefit of assisting participating countries in meeting their obligations under the LBS Protocol and serve as a demonstration for existing and potential parties to the Protocol. It was also to contribute to the objectives of the

recently adopted Convention for the coastal and marine areas of the North East Pacific.

The project strategy was consistent with government conservation and rural development policies for the Atlantic regions; and offered an opportunity for "on the ground" collaboration between national and local institutions in a difficult, geographically isolated operating environment. The GAPs promoted by the project were relevant to the needs of producers enabling a larger number of banana and pineapple growers to access export markets and take advantage of free trade agreements with the EU and North America. In Nicaragua, the project was relevant to the needs of small-scale farmers who produce for family consumption.

4.2 **Effectiveness**	Rating: **Moderately Satisfactory**

The project's effectiveness is rated 'Moderately Satisfactory' as the project achieved most of its planned outputs and it generated enabling conditions to sustain them. Yet, the project does not appear to have influenced the fundamental objective of reducing pesticide runoff to the Caribbean Sea, due to a combination of: (a) a flawed assumption underpinning the project objective; and (b) the fact that the effects of good agricultural practices (GAPs) applied at demonstration sites could not be correlated to lower pesticide runoff or residual levels. Further, while the project had a noticeable impact in its demonstration component, it had less of an impact on national policies and legal/regulatory frameworks.

The main reason why the TE claims that the project does not appear to have influenced the fundamental objective of reducing pesticide runoff to the Caribbean Sea is that this project's objective rested on the assumption that there were high contamination levels of persistent organic pesticides (PoPs) in the Mesoamerican Caribbean Basin (MCB). This assumption was based on: reports by WWF; rising quantities of pesticide imports; regional production of pesticides; and growing demand for food crops by international markets. This fundamental assumption was undermined by the initial project environmental monitoring findings that revealed low baseline levels of pesticide residues in soil and water samples that were within international standards and that did not present an immediate environmental threat. No PoPs were used on the selected crops and less than 4% of the samples showed quantifiable levels of pesticides. This was very good news and yet it weakened the arguments on which the project justification was based. However, according to the TE, the project continued to have relevance to the needs of producers as well as applicability to testing conservation approaches that are economically viable and compatible with market forces.

Additionally, no significant differences were found in samples taken from demonstration sites between those that applied conventional methods and those that applied GAPs. The effects of GAPs applied at demonstration sites could not be correlated to lower pesticide runoff or residual levels, despite significant reductions in the use of chemical pesticides for targeted crops. This was influenced by (i) the limited number, scale and duration of demonstration projects; (ii) the scheduling of monitoring campaigns during early stages of GAP demonstration; and (iii) the effects of climactic factors. Monitoring

results indicate that pesticides are widely used for the selected crops, yet generally seem to be applied rationally, despite critical residues for some organophosphates and herbicides.

That being said, the TE found that the project was a successful one that offers an innovative approach to linking environmental conservation to economic, market-driven, incentives through operational and mutually beneficial partnerships with private sector institutions. The project's efforts to promote integrated pest management (IPM) and lower pesticide use were reinforced by export market requirements and associated economic benefits. These linkages were fundamental in driving the adoption and application of GAPs by growers in the three countries, and encouraging continuity through national partner institutions. The project contributed to the increased application of GAPs and in the number of farmers adopting these practices and land area. This has generated tangible economic benefits through international certifications (such as Global Gap and RainForest Alliance) that enhanced access to export and 'Fair Trade' markets and offered higher prices (e.g., 20% higher prices through Global Gap), as well as cost savings from reduced applications of chemical pesticides (cost savings associated to the use of ground covers, natural insecticides and the recycling of plant waste). Although some of the disseminated practices have limited viability for smaller producers due to cost factors or input availability, interviewed national partner institutions and individual growers were highly positive in their assessment of the demonstrated practices and training received.

The project achieved measurable reductions in pesticide applications, resulting from the adoption of GAPs that were focused on IPM methods. Reductions in the use of all pesticides on demonstration sites ranged between 18% and 61% for banana, plantain, pineapple and African Palm; and between 90% and 97% for bean and rice crops. Herbicides were eliminated completely in several demonstration sites. Demonstration activities were linked to GAP and IPM training activities that combined training workshops, visits to demonstration sites and farmer-to-farmer extension. More than 2,000 farmers, technical staff and extension workers received training through the demonstration projects, while an additional 6,000 attended training events that were implemented by national partner institutions.

Enabling conditions for basin-scale pesticide monitoring were strengthened through: the development of a coastal monitoring program and Protocol that standardized analytical methods; establishment of a network of monitoring sites across the MCB; and the generation of baseline data on pesticide residue levels that is methodologically consistent and comparable between countries. The provision of training and equipment has expanded the range of pesticide analysis capabilities among the participating research laboratories (INVEMAR, CICA, LARP, and CIRA), contributing to their ISO 17025 certification for pesticide testing. However, due to territorial disputes, the countries could not agree on the sharing of monitoring information, which has restricted the circulation of detailed national findings. A geo-referenced coastal monitoring database was developed and is managed by UNEP-CAR/RCU by mandate. But, coastal monitoring has not been "established" and there have not been monitoring campaigns since the project ended (with the notable exception of INVEMAR in Colombia).

The project had less of an impact on national policies and legal/regulatory frameworks. Support was provided to the drafting of proposals for national crop certification programs and streamlined pesticide legislation among other activities. Nonetheless, these initiatives have not led to the approval of new

policies, laws or the revision of existing frameworks, although opportunities to influence legislation are still available in the three countries. None of the countries have ratified the LBS Protocol, despite the project's contribution to implementing provisions of the Cartagena Convention and the LBS Protocol. On the other hand, the project has helped create more awareness of the LBS Protocol (specifically Annex IV on Agrochemical run-off) and the ratification process remains active in the three countries.

4.3 **Efficiency**	Rating: **Satisfactory**

It is claimed in the TE that the project stood out for its efficient management, implementation arrangements and performance. The project successfully coped with major commencement delays and asymmetrical implementation processes between countries, through close coordination and adaptive management. The TE notes that project resources were used in a cost-effective manner and have leveraged cost-sharing contributions and parallel financing from the private sector and Government of the Netherlands. Project inputs were delivered on time in most cases and there were no major delays in disbursements. The final project report highlights a positive relation of expenditure to outputs, according to the TE. The level of achievement of some outputs (e.g., number of monitoring samples, publications and farmers trained) surpassed the numbers initially planned. At the country level, Colombia's performance stood out for its effectiveness; the MTE considered the implementation process there to have been "exemplary".

The project was very effective in demonstrating the environmental and economic benefits (including cost-effectiveness) of GAPs and IPM methods, despite commencement delays and time limitations that affected project implementation in Costa Rica and in Nicaragua. The project showed a reduction of pesticide and herbicide costs (from US$ 2,300 to US$ 1,700/hec. of bananas at CORBANA demonstration sites), which represent important savings to producers. Other practices, such as mechanical control practices and polyethylene ground covers, were found to be more costly than conventional methods.

However, in some cases the needed budget cuts limited the resources available for demonstration and validation of GAP results and for the institutionalization of project results. The quality of the demonstration projects was generally very high, according to TE, but their activation was slower than planned, and several had shortened implementation timelines. In those cases, the combined delays, time constraints and funding limitations affected the validation and sustainability of project results (e.g. Nicaragua's RAAS). Nevertheless, all demonstration projects were completed by the end of the project (a final report was pending in Nicaragua).

4.4 **Sustainability**	Rating: **Likely**

Sustainability is assessed to be 'Likely' in Colombia and, to a lesser extent, in Costa Rica due to existence of good market incentives and institutional capacities. Sustainability in Nicaragua is less evident due to: geographic isolation, lower institutional presence, and a more difficult operating environment.

Financial Sustainability: Likely – in Colombia and Costa Rica sustainability is considerably reinforced by the existing economic incentives. International certifications (e.g., GlobalGAP) for export require good practices including low pesticide use that periodically gets audited to ensure compliance. Enterprises such as CORBANA, PROAGROIN and Colombia's banana cooperatives are intent on maintaining compliance, given that certification is awarded to the entire entity and any lapse by associated producers would endanger this. In those cases where the cost-effectiveness of various GAPs and IPM methods was demonstrated, the positive benefit-cost clearly reinforces their sustainability. Practices, such as mechanical control and polyethylene ground covers, that were found to be more costly than conventional methods are less likely to be adopted on a wide scale. The high cost and difficulty of obtaining kudzu *grass* and *frejol abono* discourages widespread adoption in Nicaragua's Atlantic coast.

A US$ 17 million project proposal "*Improved management of agrochemical life cycles in the Caribbean and Central American region*" was drafted with the intent to consolidate project processes and extend GAPs to the Dominican Republic, Panama, Honduras, El Salvador and Jamaica. The proposal was submitted to GEF for review, but its status was 'uncertain' according to the TE. Thus, national funding will continue to be pivotal for ensuring sustainability, with support from other donors when available. In Colombia there were plans to replicate project experiences in the Tota Boyacá lagoon region with Conservation International, and among coffee growers with support from KfW (Germany).

Socio-Political Sustainability: Moderately Likely – Sustainability among targeted crop growers is largely driven by market incentives. Access to export markets and better prices are very effective drivers for continued GAP adoption. Among banana cooperatives in the Madgalena region, the cooperative retains a part of the earned income and invests it in a social investment fund that benefits affiliated growers and their families. These redistributive mechanisms and the improvements they finance are important locally and will contribute to ensuring sustainability. The sustainability, in terms of long-term adoption, of GAP is not ensured in Nicaragua, as the TE noted that their use declined after the project's end, possibly due to lack of follow-up and the difficulties and cost in obtaining the cover crop seeds.

The political sustainability of the project results via revised/streamlined policies and legal frameworks is less evident. The project did not influence national policies or regulatory frameworks, beyond giving catalytic support to ongoing policy advocacy processes. The project supported the design of national crop certification proposals in Costa Rica and Nicaragua. However, national certification programs - even when voluntary - are unlikely to be approved and must address institutional arrangements, financing mechanisms and domestic market incentives among other issues. At the time of the TE, there was no legislation that established limits or parameters of pesticide use, although all countries regulate their import. Costa Rica's Ministry of Agriculture has introduced norms for regulating pesticide applications to fruit, but national parameters were yet to be formulated for pesticide residues in water or soil residues. Proposed legal norms for the transport, handling and disposal of pesticides were drafted in Nicaragua and were to be evaluated by the National Commission on Norms. Free trade agreements with North America and the EU indirectly reinforce the sustainability of good farming practices and rational pesticide use. None of the countries have ratified the LBS Protocol, the ratification of which is an important enabling benchmark to sustain and replicate project results.

Institutional framework and governance: **Moderately Likely** – Inter-institutional collaboration and public-private partnerships that were supported by the project continue to function in Colombia and Costa Rica, extending training activities and GAPs beyond the project term using their own resources. The project's association with established, large-scale production and marketing enterprises such as CORBANA, PROAGROIN, AUGURA and BANACOL raises the likelihood that GAPs will continue to be applied at demonstration sites and disseminated to producers. Colombia's Agrarian Society offers discounts on crop insurance to members who apply GAPs on their plots, which could expand their application to a significant segment of the sector.

Improvements in pesticide monitoring and analysis capacities among research laboratories have contributed to ISO certification and are likely to be sustained in the future. The Coastal Monitoring Protocol and program provide a foundation for continued pesticide monitoring at the basin scale and collaboration between national research institutions. However, there have not been further monitoring campaigns involving the three countries since the project's end. Sustained pesticide monitoring at the project sites will require external funding in Nicaragua and revised institutional norms in Costa Rica. A step in this direction was taken in Costa Rica by supporting CICA in designing a national plan for sampling pesticide residues. Given the prevalence of low baseline levels that do not pose an environmental threat, the implementation of future monitoring campaigns may not be a policy or funding priority. Among participating public sector partners, INVEMAR has strong institutional presence and has extended the range of pesticide monitoring sites (applying the project methodology) to the Pacific coast.

The project's institutional arrangements have lost momentum since the project terminated and National Committees have ceased to meet as such (although many members continue to work bilaterally). In Nicaragua's Atlantic coast the combination of geographic dispersion, funding constraints and comparatively lower institutional capacities have led to the discontinuity of demonstration, training and monitoring activities, which will likely limit further dissemination of GAPs. The promotion of some practices is foreseen under a new EU-funded project for climate change adaptation. Training materials developed by ICIDRI in Nicaragua and ANDI in Colombia were being applied to other projects/regions.

Environmental: Likely - Agricultural practices and IMP were still being applied with environmental benefits. The monitoring of soil and water samples indicated consistently low levels of pesticide and herbicide concentration throughout the project. While this cannot be attributed to the use of GAPs for the reasons mentioned previously, the measurable reduction in pesticide use is likely to lower residue levels over time and more so if GAPs are adopted on a wider scale.

While the overall levels of pesticide residues found in the marine environment were not high, as indicated in the final Coastal Monitoring Report, some critical cases were highlighted i.e. the presence of selected organophosphates and herbicides. This suggests that further work may still be needed.

5. Processes and factors affecting attainment of project outcomes

5.1 Co-financing. To what extent was the reported co-financing essential to the achievement of GEF objectives? If there was a difference in the level of expected co-financing and actual co-financing, then what were the reasons for it? Did the extent of materialization of co-financing affect project's outcomes and/or sustainability? If so, in what ways and through what causal linkages?

The TE states that the approved project budget totaled US$ 9.92 million including a US$ 4.295 million GEF grant. By the end of the project the total budget stood at US$ 15.4 million due to substantial increases in co-funding from national partners.

The project successfully leveraged significant levels of co-financing from country partner institutions and catalyzed complementary support from the donor community. According to the TE, country co-financing contributions reached US$ 9.8 million (of which US$ 7.6 million came from non-governmental partner institutions), representing 72% of the US$ 15.4 million budget. Co-financing by national partners that implemented demonstrations, capacity building and coastal monitoring activities exceeded the initially targeted figures, underscoring their commitment to the project. Demonstration activities within Colombian banana cooperatives have leveraged parallel funding of EUR 1.5 million from the government of Netherlands, to extend GAP infrastructure to smallholder parcels.

There were initial shortfalls in the project co-financing contribution from the Nicaraguan government (the TE notes that these were subsequently compensated to a large extent). Implementation activities were sustained in Nicaragua in spite of shortfalls in the government's co-financing contribution and delayed disbursements to demonstration projects.

5.2 Project extensions and/or delays. If there were delays in project implementation and completion, then what were the reasons for it? Did the delay affect the project's outcomes and/or sustainability? If so, in what ways and through what causal linkages?

The TE notes that the extended gap between project design (1999-2000) and implementation (starting in 2007) resulted in changes in country situations and higher costs that had direct on the project's start-up. The initial low level of country ownership in Costa Rica and Nicaragua aggravated this slow start-up. There were delays in confirming country co-financing contributions to the project (especially in Nicaragua) and in appointing national coordinators. Further, there were delays in Nicaragua and to some extent Costa Rica when it came to approving demonstration projects. These delays resulted in: a need to update and revise budget and work plans; reformulation of demonstration projects; adjustment of country budgets to the new exchange rates; as well as two project extensions until December 2011. The NEX (national execution) modality placed country implementation and coordination responsibilities on national coordination units located within environmental ministries. They were initially unprepared to fully meet project demands due to staff limitations and other work pressures. The decision to recruit project assistants for the RCU and three NCUs had a significant impact by

enabling national coordinators to focus on substantive issues and strengthening coordination and responsiveness.

The TE notes that some of the UNEP's administrative procedures were not always flexible and able to quickly respond to changing demands. Final reports on GAP results were also postponed by delays in completing demonstration activities and case study reports. Data management errors were detected at the final regional meeting, requiring the revision of extensive data sets that caused "significant delays" in the publication of final results. Extended efforts were made to include Panama in the project, which in the end were unsuccessful.

The project experienced a challenging operating environment in Nicaragua where there were: logistical difficulties, extreme weather conditions (inundations from Hurricane Ida), resource limitations and, after the start-up delays, little time. As a result, the demonstration projects covered only one growth cycle. The TE notes that despite this the activities in Nicaragua added diversity and learning value to the project.

Once the initial difficulties were overcome, the combined drivers of effective project management and PSC/NCC involvement were instrumental in moving the implementation process forward and in applying adaptive management. Delays have affected some demonstration activities and the time/resources available to institutionalize project results and influence policymaking. The scale and duration of demonstration activities undermined the cumulative effect needed to reduce pesticide runoff to the Caribbean Sea (in addition to the fact that the original assumption underlying the project turned out to be incorrect).

5.3 Country ownership. Assess the extent to which country ownership has affected project outcomes and sustainability? Describe the ways in which it affected outcomes and sustainability, highlighting the causal links:

The institutional framework was built on existing networks and collaboration, encouraging national ownership. Country coordination responsibilities were assigned to National Coordination Units located within environmental ministries, and implementation was contracted to national partner institutions. Several partners had already applied good practices for certification and access to export markets, and therefore had a direct stake in the project's success. Thus, national partners perceived the project as a resource that supported their core mandates and goals. National Coordination Committees were important decision-making bodies that articulated the institutional stakeholders, influenced crop and demonstration priorities, and played an active role in adjusting project work plans budgets to changes in country situations that resulted from extended delays. The capacities and commitment of the CRU and most national partners were commendable and critically important to the project's performance, according to the TE. In the case of Columbia, according to the TE "partner institutional capacities contributed decisively to project performance at the country level". Performance in Columbia was termed by TE to have been "exemplary", offering "impressive" results and a model for effectively addressing pesticide runoff.

However, national ownership and commitment was not always reflected in institutional performance, which was influenced by capacity levels, resources availability, and issues related to the access to demonstration sites (especially in Nicaragua). Further, country ownership was more evident operationally and institutionally than politically. The LBS Protocol wasn't ratified and the results achieved in influencing legal and regulatory frameworks for pesticide management were lower than initially expected.

6. Assessment of project's Monitoring and Evaluation system

Ratings are assessed on a six point scale: Highly Satisfactory=no shortcomings in this M&E component; Satisfactory=minor shortcomings in this M&E component; Moderately Satisfactory=moderate shortcomings in this M&E component; Moderately Unsatisfactory=significant shortcomings in this M&E component; Unsatisfactory=major shortcomings in this M&E component; Highly Unsatisfactory=there were no project M&E systems.

Please justify ratings in the space below each box.

6.1 **M&E Design at entry**	Rating: **Moderately Unsatisfactory**

Monitoring was one of the weaker aspects of the project's design. The GEF Council meeting that approved the project noted that its monitoring strategy needed more detail as well as the inclusion of "key indicators". The TE notes that the project document did not include a monitoring plan, although a meeting of the regional project advisory panel was supposed to develop one. There was no budget allocation for external mid-term and final evaluations in the project document, although they were scheduled in the work plan.

The project document did include a list of practices, pesticide and environmental indicators that were to be used in monitoring of demonstration projects. The monitoring of environmental and socio-economic conditions at demonstration sites was foreseen under sub-component 2.1 "Demonstration Project Preparation" and a list of relevant monitoring data sources were annexed to the project document; the 2009 Mid-Term evaluation found this approach to be technically sound.

The TE noted some issues with the project's LogFrame. Notably, the project had unrealistic timelines for some outputs, including the time needed to set up the project, negotiate institutional arrangements in the three countries, influence policy frameworks and validate demonstration projects in coordination with diverse partners. The TE notes that the combined research, demonstration and validation activities required a minimum of 3 years or more in order to cover at least two plant cycles and generate solid results. In practice, demonstration projects were implemented over a two-year period in Colombia and Costa Rica, and one year in Nicaragua (barely enough to cover one cycle). Therefore, the scale and duration of demonstration activities undermined the cumulative effect needed to reduce pesticide runoff to the Caribbean Sea. Moreover, the general objective of reducing high pesticide runoff levels to the Caribbean Sea was based on unrealistic assumptions. Consistently low levels were found at all sampling sites, including those where "conventional" farming practices had been applied. Note that this

was a positive change in scenario that shifted project's primary emphasis from mitigation to prevention, according to the TE.

Further, the general objective and some outcomes and outputs (i.e. revision of policy and legal/regulatory frameworks) were outside the project's control and conditioned by external variables. For instance, the indicator "recommendations implemented by national governments" required time, resources and commitment that were outside the project scope. There were attribution issues, as project, as designed, could not be held accountable for the revision of policy or legislation.

6.2 **M&E Implementation**	Rating: **Satisfactory**

Despite issues noted above with the M&E design, the TE notes that the actual monitoring practices were proactive and influenced more by attitude and communication than a particular methodology. Internal monitoring of project implementation by the RCU has been constant and effective. The regional project coordinator and project assistant were very well informed on the progress of implementation in the three countries, as reflected in the adaptive management that was applied and in project reports that show more analytical depth than is often the case in project reporting, according to the TE. There was general compliance in submitting periodic progress and financial expenditure reports, in some cases with difficulty due to unfamiliarity with UNEP and GEF formats.

Monitoring was not segregated from the overall implementation and was built into the coordination framework that linked the RCU to the national and sub-national levels where country activities were implemented. There were regular communications with NCUs and national implementing institutions that were contracted directly by UNEP. The NCUs were involved in monitoring demonstration projects; particularly after project assistants were hired in the three countries. Impact monitoring was aided by the analysis of soil and water samples for the coastal monitoring program.

The project subsequently budgeted for and met its evaluation requirements, albeit with limited resources. A Mid-term Evaluation was held in 2009; the report provided substantive analysis of project performance and progress, and made recommendations that influenced the following budget revision that extended the project. The RCU responded to the findings of the Mid-Term Evaluation and took action on several of the MTE's findings. The Terminal Evaluation was also carried out as planned.

7. Assessment of project implementation and execution

Quality of Implementation includes the quality of project design, as well as the quality of supervision and assistance provided by implementing agency(s) to execution agencies throughout project implementation. Quality of Execution covers the effectiveness of the executing agency(s) in performing its roles and responsibilities. In both instances, the focus is upon factors that are largely within the control of the respective implementing and executing agency(s). A six point rating scale is used (Highly Satisfactory to Highly Unsatisfactory), or Unable to Assess.

Please justify ratings in the space below each box.

7.1 **Quality of Project Implementation**	Rating: **Moderately Satisfactory**

The project was implemented by UNEP, but UNON's Budget and Financial Management Service, based in Nairobi, made payments to contracted institutions and equipment purchase. Although the overall effectiveness of project implementation and management were indicative of satisfactory UNEP and UNON performance, according to the TE, implementation was initially affected by budgeting errors in the project document, and, subsequently, by delayed disbursements to some of the contracted institutions (e.g., due to disbursement delay, BICU as an implementing institution lacked the financial liquidity to provide interim funding).

Key omissions such as the absence of a budget for external evaluations, the underestimation of management costs or insufficient agency overhead fees should have been detected during the internal appraisal that is mandated before approval. The MTE noted expressed concerns that UNON had made mistakes in the transfer of funds, "…wiring funds to incorrect accounts or in the incorrect currencies, confusing vendors." It should also be noted that flaws in the financial documentation provided by contracted institutions reinforced some of the delays and processing errors. The final project report has also noted concerns regarding the flexibility and timeliness of the administrative support provided.

7.2 **Quality of Project Execution**	Rating: **Satisfactory**

The overall quality of project execution is rated 'Satisfactory' as the Executing Agency was very effective and it showed good adaptive management that enabled the project to achieve good results. Shortcomings, especially at the early stages of the project, were noted and are outlined below. But it must be noted that many of these shortcomings were outside of the Executing Agency's control.

UNEP CAR/RCU provided effective management, administrative and backstopping support. Examples of this include extensive efforts to incorporate Panama into the project (even though ultimately unsuccessful); the supportive attitude towards budget revisions and project extensions; the contracting of project assistants that significantly improved project coordination and efficiency; frequent communications with the RCU and contracted national partners; and the perseverance displayed in accommodating co-financing shortfalls and start-up delays in Nicaragua and (to a lesser extent) in Costa Rica. UNEP CAR/RCU assigned an administrative assistant and part-time program officer to support the project when implementation was lagging, and provided consultancy support to Nicaragua for the review of documents. According to the TE, it demonstrated flexibility and responsiveness by supporting different country priorities and implementation approaches, i.e., using market-driven initiatives in Colombia and Costa Rica while, in Nicaragua, focusing more on food security and community development in the autonomous regions.

The performance of the regional coordinator and UNEP CAR/RCU were recognized as key determinants of project efficiency by most interviewees. The RCU effectively managed parallel implementation

processes in three countries and maintained open channels of communication and coordination with national partners. The regional project coordinator's responsiveness to country needs and feedback was highly rated by all respondents according to the TE. The establishment of National Coordination Committees (NCCs) and the regional Project Steering Committee (PSC) opened channels of communication that linked project components as well as key institutional actors at the regional and national levels. The PSCs and NCCs have supported the RCU and National Coordination Units by facilitating institutional collaboration, leveraging financial and in-kind support, and providing oversight to implementation process. Both levels combined advisory and decision-making functions, and contributed substantially to the re-programming of project activities, budget revisions and adaptive management in general.

The support of UNEP CAR/RCU to periodic adjustments and revisions was recognized as a contributing factor to the project's adaptive management. This was particularly important as the combination of a seven-year gap between project design and commencement and delays in starting demonstration activities undermined the level of preparation that had been reached at the end of the PDF and have resulted in the decline of the motivation of the national partners. UNEP CAR/RCU and the regional project coordinator had to re-build stakeholder motivation and foster ownership and there was a need to revise work plans, reformulate demonstration projects and adjust country budgets. The RCU and PSC were effective in managing the budget and responding to emergent needs - expenditures were successively re-programmed, budget lines adjusted to changing circumstances, significant levels of additional co-financing were mobilized, and budgetary oversight was provided.

Other remaining issues relevant to project execution include: (a) very slow recruitment of project personnel in some cases; (2) the need to extend the project duration to compensate for the late start and delays; and (3) the need to revise some of the budget lines that affected some demonstration activities as well as the time/resources available to institutionalize project results and influence policy-making.

8. Lessons and recommendations

8.1 Briefly describe the key lessons, good practices, or approaches mentioned in the terminal evaluation report that could have application for other GEF projects.

Implementation Approach and Coordination Arrangements: (1) building of the project's institutional framework around the existing networks and collaborative processes and promoting public-private partnership encourage high ownership and commitment levels; (2) cultural and socioeconomic variables need to be considered in a project's design to ensure relevance and coherence to different national and sub-national contexts; and (3) stakeholder participation and consultation processes are important for the project's quality and relevance.

GAPs and Demonstration Projects: (1) GAP adoption is more likely where acceptability is market-driven*;* and (2) the promotion of GAPs was more effective and efficient when managed by established enterprises that were directly engaged in crop production and marketing.

Revision of policy, legal and regulatory frameworks: Policy and legal/regulatory reform processes are not linear and alternative project arrangements are required to generate impact.

Monitoring: The existing high capacity levels among national research institutions allow for effective coastal pesticide monitoring.

8.2 Briefly describe the recommendations given in the terminal evaluation.

The following recommendations are provided in the TE: (1) Continue with the institutionalization and policy advocacy efforts; (2) national partner institutions need to continue to support priority initiatives that sustain and expand on project achievements; (3) Refine and approve proposed national certification programs based on GAPs; (4) Future pesticide management initiatives should include other pesticide intensive crops; (5) Establish national norms and parameters regulating pesticide residue levels in soil and water; (6) Give continuity to coastal pesticide monitoring; and (7) The project approach to pesticide monitoring and IPM should evolve into a wider area-based strategy based on IW-CAM principles.

9. Quality of the Terminal Evaluation Report

A six point rating scale is used for each sub-criteria and overall rating of the terminal evaluation report (Highly Satisfactory to Highly Unsatisfactory)

Criteria	GEF EO comments	Rating
To what extent does the report contain an assessment of relevant outcomes and impacts of the project and the achievement of the objectives?	The TE assessed the project's achievements objectively, noting both the positive results and shortcomings. However, the bulk of the TE is focused on reporting outcomes and 'results'. The TE does address in sufficient detail the progress towards achieving the main project objective, but it does not sufficiently address the rest of the project's stated outcomes.	**S**
To what extent is the report internally consistent, the evidence presented complete and convincing, and ratings well substantiated?	Sufficient and convincing evidence is presented in the TE that substantiates adequately the ratings provided. A more detailed discussion of the other, less successful, project components would have been informative.	**S**
To what extent does the report properly assess project sustainability and/or project exit strategy?	Sustainability of the project's outcomes is addressed in a comprehensive manner. This is a highly detailed and well-elaborated section of the report.	**HS**
To what extent are the lessons learned supported by the evidence presented and are they comprehensive?	Lessons learnt and recommendations are provided, but are of varying quality and applicability.	**S**
Does the report include the actual project costs (total and per activity) and actual co-financing used?	This is by far the weakest part of the TE. The TE does not present sufficient information on how project funding was spent, especially when it comes to the GEF grant. No details of the actual project costs are presented. The TE does present some information on co-financing (in the body of the text an explanation for higher co-financing is provided and a breakdown of co-financing is given in Annex 5). It would have been helpful had the report provided more details on the issues related to Nicaraguan co-financing (it briefly touches on the issue, but it remains unclear how the issue was resolved). It looks like an error was made in Annex 5 where the actual IA's own financing was listed as 0.77; while, based on the total sum, it should have been listed as 0.077.	**MU**
Assess the quality of the report's evaluation of project M&E systems:	The assessment of the project's M&E systems (at design and during implementation) is presented in the report, but could have been more detailed. The TE does not address the fact that the outcomes used in the PIRs differ from those outlined in the Project Document and the outcomes that the TE itself used. If the outcomes have been revised and officially adopted, then the TE should have evaluated the project based on the new outcomes. If the outcomes used in the PIRs were not officially adopted, and this was the reason why the TE did not use these, then the TE should have provided an	**MS**

	explanation for this. In either case, the TE does not address these possible revisions to the LogFrame at all.	
Overall TE Rating		**S (4.8)**

10. Note any additional sources of information used in the preparation of the terminal evaluation report (excluding PIRs, TEs, and PADs).