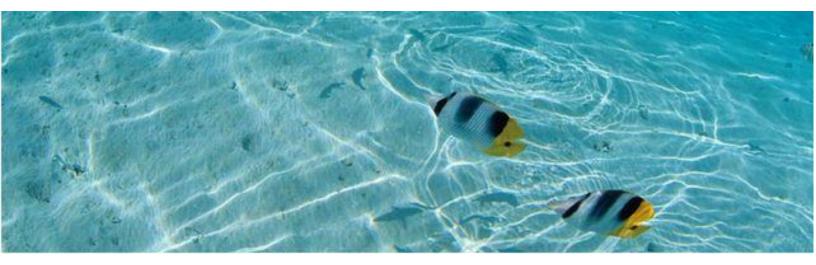
Mid-Term Review of the CLME.

Sustainable Management of the Shared Living Marine Resources of the Caribbean Large Marine Ecosystem (CLME).



Prepared by:

Dr. Glen Hearns Transboundary Water Initiative UBC

10 February 2012

Contents

Executive Summary1
Introduction
Project Information3
Background3
Mid-Term Evaluation (MTE)4
Project Formulation
Logical Framework
Assumptions and risks8
Management arrangements and partners8
Project Implementation9
Project Management9
Project results and achievements to date9
Monitoring and evaluation11
Stakeholder Involvement
Project Finance12
Sustainability13
Major Challenges
Past Challenges13
Future Challenges15
Issues and Recommendations16
Conclusions
Annex A - List of Interviewees
Annex B - References and Documents reviewed
Annex C – Interview Questions and Guidelines
Annex D – Logframe
Annex E - Financial Reporting as of 201141
Annex F – Qualifications of Evaluator

Mid-term Evaluation of the Sustainable Management of the Shared Living Marine Resources of the Caribbean Large Marine Ecosystem (CLME project).

Executive Summary

The CLME project is addressing gaps and inefficiencies with oceans governance of living marine resources in the wider Caribbean region. It responds to the serious challenges posed by the over-exploitation of fish-stocks, increasing pollution levels and potentially negative impacts from climate change on the CLME by promoting and ecosystems approach to the management of living marine resources which demands regional level cooperation. The project is innovative in that it does not focuses on establishing new institutions, but rather enhance and potentially extend existing arrangements to address the current inadequacies. This is being conducted in one of the most politically, socio-economically, and environmentally diverse areas of the planet, and with a relatively modest budget and timeframe.

The project commenced activities in May 2009 and is to be completed by April 2013. GEF is supporting the project with US\$ 7 million and there is an additional US\$47.8 million in co-financing. The project is coordinated by UNPOS with the UNDP as the implementing agency and IOC-UNESCO as a technical implementing agency. The project involves 23 GEF eligible countries as well as several associated countries and territories. The project boasts and wide range of partners including WECAFC/FAO, UNEP-CEP, CRFM, OSPESCA, CERMES, TNC, INVEMAR, CORALINA, IWCAM amongst others. Moreover, stakeholder involvement, through national level participation as well as NGOs, has been admirable.

To date the project has conducted a Transboundary Diagnostic Analysis (TDA) highlighting (1) unsustainable exploitation of fish and other living resources, (2) habitat degradation and community modification, and (3) pollution and the need for better governance to address these issues (CLME Project 2011a). The project has also initiated two fisheries pilot projects on the spiny lobster and on reefs and biodiversity; as well as cases studies on flyingfish, shrimp and ground fish, and large pelagics. Additionally, case studies have been initiated on regional governance mechanisms and the development of an Information Management System and Regional Environmental Monitoring Programme (IMS-REMP).

The project, however, has had its challenges. There has been a high turnover of project staff at the PCU level, all sub-projects are behind schedule, and National Inter-sectoral Committees are not well established. Despite these hindrances the project has emerged from its 3rd Steering Committee with an atmosphere of enthusiasm and a set of thoughtful and practical recommendations to help achieve a successful completion, including an extension of the project to April 2013.

1

The second half of the project will focus on finalizing the sub-projects, developing and endorsing the SAP and laying the foundations for its implementation. This is a formidable amount of work to be conducted over the next 16 months, however, the project is well positioned with strong management, good partner relationships, well advanced sub-projects and innovative and aggressive workplans for SAP development and endorsement. Key to a successful termination of the project will be ensuring all partners, NFPs, and stakeholders conduct their activities within the timeframes agreed at the 3rd Steering Committee Meeting.

Issues	Recommendations			
1. Coordination and	1. Set a Steering Committee discussion or dialogue for May or June			
management flexibility	(Not necessarily a meeting).			
2. Termination of sub-projects	2.1 Instate more frequent and simple reporting and track on a web-			
	page.			
	2.2 Set clear milestones. Consider developing a reallocation fund if			
	milestones are not met.			
3. Regional awareness building	3.1 Develop an information package for SAP awareness building.			
for SAP	3.2 Sub-projects should review all possible meeting and opportunities			
	to enhance SAP awareness.			
	3.3 NFPs should also develop a brief communication workplan for the			
	SAP at a national level in conjunction with NIC development.			
4. SAP development and	4.1 A chapter approach should be developed to facilitate SAP			
endorsement	development. Chapters can relate to the work of the sub-projects.			
	4.2 A chapter/compartment approach for SAP endorsement should be			
	considered to help advance cooperation and engagement in areas			
	that are able to.			
5. Revising sub-project	5.1 Extend the timeline for revision to the end of February 2012.			
workplans	5.2 Special attention should be given to the governance and IMS-			
	REMP case studies to assist with awareness building as they have a			
	regional perspective and the latter has access to senior policy makers.			
	5.3 A structured approach to how sub-projects can assist SAP			
	endorsement should be undertaken.			
6. Knowledge Transfer within	6. Take advantage of SAP development to educate the different sub-			
the CLME project	projects as to each other's findings and activities. And use the built in			
	capability of the web-site.			
7. Development of NICs	7. NFPs should take advantage of any ocean committees or teams			
	that are being developed in anticipation of Rio Plus 20.			
	7.2 Pilot projects, case studies and partners should assist NFPs in			
	developing the NICs whenever opportunities present themselves.			
8. Sustainability and funding for	8. The project should consider applying for assistance to initiate SAP			
SAP implementation	implementation and thereby allow more time to mobilize resources			
	from countries and/or other sources. This would help to maintain			
	momentum.			

The main future issues and recommendations emerging from this evaluation are as follows:

Introduction

Project Information

Title: "Sustainable Management of the Shared Living Marine Resources of the Caribbean Large Marine Ecosystem and Adjacent Regions" (CLME project).

PIMS # 2193

Countries: Antigua and Barbuda, Bahamas, Barbados, Belize, Brazil, Colombia, Costa Rica, Dominica, Dominican Republic, Guatemala, Grenada, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago. Associate countries : Cuba and Venezuela, and Caribbean Territories.

Implementing Agency: United Nations Development Programme (UNDP)

Technical Implementing Agency: Intergovernmental Oceanographic Commission (IOC-UNESCO).¹

Executing Agency: United Nations Office for Project Services (UNOPS)

Financial: GEF Contribution: \$M 7.

Co-financing: \$47,804,110² (in-kind) / \$0 (cash).³

Initial timeframe: May 2009 to December 2012. Extension to April 2013 approved at the 3rd Steering committee meeting (22 November, 2011).

Background

The CLME project was designed to improve the status of the shared living marine resources between the countries through an ecosystem level approach to management (UNDP/GEF CLME 2009). The project is extremely multi-faceted working with 23 participating countries and several associate countries and territories in one of the most complex cultural, political, socio-economical and biologically diverse regions in the world. The project was created to respond to the serious challenges posed by the over-exploitation of fish-stocks, increasing pollution levels and degradation of habitats, and potentially negative impacts from climate change on the CLME. Moreover, following on from the work of the *Cartagena Convention on the Protection and Development of the Marine Environment in the Wider Caribbean* and its three protocols⁴ the CLME project provided an opportunity for the Caribbean states to

¹ In the Pro Doc IOC-UNESCO is listed as a co-executing agency and the PCU offices are in the IOC-UNESCO building in Cartagena.

² Note, this does not include contributions from Barbados as per the Pro-Doc (UNEP/GEF CLME 2009). Personal Communication with Lorna Inniss confirmed that the government of Barbados has been active in participating in meetings and assisting with the reef pilot project; however, their contribution is difficult to estimate. See section on Finance.

³ Note that on the IW Learn website GEF Allocation was US\$ 9.7M and co-financing was described as US\$ 9M.

⁴ The Cartagena Convention was adopted in March 1983 and entered into force in 1986. It is one of the oldest and most comprehensive agreements on the management of an LME and precedes the Law of Sea by a year. It has three protocols: *Protocol Concerning Specially Protected Areas and Wildlife in the Wider Caribbean Region (SPAW),*

address goals relating to fisheries, particularly to reverse the depletion of stocks and their restoration (Mahon, McConney et al. 2010). As such, five of the seven sub-projects deal directly with fisheries and the additional two deal with information management, monitoring and governance. Despite the apparent emphasis on fisheries, the TDA and sub-projects clearly illustrate the linkages between habitat degradation and pollution to fish stocks (CLME Project 2011a).

The foundations of the CLME project began in 1998 when regional stakeholders initiated dialogue to look at gaps in regional governance. In 2001 the first workshop was held at NOAA, under a PDF-A grant organized in combination with IOC-UNESCO and other stakeholders (Toro 2012). A subsequent PDF-B was developed including the UNDP and was organized by CERMES in Barbados. The Pro-Doc for the CLME project took about 18 months to develop involving all the countries of the region and during this time key project partners were determined including UNOPS as the executing agency for the project (Toro 2012). Activities began on May 1st, 2009 and are to terminate in April 2013.

The GEF intervention aims to assess and understand problems and threats to the CLME as well as their causes through an analysis of management and governance issues, and policy cycles within the context of five main transboundary fisheries; the development of a Transboundary Diagnostic Analysis (TDA), which was completed in June 2011; and the subsequent development of a Strategic Action Plan (SAP) addressing the key causes and incorporating a monitoring program (CLME Project 2011c).

In combination with key results from seven pilot projects and case studies, the TDA now serves the process developing a governance model for the CLME together with a Strategic Action Programme (SAP). The SAP will reflect a region-wide shared vision for the sustainable management of the CLME's LMR. It will describe priority interventions, reforms and investments which have been identified and agreed upon by the participating countries, and which are to be executed during the (post-project) implementation of the SAP.

The major focus of the GEF involvement under the CLME project is to assist the countries to (i) agree upon, and make political commitments towards, an improved regional governance framework, which will facilitate ecosystem-based joint action for sustainable fisheries and marine living resources management; and to (ii) endorse a joint programme of actions including the identified priority institutional and legal reforms which will be required to catalyze the ecosystem-based management approach referred to above. The overall goal of the project is the

"Sustainable provision of goods and services of the shared living marine resources (LMR) in the Wider Caribbean Region through robust cooperative governance." (UNDP/GEF CLME 2009).

Mid-Term Evaluation (MTE)

In accordance with UNDP-GEF M&E policies and procedures, all full and medium-sized projects supported by UNDP with GEF and other financing should undergo a Mid-Term Evaluation. This is particularly relevant for the CLME project as it approaches the expected finalization date of pilot

Protocol Concerning Cooperation in Combating Oil Spills in the Wider Caribbean Region (Oil Spills), and Protocol Concerning Pollution from Land based Sources and Activities (LBS).

projects and case studies and is currently undertaking the SAP development/endorsement with a limited timeframe and budget.

This evaluation is being conducted based on template reviewed by UNOPS and UNDP. It is based on information obtained through review of project documents and interviews with persons familiar with various aspects of the CLME Project. The evaluation necessarily contains the evaluator's personal perspectives and experience when balancing the information and developing recommendations (Annex F).

The evaluation has been conducted with a view to constructively assist the successful termination of the CLME project.

Scope

To best assist the remainder of the project the mid-term evaluation focusses on developing recommendations for how best to achieve the project outputs within the remaining timeframe and budget. This mid-term evaluation:

- Reviews the work and activities completed to date in relation the proposed workplan and logframe, and assesses expenditures etc.
- Assesses existing mechanisms of cooperation and information exchange which are working or not working,
- Identifies past strengths or challenges that have either resulted in enhancing or hindering achieving mid-term targets or are likely to affect achieving final project targets;
- Identifies future challenges; and
- Develops recommendations for remainder of the project.

The review may mention, but does not assess in detail, the achievement of long-term goals, long term sustainability of the project, the relevance of the project, or relationship between planned objectives and impacts.

Methodology

The mid-term evaluation has been conducted through:

- 1. A desk review of project documents including:
 - a) Outputs, monitoring reports (such as progress and financial reports to UNDP (both from the full project as well as pilots and case studies where feasible), and relevant correspondence);
 - b) Specific products including the TDA publication, any country reports of focal points or those of relevant agencies (national, international), pilot project and case study reports;
 - c) Minutes from the Project Steering Committee meetings; Project Advisory Group (PAG) meetings, Stakeholder Advisory Group (STAG) and Partners of the Project Coordination, where available.
 - Relevant material published on web-sites, including that maintained by CLME Project (<u>http://www.clmeproject.org</u>);

2. Interviews and correspondence with project management and technical support including the staff from the Project Coordinating Unit, members of the PAG and STAG, national focal points, and other experts as deemed necessary.

People interviewed during this evaluation are contained in Annex A, references are contained in Annex B and an interview questionnaire/ guide was developed to ensure consistency among questions if found in Annex C.

Project Formulation

As noted in the background the CLME project was developed with over a decade of preparatory work in terms of bringing together different governments, agencies and stakeholders within the wider Caribbean Region. In the development of the CLME project care was taken to ensure that the project build on the efforts of existing initiatives. For example the CLME project built upon efforts of FAO/WECAF working groups on shrimp and groundfish in the Brazil-Guianas shelf, Caribbean spiny lobster, and flyingfish in the Eastern Caribbean; as well as the efforts of OSPESCA in Central America focusing on shrimp and spiny lobster (UNDP/GEF CLME 2009). To conduct the various activities the CLME brought together agencies and institutions with specific expertise in the region such as Caribbean Regional Fisheries Mechanism (CFRM), Organizacion del Sector Pesquero y Acuicola del Istmo Cetnroamericano (OSPESCA), FAO, IOC-UNESCO, UNEP-CEP and the Centre for Resource Management and Environmental Studies (CERMES) (UNDP/GEF CLME 2009).

It is important to note that the CLME project does not look to necessarily develop institutions for transboundary fisheries, but rather looks at existing structures and seeks to determine necessary transfers of information at appropriate policy cycle levels to enhance coordinated decision-making (UNDP/GEF CLME 2009). The strategy behind the CLME is to make existing institutions more effective and to identify policy gaps. For example in the case of large pelagic fisheries the Convention for the Conservation of Atlantic Tuna (and tuna like fishes) (ICCAT) covers the Wider Caribbean Region; however not all CFRM countries are members of ICCAT and not all important pelagic species are covered by ICCAT (O Haughton 2012; Phillips 2012). The CLME project is therefore helping to develop linkages between two existing management mechanisms to cover the gaps (O Haughton 2012).

The CLME project is consistent with the GEF – 4 Operational Strategy for LMEs (GEF 2006) and the goals set out at the World Summit on Sustainable Development as laid out in part IV of the Johannesburg Plan of Implementation, particularly in terms of meeting controls on fisheries and the application of the ecosystem approach to fisheries (UN WSSD 2002). This has been reflected in the main project objective:

"Sustainable management of the shared LMR of the Caribbean LME and adjacent areas through an integrated management approach that will meet the WSSD target for sustainable fisheries".(UNDP/GEF CLME 2009)

The specific project objectives are:

- To identify, analyze and agree upon major issues, root causes & actions required to achieve sustainable management of the shared LMR in the Caribbean LME and its adjacent regions (through the development of a TDA);
- To improve the shared knowledge base for sustainable use and management of transboundary LMR;

- To define, agree on, and commit to the implementation of required legal, policy and institutional reforms and investments to achieve sustainable transboundary LMR management (through SAP development);
- To develop an institutional and procedural approach to LME level monitoring, evaluation and reporting.

The project has ambitious objectives and workplans for the current level of funding and timeframe. The original project was submitted for substantially more support than was agreed to under the final document (Toro 2012). The ambitious nature of the project was noted as early as the first PAG meeting and consequently, a revision of activities was recommended; for example, under the Spinny Lobster fisheries pilot project (CLME Project 2009a). The CLME project was also noted as very ambitious by several respondents in a questionnaire distributed at the First SC Meeting of the CLME (Mahon, McConney et al. 2010). Interviewees in this mid-term evaluation generally shared the opinion that the activities and goals of the project were ambitious for the level of funding and time allotted. Not only is there a great deal of complexity in coordinating numerous case studies and pilot projects which are to be synthesized into a regional management framework, but to have "reference to SAP in the national fisheries policy and planning and in other sectoral plans"⁵ may be over ambitious for the timeframe and funding available to the project.

While all LMEs and the socio-political elements pertaining to them are different it is worthwhile to look at some other GEF projects charged with developing TDAs and SAPs. The "Reversing Degradation Trends in the South China Sea and Gulf of Thailand" project brought together seven littoral states⁶ to foster and encourage collaboration in addressing environmental problems and agree to a SAP encompassing specific targets (Pernetta 2009). The timeframe for the project was February 2002 to 2008 with a GEF contribution of US\$ 16.4M (co-financing - US\$16.4M). The Southwest Indian Ocean Fisheries project assisted seven states⁷ managing living resources and habitat through and ecosystems approach. The project was for a duration of 6 years (2005-2011) and conducted with a GEF contribution of US\$ 23M co-financing. In the case of the "Combating living resource depletion and coastal area degradation in the Guinea Current LME" project developed a cooperative approach to living resources in the 16 countries⁸ of the Guinea Current (Donker 2011). Between November 2003 and June 2011 the project developed a TDA, SAP which was adopted into National Action Plans, prepared Investment Projects, and established the Guinea Current Commission. This was achieved with a GEF contribution of US\$ 20.8 M and co-financing of US\$ 45M.

⁵ Outcome 2 (Annex D).

⁶ Cambodia, China (ROC), Indonesia, Malaysia, Philippines, Thailand and Viet Nam.

⁷ Comoros, Kenya, Mozambique, South Africa, Tanzania, Mauritius and Seychelles.

⁸ Angola, Benin, Cameroon, Congo, Cote d'Ivoire, Equitorial Guinea, Ghana, Guinea, Guinea-Bissau, Liberia, Niger, Nigeria, Sierra Leone, and Tongo.

Logical Framework

The logical framework developed for the project is consistent with those of other projects in describing strategies, outcomes, indicators, verifications means etc. The log-frame for the CLME project is found in Annex D and provides one of the basis by which this mid-term evaluation has been conducted.

Assumptions and risks

Assumptions and risks were identified in the Pro-Doc (UNDP/GEF CLME 2009) and appear both logical and reasonable focusing principally on the willingness and ability of the countries to work together and share data. It is also noted that sustainability of the project will necessarily depend on the commitment of governments and related organizations to activities post-project, and for this reason a Partners of the Project group was created to mitigate the risks of the SAP not being implemented (Para 195 -(UNDP/GEF CLME 2009)).

The economic downturn of 2008 and 2009 may have had an effect on the participation and activities of the partners and governments, particularly in terms of their in-kind contribution; however, it is difficult to assess its impact on project activities.

Management arrangements and partners

UNDP is the primary implementing agency for the CLME project. It is responsible for the overall financial management and deliverables of the executing agency UNOPS (UNDP/GEF CLME 2009). IOC-UNESCO is listed as a co-executing agency and provides a technical advisory role. The UNDP has a managerial role for the entire project as well as providing technical advice. The UNDP – RTA assesses the project performance and provides technical recommendations to ensure that specific objectives are met. UNOPS is concerned with management of the CLME Project and the coordination and contracting of the sub-projects and staffs the Project Coordinating Unit (PCU) (Debels 2011; Troya 2011; Lichtenburg 2012; Toro 2012)

The PCU is based in the IOC-UNESCO offices in Cartagena. It has developed close linkages with the project partners and manages the sub-projects (pilot projects and case studies), including the development of contracts and overseeing deliverables. UNOPS is primarily responsible for ensuring that project deliverables for the CLME are conducted on a timely fashion and within the budget

The project has formidable list of project partners and participating groups including WECAFC/FAO, UNEP-CEP, CRFM, OSPESCA, CERMES, TNC, INVEMAR, CORALINA, IWCAM amongst others.

The project document is very stakeholder friendly allowing not only national governments and project partners to be on the Steering Committee but opening it to include: Representatives from strategic Caribbean partners (ACS, CANARI, CCCCC, CEHI, OAS, OECS, ECLAC, WWF), other appropriate Non-Governmental Organizations, relevant GEF projects in the region (IWCAM), key industry sectors, and any other groups agreed to by the countries, the Implementing Agencies, the Executing Agency and the PCU (CLME Project 2009b).

A curious feature of the management structure is that the IOC-UNESCO is both a co-implementing agency with UNDP and responsible for a conducting a pilot project under a UNOPS contract. This means that IOC-UNESCO is both responsible for overall project oversight as well as being a contractor to the

project. This exceptional arrangement stems from the evolution of the project and the role with IOC-UNESCO played in both the development and CLME project and its position to conduct technical work.

Project Implementation

Project Management

The management arrangement of the CLME project appears to have functioned relatively well given the challenges of personnel changes, a complex region (both politically and environmentally) and an ambitious set of activities.

The relationship between the primary implementing agency (UNDP) and the executing agency (UNOPS) was effective and worked well (Debels 2011; Hudson 2011; Troya 2011; Lichtenburg 2012).

Coordination of the project and management of the pilot projects and case studies varied throughout the project due to changes of senior personnel at the PCU level (see <u>Past Challenges</u>). Different people brought different management styles and levels of coordination, as well as there not being a RPC for approximately 10 months (Debels 2011; Hudson 2011; Inness 2012; McDonlad 2012; Phillips 2012; Vanzella-Khouri 2012). Despite these unfortunate disruptions UNOPS and the pilot projects and case studies were able to maintain working relationships and participate in meetings and decision making forums. More recently, it was noted that the PCU has made an extensive effort to facilitate reporting and documentation of the progress of the pilot projects and case studies. For example, through the development of simplified reporting forms which has enhanced coordination and integration of the pilot projects (Debels 2011; McDonlad 2012).

The interviewees felt that the project was successful in bringing many different governments, organizations, and stakeholders together. Project documentation also supports this view as evident from the list of participants attending the various PAG, STAG and SCM meetings.

Project results and achievements to date

The CLME project has accomplished a large portion of its mandated outputs as per the Log Framework in the Project Document (Annex D). During the 30 months since project inception work has focused on developing working relationships and conducting pilot projects and case studies and conducting a TDA (CLME Project 2011a) to serve as the basis for an agreed program of priority interventions through an SAP. A good deal of effort has been dedicated to retrieving information and data on reef and spiny lobster fisheries, understanding policy frameworks and cycles for large pelagics, flyingfish, shrimp and ground fisheries for inclusion in the SAP. Also, as the CLME project has focused on developing a governance framework, the Governance TDA (Mahon, Fanning et al. 2011) has been conducted to help identify key management gaps and to enhance decision-making. The second half of the project will be focused on termination of the pilot projects and case studies, including the development of a regional Information Management System – Regional Environmental Monitoring Programme, and the creation and endorsement of an SAP.

Major achievements:9

⁹ Note this refers to the major outputs and activities.

- Pilot projects are being conducted on i) spiny lobster fishery and ii) reef fisheries and biodiversity with demonstration projects in Seaflower Biosphere Reserve in Colombia (managed by CORALINA); Pedro Bank project in Jamaica (managed by TNC-Jamaica) and the Cracol/Monte Cristi and Pedernales/Point Marigot (managed by Ministry of Environment in Haiti and Dominican Republic in collaboration with TNC-DR). (these specifically link to Outcome 1 and 3)
- Case studies are being conducted on i) flyingfish, ii) shrimp and ground fish, iii) large pelagics, iv) governance mechanisms and v) Information Monitoring System – Reporting and Environmental Monitoring Programme (IMS-REMP).
- The project developed a TDA Technical Task Team (TDA-TTT) to help develop the TDA. The TDA has been developed and countries have agreed to the scope and priorities of transboundary issues through the endorsement of a regional TDA highlighting (1) unsustainable exploitation of fish and other living resources, (2) habitat degradation and community modification, and (3) pollution and the need for better governance to address these issues (CLME Project 2011a). Initial recommendations within the TDA provide the basis for developing actions and interventions for an SAP (p114-121 of the TDA). (linked to Outcome 1)
- As part of the TDA, sub-TDAs have been developed for
 - coral reef and pelagic fisheries ecosystem (Heileman 2011);
 - o continental shelf fisheries ecosystem. (Phillips 2011); and
 - governance issues related to transboundary fisheries (Mahon, Fanning et al. 2011) (linked to Outcome 1)
- Pre-feasibility studies for actions on reef, pelagic, and continental fisheries are continuing to be undertaken and will be finalized by June 2012 (3rd Steering committee recommendations).
- A detailed and functioning web-site has been developed as is maintained where most project documents are available and downloadable (<u>www.clmeproject.org</u>) (linked to Outcome 2)
- Some national inter-sectoral committees are being established. (linked to Outcome 2)
- PAG and STAG formed, meetings held, and recommendations forwarded to SCM (linked to Outcome 2)
- Project personnel have been established or are being established (recent application for a Senior Project Officer at the PCU), contracts with pilots and case studies have been signed, Steering Committee produces reports, monitoring is in place with the implementing agency (linked to Outcome 4).

Major outstanding activities are:

- Decision support framework agreed to for key transboundary fisheries: REMP-IMS developed and operationalized in 50% of the participating states (linked to Project Objective). IMS launched and practioners trained in use (linked to Outcome 1)
- Management plans take into account environmental variability, including climate change (linked to Project Objective).
- SAP signed and endorsed by all participating countries, including financial commitments and with reference to SAP in national fisheries policy and planning (linked to project objective and Outcome 1)

- Monitoring and Evaluation framework for the region agreed to in order to track implementation of the SAP. (linked to Outcome 2)
- Institutional framework agreed for coordination of SAP implementation
- Endorsed multilateral fishery management plans for large pelagics, flying fish, lobster and shrimp and ground fish based on EBM approach (Related to Outcome 1)
- Functional national inter-sectoral committees to continue implementation of SAP post project (linked to Outcome 2).

While there have been delays in achieving deliverables, only minor alterations in project strategy have occurred since project inception. For example it was decided after the project began to ask the FAO WECAFC to conduct the assessment of the Shrimp and Groundfish fisheries (CLME Project 2009a).

Monitoring and evaluation

The CLME project has an effective process for monitoring which has been implemented well to date. Meetings, reporting and procedures as described in the project document have been conducted on time (for instance the annual Steering committee meetings and timely Project Annual Reviews (PIR)) and used to inform and update partners and the implementing agency (Troya 2011).

The Steering Committee, which oversees the overall project, has met at least once every 12 months since project inception: Autumn 2009, November 2010 (Panama), November 2011 (Cartagena). The SC meetings have monitored the work of the PCU and its coordination of pilot projects and case studies and have produced significant recommendations such as reviewing activities for the pilot projects (CLME Project 2010b), endorsed public participation strategies and communication strategies (CLME Project 2010b), called for extensions to the pilot project, cases studies, and project (CLME Project 2011d), and reviewed budgets (CLME Project 2010b; CLME Project 2011d).

The PAG and STAG were set up to provide input to the SC and thus help direct the project. Meetings are designed to communicate or meet on ad-hoc basis (and through informal communication) to inform the Steering Committee meetings (para 212, (UNDP/GEF CLME 2009)). The PAG has meet regularly, the first being in 28 September 2009 (CLME Project 2009a), and the latest directly preceded the 3rd Steering Committee meeting in Cartagena (20 November, 2011). The STAG has met at least once.¹⁰

PCU to be in the IOCCARIBE offices, primarily responsible for financial management, overall coordination of all CLME activities, TDA and SAP development (Para 217, (UNDP/GEF CLME 2009)).

Stakeholder Involvement

The stakeholder involvement has been rather good in terms of engaging NGOs, academics and national presence in both the STAG and Steering Committee (Mahon 2011; Troya 2011; Inness 2012; McDonlad 2012; O Haughton 2012). Some of the members present at the 2nd STAG meeting included University of the West Indies, CANARI, Ministry of Fisheries for Grenada, Ministry of Environment for Colombia, Caribbean Network for Fisheries, Caribbean Alliance for Sustainable Tourism, Fisheries Division of Trinidad, IUCN, and CERMES. The presence of 16 national focal points or delegates at the 3rd Steering

¹⁰ Meeting minutes were not reviewed.

Committee Meeting is a testament to the engagement of stakeholder interest at the state level (CLME Project 2011c).

The stakeholder advisory group (STAG) was set up to convene prior to SC meeting to provide feedback for the SC meeting (para 210, (UNDP/GEF CLME 2009)). The STAG has provided a venue for NGOs and other stakeholders to have input according to a number of interviewees (Mahon 2011; Troya 2011; Inness 2012).

Project Finance

The total project is for US\$56,310,947 with GEF financing for US\$ 7,008,116 and in-kind co-financing of US\$47,591,111 from national governments in the region, private industry and US-NOAA (UNDP/GEF CLME 2009; CLME Project 2011b)

The original project budget described in the Pro-Doc contains detailed budget notes describing the different activities and the expenses associated with them (UNDP/GEF CLME 2009). To date there does not appear to be any major discrepancies between line items as budgeted in the project document and expenditure as projected to 2011. The differences lie in the timing of expenditures, for example the UNDP amended expenditures for 2011 in September 2011 (CLME Project 2011c).

The project budget for 2012 and 2013 was presented at the 3rd Steering Committee Meeting. A revision of PCU activities was approved to allow an extension of the project by an additional 4 months to April 2013 (CLME Project 2011b).

Several different alternatives were presented at the 3rd Steering Committee meeting regarding how the remaining PCU budget should be spent. For example it was decided that the PCU should hire a local Senior Project Officer and forego a Stakeholder and Public Participation Expert to stretch funding for an additional four months.¹¹ This type of creative budgeting and 'on the ground' decision making by the SC illustrates the engagement and effectiveness of the management structure in adapting to new situations.

With respect to co-financing it is always difficult to assess the degree of in-kind contributions and to what extent they have been delivered. In the case of the CLME almost half of the co-financing is from US-NOAA (US\$22,600,000) who are on the Steering Committee (CLME Project 2009b).¹² An accounting of national contributions is not possible; nevertheless it is clear that countries in the region have assisted particularly those involved in pilot projects and case studies, such as Haiti and the Dominican Republic. Also, co-financing has come from those partners engaged in pilot projects, case studies or as members of the PAG or STAG.

It should be noted that the question of in-kind co-financing contributions is always problematic when determining how to assess the contributions. In some cases it is clear that work would not be done if it were not for CLME project, for example the activities of the Haitian and Dominican environmental ministries work in the Carcol/Monte Cristi project. These cases can be seen as clear additionally of the CLME project. Whereas in the case of research institutions, such as NOAA, which are primarily

¹¹ The project tis to be extended from December 2012 to April 2012

¹² Attempts were made to contact Bonnie Ponwith for an interview.

exchanging information and data it is highly likely this data would be generated even in the absence of the CLME project.

Sustainability

One of the principle goals of the projects is to have implementation of the SAP once endorsed. Project documents and interviews have identified three key components for sustainability:

- Willingness to implement the SAP. This will be reflected by country endorsement and commitment to implement the SAP including functioning National Inter-sectoral Committees (NICs) to help drive the implementation of the SAP at the national level, as well as the commitment of partners and international organizations to assist.
- 2. Capacity to implement the SAP. The countries and partners will need the capacity to engage, conduct monitoring and have information reflected in decision-making .
- 3. Adequate funding. Funding will be needed to ensure implementation of the SAP, and likely develop capacity in some cases to implement the SAP. Apart from national, and international funding, engagement of the private sector has already been targeted as a potential area where funding may be sought, however no clear strategy has been developed to do so. In the medium term possibly the tourism industry may be source of funding.

The development and endorsement of a functional, effective and beneficial SAP is the principle mechanism for sustainability of the project. As will be discussed below there are different options for how to approach the creation of an SAP for the CLME project.

Major Challenges

Past Challenges

PCU management and coordination of pilot projects and case studies.

It was very unfortunate, but the PCU experienced a great turnover of staff with almost all positions, save the office manager being changed. Interviewees indicated that personnel changes at PCU level have hindered the coordination of the project as a whole, in particular the development and signing of contracts as well as oversight of the sub-projects. Although UNOPS worked relatively quickly to fill posts, changes in senior personnel have left the project without a Regional Project Coordinator (RPC) for a total of 10 months and without a Senior Project Officer for four months. Major personnel changes at the PCU level were:

- 1- Regional Project Coordinator: Martin Johnson (May 2009 to November 09);
- 2- Regional Project Coordinator: Nestor Windevoxhel (April 10 April 2011);
- 3 Regional Project Coordinator: Patrick Debels (August 2011- present);
- 4- Senior Project Officer: Ivan Soto May 2009 Aug 2011; and
- 5 New Senior Project Officer to commence January 2012.

Personnel changes have also occurred at the pilot project level, and with the UNDP. For example, the current project coordinator for the Reef Fisheries pilot project has only been coordinating the project as of February 2011 (McDonlad 2012; Vanzella-Khouri 2012).

There will naturally be turnover amongst such a large number of partners, national focal points and stakeholders during the course of such a project. However, that there was such a high degree of turnover amongst senior people in the PCU has clearly hindered progress. This turnover has been remedied with the hiring of a new RPC in August and an SPO more recently.

Maintaining timelines for pilot projects and case studies.

The pilot projects and case studies were developed with the goal of "strengthening existing decisionmaking institutions by the formation of policy cycles capable of providing ecosystem based management of the living marine resources" and feed into the TDA and inform SAP development (UNDP/GEF CLME 2009). As of December 2011, most the pilot projects and case studies were behind schedule. In the case of the IMS-REMP case study it only began December 2011 with the development of a task agreement (IOC-UNESCO 2011). The reasons behind the delays are likely a combination of different issues. The development of contracts has generally been problematic, hindered by the turnover of coordinating staff; however, in the case of the IMS-REMP case study this was compounded by developing details of certain clauses of the contract between UNOPS and UNESCO (Toro 2012).

In some cases it has been difficult to bring on countries or territories into sub-projects which are not part of the CLME. For example, in the case of the large pelagic case study, work demands the inclusion of French Island territories and while there is a high level of interest at the local level it is not clear at what level policy development needs to take place since there are local authorities, French and EU policy levels (O Haughton 2012). In short, the jurisdictional complexities, different developmental levels of the actors, a variety of sectors and stakeholders to engage, and a variety of ecosystems make transboundary work in the region challenging.

Developing effective National Inter-Sectoral Committees

The stakeholders involved in transboundary regional fisheries is very complex nature, such as developers, tourism, coastal zone management authorities, municipalities, sport fishers, artisanal local fishers, commercial fishing, etc. National Inter-Sectoral Committees were to be developed to ensure adequate involvement and input into the development as well as approval of the TDA and SAP at the national and sub-national level (NIC) (UNDP/GEF CLME 2009). The importance of the NICs and their need to be strengthened has been emphasized at both the 2nd and 3rd Steering Committee Meetings (CLME Project 2010b; CLME Project 2011d). National Focal Points are primarily associated with developing and activating the NICs (CLME Project 2009a; CLME Project 2011f). Based on the interviews conducted during this evaluation it appears that the NICs have not been well established. The reasons for this are not known, but likely are due to the difficulties associated with bringing together diverse stakeholders even at the national level.

Future Challenges

Termination of the pilot projects and case studies to incorporate into SAP develop.

As per the recommendations of the 3rd Steering Committee (CLME Project 2011d), the timeline for pilot projects and case studies have been revised, with the majority of activities to be completed by June 2012, and with December 2012 as the final closing date for all case study and pilot project activities. Over the next 16 months the PCU will need to focus on SAP development and endorsement. Necessarily, the SAP will need to be developed in parallel with the completion of the pilot projects and case studies. It will be of particular importance that the pilot projects and case studies do not experience any additional delays. This will be particularly important for the IMS-REMP case study as it has commenced at such a late stage in the CLME project.

SAP development and endorsement

The SAP is a negotiated policy document which identifies policy; legal and institutional reforms and investments needed to address the priority transboundary living marine resource management problems and establishes clear priorities for action (UNDP/GEF CLME 2009). As such it will require an understanding of the complex issues associated with multi-layered governance as envisioned in the CLME project.

As outlined in the recommendations of the 3rd Steering Committee meeting, substantial contributions from the PAG to SAP development will be expected (in particular those members conducting pilot projects and case studies), with additional (review) support from a SAP Formulation Support Team . Also the development and use of NICs to build awareness, achieve ownership and facilitate national-level endorsement will be important (CLME Project 2011e). A detailed workplan has been developed and endorsed by the SC which includes the development of working agendas for the NICs as early as March 2012.

Gaining SAP approval with some 23 countries will require a great deal of coordination and engagement as well as commitment from the national focal points, PAG members and pilot project and case study teams. In the case of the Guinea Current the project was able to obtain endorsement of a similar nature from 16 countries over approximately 18 months (Donker 2011; Hudson 2011). Consequently, it is entirely possible that SAP endorsement can be achieved with at least the majority of participating countries within the time frame available.

Building awareness of the SAP.

One of the keys to SAP endorsement is awareness amongst the countries and regional authorities. Unfortunately, there is relatively poor communications within national governments and between ministries with respect to regional marine governance (Mahon, McConney et al. 2010). Knowledge of the CLME project was rather limited by the first Steering Committee Meeting (19-30 September, 2009) and appeared to remain so, confirmed by telephone interviews, by the summer of 2010 (Mahon, McConney et al. 2010). Interviewees in this mid-term evaluation generally felt that there was not a great deal of knowledge of the CLME, unless national governments and ministries were specifically involved with the pilot projects (Inness 2012; O Haughton 2012; Phillips 2012). The CLME project has developed and approved of a communications strategy which is focused on i) developing active support for the sustainable use of the CLME from National Focal points, Inter-sectoral Committees, Partners and allies, Private sector, all the media, and public opinion; and ii) to sensitize governments, authorities and decision maker's on the importance of the implementation of a governance model for the right use of the marine resources in the region, strengthening their political will (CLME Project 2010a).

As the main source of information for the SAP will be coming from the achievements of the pilot projects and case studies it will be important to capitalize on these achievements and findings as they are made available and bring them to as wide an audience as possible in the region. Continual information may help to maintain a momentum of awareness building.

Activating and Energizing the National Inter-Sectoral Committees

As previously mentioned the NICs are important not only for awareness building but also for helping to ensure the sustainability of the CLME project outcomes and implementation of the SAP over the next 5 years. The 3rd Steering Committee meeting emphasized that the task of developing the NICs is predominantly the role of the National Focal Points (CLME Project 2011f). NIC development has been addressed under the SAP development strategy whereby National Focal Points are to develop a NIC plan by March 2012 (CLME Project 2011e). While the timing appears feasible, much hinges on the ability of the National Focal Points to bring together the necessary individuals at the country level. In some cases, such as that of Barbados, it may be relatively easy as they are intending to develop an oceans committee very similar to the envisioned NIC (Inness 2012). In other cases this may quite difficult as the NFP may be in a different Ministry to many of the stakeholders envisioned in the NIC.

Funding for SAP implementation

Significant funding will be needed to ensure SAP implementation both in terms of conducting governance activities, monitoring and reporting, but also it is likely that capacity building will be required in some cases. In the case of the Benguela Current LME, GEF supported the implementation of the SAP through the establishment of an Interim Commission, training and capacity building, a series of assessments etc. for Angola, Namibia and South Africa. The work was for approximately 5 years and the GEF contribution was for US\$ 15 M with an additional US\$ 24M co-financing. The Yellow Sea Project incorporated private sector financing for monitoring data, and the Caspian Sea Project has been developing relationships with oil and gas where British Petroleum has been approached for the establishment of the Caspian Information Centre and Agip KCO for the preparation of the Bio-diversity Atlas (Hearns 2011). There is no indication that the CLME project has developed any relations with the private sector to support activities that may commence ideally within 16 to 20 months.

Issues and Recommendations

The following issues and recommendations are focused, but not exclusively, on the recommendations emerging from the 3rd Steering Committee meeting. At that meeting the Steering Committee acknowledged the urgency in commencing the SAP development and the conclusions of the pilot

projects and case studies. The recommendations below have been developed based on the following objectives:

- i. Secure the greatest possible # of endorsements for the SAP;
- ii. Advance a meaningful SAP to develop momentum for implementing activities and secure sustainability of the activities;
- iii. Advance an institutional and procedural approach to LME level monitoring, evaluation and reporting (planned as part of an SAP)
- iv. Maintain costs within the PCU budget
- v. Achieve the objectives within the allocated time frame.

Issue 1 – Maintain sufficient coordination and management flexibility for the duration of the project.

Though the situation has been addressed through the hiring of new staff, the report would be incomplete without emphasizing that maintaining senior staff at the PCU level is important for continuity and maintaining project momentum. Also, it will be important to increase adaptability and flexibility for decision-making over the next 16 months as there may be a need to make some decisions prior to the next scheduled SC meeting.

Recommendation 1 – Set the possibility for a mid-term Steering Committee 'discussion' in May or June 2012. Funds may not permit a meeting, but some form of dialogue should take place to update the SC on any issues that may require a decision prior to the next SC meeting in November. This is possible under the TOR of the Steering Committee Meeting (CLME Project 2009b).

Issue 2 – Ensuring termination and input of the pilot projects and case studies to SAP

The 3rs Steering Committee called for the development and implementation of a monitoring mechanism to provide more oversight on the status of different projects (CLME Project 2011d). This was to ensure that they maintain their new workplans and delays do not compromise the overall project.

Recommendation 2.1 – Simplified and increased frequency of reporting may be required such that the PCU and other partners can keep track of how all sub-projects are doing. There could be a web-page dedicated to monitoring sub-projects which everyone could view.

Recommendation 2.2 - Milestones should be placed into the new workplans for the pilot projects and case studies. Additionally, funding reallocation for not meeting milestones should be considered similar to those used in SOPAC with its sub-projects. In the SOPAC project they have developed a draft reallocation pool for funds from demonstration projects (SOPAC 2011). The guiding principles of the funds are that GEF allocated funds for pilot projects should be spent on a timely manner so as to benefit other pilot projects and the project as a whole. If the funds are not spent and work conducted in a timely way a percentage of the remaining funds go back to a fund pool which is reallocated to benefit the project as a whole. This reallocation fund was endorsed at their 3rd SOPAC SC meeting in July 2011. Also, what was interesting is that those countries and projects which were somewhat delayed were not opposed to

Issue 3: Regional awareness building of the SAP will need a concerted effort

Central to building awareness in the project documents is the development of national inter-sectoral committees (NIC) by the national focal points. It should be noted that not all the national focal points are from the same sector. Some may be from the ministry of environment, others from fisheries and other from coastal zone management etc. and often is can be challenging to engage stakeholders outside of one's particular agency. It is therefore important that partners with an international presence assist in the development of the NICs whenever possible. It was acknowledged at the 3rd Steering Committee Meeting that a concerted effort will be needed to promote the SAP. It was agreed that there should be shared responsibilities between the PCU and all partners to implement the communication strategy and public participation plan; that pilot projects and case studies should review how they could help build awareness within their activity plans; that there should be assistance for translations of documents into both English and Spanish, and that communication documents should be disseminated to NFPs (CLME Project 2011d). In addition to the thoughtful recommendations made at the 3rd Steering Committee meeting the following should also be considered:

Recommendation 3.1 – The PCU in conjunction with CERMES should develop high level information package to allow non-technical people to understand the benefits and activities of the SAP in a broad sense. CERMES is likely best suited to help develop these packages as they are most aware of the greater regional governance structure and the benefits associated with it. The package would be used by anyone in the project as part of the communication strategy. This package should contain pamphlets, presentation slides (5 slides to be able to be incorporated into any appropriate presentation) and supporting materials including short 1-2 pages brief on the project achievements and SAP goals etc. It must emphasize the benefits to the stakeholders of implementing the SAP. This would greatly assist those attending conferences, meetings or communicating with press to promote the project. It will also greatly assist NFPs in promoting the SAP and developing the NICs.

Recommendation 3.2 - When analyzing the possibilities to deliver direct and relevant contributions to the implementation of the communication strategy the pilot projects and case studies should ensure that all potential conferences and regional meetings, contacts with influential NGO's (such as the Regional Fisher Folk Organization), and media opportunities are considered (including social media and the internet). Moreover, thought should be given as to what incremental activities beyond their current activity plans might provide additional benefits, and if warranted modify their plans in collaboration with the PCU. Additional activities should focus on assisting and working with NFPs to assist in NIC development and awareness building at the senior policy level.

Recommendation 3.3 – When the NFPs develop a workplan for developing NICs and determining who will be signing the SAP (CLME Project 2011d) they should also provide a brief workplan for implementing the communication strategy (or what elements of the strategy will be adopted). Many countries are developing committees regarding Rio Plus 20 – and these preparations should be taken advantage of with regard to SAP awareness building as well as NIC development.

Issue 4 SAP development and endorsement

The 3rd Steering Committee meeting recommended that a sequential process be used for SAP development with stepwise-development, consultation and endorsement at different levels (CLME

Project 2011d). The SAP development and endorsement strategy provides a practical way to gain input and approval from the various partners and national governments (CLME Project 2011e). However, there is a risk that the SAP will be a large encompassing framework for the region which may be difficult for countries and partners to digest, and ultimately have countries sign onto because of its complexity and the limited timeframe for understanding the SAP. Consequently, in the development of the SAP care should be taken to not overload partners, IGO's, NFP and NICs with information on areas that are not pertinent to their regions or activities.

A balance will need to be sought between developing a Strategic document that is sufficiently detailed to have meaning and sufficiently conceptual to appeal to the largest number of stakeholders for national endorsement. This complexity arises because participating countries in the region have been engaged at various levels throughout the project. For example those directly related to sub-projects have been more engaged that those that have not by virtue of the sub-projects. Moreover, some sub-projects are at a greater stage of developing cooperative management structures than others. While the goal is to have all countries sign onto a single document it may also be important to advance cooperation where possible, in a compartmentalized fashion, and build momentum for greater and broader cooperation in the future. This type of compartmental approach, where countries agree to move ahead where they can and have other follow, has been noted as effective in generating cooperation in field the transboundary river water management (Waterbury 1997; Giordano and Wolf 2003; Hearns 2010). In this way all countries could sign onto and endorse an overarching document with broader conceptual goals and in addition those countries that are more willing or are more advanced in certain areas (say for example flying fish management) could sign onto and endorse more specific management objectives and actions.

Recommendation 4.1 - A multi-chaptered approach should also be considered with respect to SAP development. The SAP may be more advanced in some geographic areas or in some fisheries than in others, and thus be more detailed in terms of developing activities. For example countries not concerned with flyingfish need not necessarily have to review the elements of the SAP associated with flying fish. This may help to simplify and expedite the review process.

Recommedation 4.2 – A multi-chaptered approach should also be discussed with respect to SAP endorsement such that transboundary cooperation can be advanced as far as possible in different areas. A Strategic level action plan with overarching concepts and actions should form the core of the SAP incorporating the governance concepts and regional issues such as IMS-REMP while chapters on specific focus areas such as flying fish can address more detailed objectives and actions. This would allow countries to all sign on to the overarching concepts while also permitting countries to advance as much as possible in specific areas where they feel they can. The additional benefit of such an approach is lies in obtaining future funding, particularly from the private sector. International donors and the private sector may be more willing to support specific geographical regions or targeted fisheries etc. through specific activities as opposed to supporting the overall governance structure. In any case the more opportunities available to engage specific donor interests the more likely it will be to find funding support. It has been noted that the goal of the CLME is to foster a regional approach to cooperation and governance and to move away from the sub-regionalization of the past. Moreover, there is a risk that countries may not sign-onto an overarching concept chapter SAP, but rather choose to sign and implement only the sub-chapters they want to. This can mitigated by developing an overarching core of the SAP which appeals to the broadest number of stakeholders possible to ensure that there is cooperation and move to advance governance, but at the same time allowing those countries that can move ahead to do so. Moreover, with the level of cooperation which exists in the Caribbean region the goal of cooperation through an SAP should be to undertake activities as targeted and beneficial, and thus specific, as possible. There is a real opportunity with the CLME to not only advance regional effort but also have significant impact on focused areas.

This issue should not necessarily be decided immediately but rather could be discussed and decided at mid-year discussion of the SC (Recm # 1) or at the 4th SC.

Issue 5: Revising pilot project and case study workplans

The 3rd Steering Committee Meeting also recommended that the PCU revise (together with implementing agency) the pilot projects and case study work plans to introduce changes in order to optimize usefulness for SAP development by the end of January 2012 (CLME Project 2011d). This will be a key task for the PCU and may need longer the end of January to conduct as it could be fairly sensitive. Moreover, there are different ways of approaching the activities and it will be pilot project/case study dependent. It is also linked to recommendation 3.2 where pilot projects and case studies review their own activities to see where enhancement can be achieved.

Recommendation 5.1 – Extend the timeframe for analysis to the end of February 2012.

Recommendation 5.2 – Special attention should be given to review of the activities of the governance case study and the IMS-REMP sub-project when reviewing activities. CERMES would be well positioned to help develop an information package promoting the SAP (See Rec #3.1) as well as potentially helping with sensitization at a regional level. IOC-UNECSO running the IMS-REMP might also be able to assist with sensitization of senior people within the region through the IOC membership. Moreover, the late commencement of the IMS-REMP project may mean that there is greater opportunity to review the workplan in order to assist the development of the SAP.

Recommendation 5.3 - The revision of potential activities should be structured in terms of level of engagement that is possible to facilitate SAP development and endorsement. Each pilot project and case study should be approached to determine what category it can fall under. Likely because of the time frame, none would fall under category C., but it should be included for consistency sake.

- A. Pilot projects and case studies build awareness of the SAP and larger governance project beyond their specific mandate (where applicable). Build relations at the senior policy level within the nations where they are operating. (This requires some of their resources to be allocated towards this goal). Specific activities would include:
 - a) Taking every opportunity to present information on the SAP to build awareness at all levels when having meetings or attending conferences within their initial mandate both within the CLME project and in their formal roles. (pamphlets and slide shows the material to be

prepared by the PCU or other partner (*Rec #3.1*). *Requires no additional funds as everything is within existing mandates*.

- b) Expand the mandate of the pilot projects and case studies to specifically include awareness building activities for senior policy level persons. This is fairly well developed in some pilot projects, such as the flying fish, and less well developed in others. In those technical pilot projects where there is already a high degree of ministry involvement at the national level additional awareness building will require minimal redirection of activities and funds. In those pilot projects where there has been little involvement with national ministries and senior policy makers, efforts for the last 12 months will need to be partially redirected towards awareness building. *This will requires funds to be redirected to target awareness building*. An assessment is needed to determine what activities can be done by various pilot projects at the current level of engagement and expenditure.
- B. Pilot projects and case studies include awareness building for the SAP into their next 12 months of activities, which includes funding participation of the PCU in travel, meetings, or other awareness building activities. There is a significant redirection of funding and activities towards awareness building. Awareness building funds would remain with the pilot projects, however, some funds are spent towards directly assisting the U with things such as travel and logistics, preparing for meetings etc.
- C. Pilot projects and case studies redirect portions of their funding towards the PCU with the intention to build awareness and advance endorsement and adoption of the SAP. In this option pilot projects that are unlikely to achieve all their goals by the allocated time to meaningfully incorporate them into the SAP development would assist with the overall goals of the CLME project by redirecting a portion of their funding back to the CPU to be used to enhance SAP endorsement. *Requires redirection of funds to PCU other Partner.*

Issue 6 – Internal knowledge transfer is important to ensure a 'collective' understanding of the project.

One of the key objectives of the CLME project is to "improve the shared knowledge base for sustainable use and management of transboundary LMR (UNDP/GEF CLME 2009)". However, interviewees where generally not knowledgeable regarding what other projects or case studies were doing or their findings. To date, knowledge transfer between the pilot projects and case studies has been conducted primarily through PAG and Steering Committee Meetings where updates have given from the various sub-projects. The CLME website is set up to provide a description and updates of the pilot projects and case studies (www.clmeproject.org) ; however, no information is available under the headings and updates have to be found within meeting minutes, when available. This built in mechanism to access information on the projects and cases studies should be better used and new reporting mechanisms in place may make this easier to achieve. The Governance Issues case study is helping to synthesize some of the experiences as evidenced by its TDA report, recommendations and other publications (Mahon, McConney et al. 2010; Mahon, Fanning et al. 2011); however, this does not give details of the scientific processes involved in the studies.

Recommendation 6: Thought should be given to better transfer of knowledge and experiences between the pilot projects and case studies. This could be accomplished through the web-site, through announcements or briefs as achievements of the pilot projects and case studies become available,

through synthesis briefs as the SAP is developed, or project twinning if funds are available. As explained by the PCU, pilot projects and case studies themselves have access and training to update the website and they could be doing this with technical support from the PCU.

Issue 7 – Development of functioning NICs

The 3rd Steering Committee encouraged the development of functioning NICs and asked that the NFPs communicate success stories about NIC development to the rest of the project (CLME Project 2011d).

Recommendation 7.1 – NFPs see if their governments are developing any national committee to attend Rio Plus 20 in June 2012. This may be an opportunity to develop the NIC for the CLME.

Recommendation 7.2 – Partners, pilot projects and case studies should also assist NFPs in identifying key people and participate in helping to develop the NICs. This could be through inviting NFPs to meetings where different sectors are meeting which they might not otherwise meet. For example inviting a NFP from the Min. of Environment to a meeting where Min. of Fisheries people are attending.

Issue 8 – Sustainability and funding implementation of the SAP

16 months is not a great deal of time to mobilize funding for implementing an SAP such as the one anticipated for the CLME and in diverse region like the Caribbean and it would be unfortunate to lose the regional momentum developed by the CLME project due to a funding hiatus. It is highly possible that some of the governments will not be able to activate funding and will therefore require initial assistance to participate in implementation. Moreover, if private sector funding is to be sought for a longer term a strategy will need to be developed and relationships built over a longer timeframe.

Bridge funding should be sought from the GEF to ensure continuity and momentum for SAP implementation. Having already invested \$7million, there is a strong argument to invest an incremental amount to ensure SAP success.

Recommendation 8.1 – The project should begin to seek interim funding from GEF, or other international organizations, to being implementation of the SAP. Indeed, the project should begin the process of applying for bridge funding from the GEF as soon as possible so that it can be factored into their 2013 – 2014 budget.

Conclusions

The CLME project has achieved an admirable portion of the projected outputs (Annex D) based on the available funding, timeframe and past challenges. Moving into the second half of the project, there is strong management and coordination at the PCU level, functioning and effective partnerships and realistic workplans in place for termination and sub-projects. Moreover, there is a general atmosphere of enthusiasm and high level of participation from stakeholders, particularly national stakeholders.

The modest extension of the project by four months will help with the successful termination of the project, however, the timelines and workplan for the SAP is extremely tight. There cannot afford to be any additional delays, including at the national level in terms of consultations with line ministries and local stakeholders. The recommendations approved at the 3rd Steering Committee Meeting are thoughtful and practical, and appear feasible providing all partners, NFPs, and sub-project managers

have the capacity to implement them within the allocated timeframe. To ensure this occurs the PCU will have to coordinate closely with all partners.

To help ensure SAP implementation and the support of local governments it is likely that some additional bridge funding will be required, and this should be sought as soon as possible to maintain momentum.

Finally, there is an observation which may not be able to benefit the CLME project at this stage of development, but may benefit future projects. It may be worthwhile when developing such a complex project as the CLME concerning many different agencies and institutions as well as geographical areas and topics to develop a competitive process for identifying organizations to implement various elements of the project. Clearly, this cannot be done when those organizations are line agencies, but it could be done in other circumstances. Or better define the terms of reference and expectations of those organizations and partners at the project document level. Again, there are many reasons why this is challenging, however, it might assist in developing momentum for actions and activities early in the project implemention.

Annex A - List of Interviewees

Name	position	contact	skype	Dates Interviewed
		Ph (575) 664 0914 Mobile: (57) 314		16, 20 & 21 Nov, 2011;
	CLME Regional Project	5292462		2 Dec 2011; 15 & 20
Mr. Patrick Debels	Coordinator	E-mail: PatrickD@UNOPS.org	pdebels	Dec 2011
	CTA UNDP/GEF Tiza	te: 4477 68166713	pacocio	0001011
Peter Whalley	River	pdwhalley@btinternet.com		n
Peter windley	-	pdwnalley@btiliternet.com		n
	Project Coordinator for			
Karen McDonald Gayle	the Reef Pilot project	mcdgayle@gmail.com	klm.gayle	28-Nov-11
	Professor of Marine			
	Affairs and Director,			
	Centre for Resource			
	Management and	Tel 246-417-4570, Fax 246-424-4204		
Robin Mahon	Environmental Studies	rmahon@caribsurf.com	robinmahone	16-Nov-11
	Deputy Director			
	Caribbean Sea LME			
	Barbados Coastal Zone	tel: + 124 6228 5950		
Lorna Inniss	Management Unit.	linniss@coastal.gov.bb		17-Nov-11
	Coordinator for			
	Continental Shelf			
Terrence Phillips	Fisheries, CRFM	terrencephillips@vincysurf.com		18-Dec-11
		Tel: +39 06 57055233		
BAHRI Tarub (Ms.),	FAO-FIRF	tarub.bahri@fao.org		
	IOC(UNESCO) Secretary	Tel: +57-5-664-6399		
Cesar Toro	for IOCARIBE	c.toro@unesco.org	C_toro	13-Jan-12

	Programme Officer UNEP			
Alessandra Vanzella-	Caribbean Environment	Tel: 876-922-9267 Cell: 876-316-9134		
Khouri	Programme	avk@cep.unep.org		6-Dec-11
	Portfolio Manager	Tel: 41.22.917.84.73		
Katrin Lichtenberg	UNOPS	KatrinL@UNOPS.org		11-Jan 12
	Deputy executive			
	Director - Caribbean			
	Regional Fisheries	Cell: 501-624-8395		
Milton O Haugthon	Machanism (CRFM)	haughton@caricom-fisheries.com		20-Dec-11
	Prganizacion del Sector			
	Pesquero y Acuicola del	Tel: (503)22488340		
Mario Gonzales. Recinos	Tstmo Centro Americano	mgonzalez@sgsica.org		none
	Regional Technical			
	Advisor - UNDP regional			
	Coordinating Unit for	Tel + 507 302 4636		
Jose Vicente Troya	Latin America	Jose.troya@undp.org		23-Dec-11
	Secretariat for the Pacific			
	Applied Geo-Science			
	Commission (SOPAC),			
	Private Mail Bag, Suva,	<u>Tel +679 9406237.</u>		18 Dec 2011 & 28 Dec
Chris Patterson	Figi	christopher@sopac.org	scs_chris	2011
	Principal Technical			
	Advisor International			
	Waters UNDP/GEF 1 UN			
	Plaza 10017 New York,			15 & 23 Dec 2011 3
Andrew Hudson	NY USA	tel: +121 2906 228		January 2012

Annex B - References and Documents reviewed

CERMES (2011). The emerging ocean governance regime in the Wider Caribbean Region. <u>Policy</u> <u>Perspectives</u>. CERMES, CERMES. **1 November 2011**.

CLME Project (2009a). Caribbean Large Marine Ecosystem Project Adisory Group (PAG) Meeting Minutes - 28 November, 2009, CLME.

CLME Project (2009b). TOR for Steering Committee Members.

CLME Project (2010a). CLME Project Communication Strategy. 2nd SCM (Panama, 2010).

CLME Project (2010b). CLME Project Participation Strategy. <u>2 SCM CLME, November, 2010</u>. Panama, CLME.

CLME Project (2010c). <u>Detailed Financial Budget</u>. 2nd CLME Steering Committee 20 November 2010.

CLME Project (2010d). Minutes of the Second Steering Committee Meeting of the Caribbean Large Marine Resources of the Caribbean Large Marine Ecosystem (CLME) and Adjacent Areas - 17-18 November 2010, Panama. <u>SC Meetings</u>. Cartagena, CLME.

CLME Project (2011a). Caribbean Large Marine Ecosystem Project Regional Transboundary Diagnostic Analysis. CPU. Cartagena, Colombia.

CLME Project (2011b). <u>CLME Project Finances</u>. 3rd CLME Steering Committee Meeting 21-22 November, 2011, Cartagena, Colombia.

CLME Project (2011c). Presentations at 3rd Steering Committee Meeting, Nov 2011.

CLME Project (2011d). Recommendations of 3rd Steering Committee Meeting. <u>3rd SCM, 20-22</u> <u>November, 2011</u>.

CLME Project (2011e). SAP development and endorsement strategy <u>3rd Steering Committee Meeting</u>, <u>21-22 November</u>, <u>2011</u>.

CLME Project (2011f). Status of CLME NICs. 3rd Steering Committee Meeting, 21-22 November, 2011.

Debels, P. (2011a). CLME Regional Project Coordinator. *Personal Communication* 11 & 16 Nov; 2,15, 20 Dec.

Debels, P. (2011b). Regional Project Coordinator. *Personal Communication* 16, 20 & 21 Nov, 2011; 2 Dec 2011; 15 & 20 Dec 2011.

Donker, M. (2011). Combatting Living Resource Depletion and Coastal Aera Degradation in the Guinea Current LME through Ecosystem Based Regional Actions, GCLME Project UNIDO.

GEF (2006). GEF 4 Operational Strategy, Chapter 4 International Waters, Water Body Based Operation *Large Marine Ecosystems Projects*, GEF.

Giordano, M. and A. Wolf (2003). "Sharing waters: Post-Rio international water management."<u>Natural</u> <u>Resources Forum</u> **27**: 163-171.

Hearns, G. (2010). Analysis of Process Mechanisms Promoting Cooperation in Transboundary Waters. <u>Facutly of Graduate Studies, Resource Management and Environmental Studies</u>. Vancouver, University of British Columbia. **Ph.D.:** 301. Hearns, G. (2011). Caspian Sea Case Study. <u>Good Governance in International Waters</u>, (www.governance-iwlearn.org/documents).

Heileman, S. (2011). Consultancy to deliver the CLME Project Causal Chain Analysis (CCA) revision, CCA gap analysis and the update of the Reef and Pelagic Ecosystems Transboundary Diagnostic Analysis (TDA), CLME Project.

Hudson, A. (2011). Principal Technical Advisor International Waters UNDP/GEF. *Personal Communication* 15 & 23 December 2011, 3 January, 2012.

Hudson, A. (2012). Principal Technical Advisor International Waters UNDP/GEF *Personal Communication* 15 & 23 December.

Inness, L. (2012). Deputy Director Caribbean Sea LME, Barbados Coastal Zone Management Unit. *Personal Communication* 17 November.

IOC-UNESCO (2011). Design and Development of the Information Management System (IMS) and the Regional Environmental Programme (REMP) framework for the CLME Project.

Litchenburg, K. (2012). Senior Portfolio Manager EMO IWC. *Personal Communication* 12 January 2012.

Mahon, R. (2011). Professor of Marine Affairs and Director, Centre for Resource Management and Environmental Studies *Personal Communication* 16 November, 2011.

Mahon, R. (2012). Professor of Marine Affairs, CERMES. Personal Communication 16 November.

Mahon, R., L. Fanning, et al. (2011). CLME TDA Update for Fisheries Ecosystems: Governance Issues. C. Project.

Mahon, R., P. McConney, et al. (2010). Ocean Governance in the Wider Caribbean Region: Communication and coordination mechanisms by which state interact with regional organisations and projects., CERMES. **Technical Report No. 40. 84p**.

McDonlad, K. (2012). Project Coordinator of Reef Fisheries Pilot Project. *Personal Communication* 28 November.

O Haughton, M. (2012). Deputy executive Director - Caribbean Regional Fisheries Machanism (CRFM). *Personal Communication* 20 December.

Patterson, C. (2012). Secretariat for the Pacific Applied Geo-Science Commission (SOPAC). *Personal Communication* 18 and 28 December.

Pernetta, J. (2009). Reversing Evironmental Degradation Trends in the South China Sea and Gulf of Thailand - Terminal Report SCS Project.

Phillips, T. (2011). Consultancy to deliver the CLME Project Causal Chain Analysis (CCA) revision, CCA gap analysis and update of the Continental Shelf Ecosystem Transboundary Diagnostic Analysis (TDA). C. Project

Phillips, T. (2012). Coordinator for Continental Shelf Fisheries Pilot Project, CFRM. *Personal Communication* 18 December.

SOPAC (2011). Draft Rules of Operation for a Reallocation Pool for Unspent National IWRM Demonstration Project Funds. <u>Third Meeting of the Regional Project Steering Committee July 2011</u>. Rarotonga Island, Cook Islands. **SOPAC/GEF/IWRM/RSC 3/10**.

Toro, C. (2012). "Secretary for IOCARIBE, IOC-UNESCO."

Troya, J. V. (2011). Regional Technical Advisor - UNDP regional Coordinating Unit for Latin America. *Personal Communication* 23 December.

UN WSSD (2002). Johannesburg Plan of Implementation, Part IV Protecting and manageing the natural resource base of economic and social development, UN Department of Economic and Social Affairs, Division for Sustainable Development.

UNDP/GEF CLME (2009). Sustainable Management of the Shared Living Marine Resources of the Caribbean Large Marine Ecosystem (CLME) and Adjacent Regions - Project Document.

Vanzella-Khouri, A. (2012). Programme Officer UNEP Caribbean Environment Programme. *Personal Communication* 6 December.

Waterbury, J. (1997). "Between Unilateralism and Comprehensive Accords: Modest Steps toward Cooperation in International River Basins." <u>Water Resources Development</u> **13**(3): 279-289.

Annex C – Interview Questions and Guidelines.

1. Achievement of outputs and activities to date:

Where all expected outputs and activities (pilot projects and case studies) of the project delivered as programmed to date, on time and on budget?

If the project activities have not been on time or budget why?

Were the methods used to develop technical documents sound and effective to date?

Do the technical products have the scientific weight and authority in influence decision makers, national level? Ie do the TDA and pilot studies have scientific weight?(specific question for National Focal Points)

2. **Project completion and sustainability**

Are there any risks (financial, social-political, institutional, technical or environmental) which jeopardize achieve the project objectives of developing an:

(i) SAP which will be endorsed by the countries

(ii) institutional and procedural approach to LME level monitoring, evaluation and reporting

To ensure that there is continuity and that the intended impacts of the project are realized what aspects of the remaining project need to be emphasized, what additional measures need to take place, or what needs to change? (for example: greater coordination with national authorities, inform national authorities, secure post project sources of income, develop public sector involvement etc.)

2 Management and Coordination

Has the PCU applied management and coordination duties?

How has the PCU assisted or hindered your participation in the CLME Project? (for partners, institutions, and NFP).

Has the management and coordination at the PCU level of pilot projects, case studies and other activities been effective?

Has the management and coordination at the activity level of pilot projects, case studies and other activities been effective?

3. Financial Management

Have financial controls, including reporting, and planning allowed the project management to make informed decisions regarding the budget and allow for a proper and timely flow of funds for the payment of satisfactory project deliverables?

Actual project costs (and sub-component costs) compared to budged – how have they differed and why?

What are the major sources of co-financing (whom, cash/in-kind)?

How has co-financing been achieved? (specific question for NFP and co-financing doners).

4. Institutional Arrangements

What institutional factors are present to help achieve or undermine the project goals? How can these be improved upon?

6. Assessment of Monitoring and Evaluation Systems

Has monitoring and evaluation tools been effective (Reporting. SC meetings etc.) both for PCU and at the pilot project – case study level?

Budgeting and funding? Adequate and timely?

7. Country ownership - .

Have countries embraced the project and contributed to project activities? How?

What is the level of country commitment to facilitating financial and in-kind contributions to the project?

8. Stakeholder participation / public awareness

Has the project achieved its goals with respect to stakeholder participation and engagement ?

Were collaboration/interactions between the various project partners and institutions during the course of implementation of the project effective?

10 February, 2011

Annex D – Logframe

Target Unless otherwise sta Project Strategy	ted these Indicator	Base Line	are targets for Project completion	Means of Verification	Assumption
Goal: Sustainable	provision of goods and	services by the shared living ma	arine resources in the Wider Car	ibbean Region through robust	cooperative governance
Purpose (Objective): Sustainable management of the shared living marine resources of the Caribbean LME and adjacent areas through an ecosystem-based management approach that will meet the WSSD target for sustainable fisheries.	1. Agreement on and understanding of the transboundary problems of the CLME as they relate to management of living marine resources	• Preliminary agreement of transboundary issues has been reached during the project preparation phase. Pollution was a priority issue for many states but its form and transboundary component has not been established. With regard to LMR it remains a perceived issue. There is no general contaminant mo nitoring programme place for the CLME. Invasive species is recognized as a priority issue addressed through the GEF Globallast programme. The countries are in agreement regarding the need to address the LMR policy cycles at various level given their commit ment to sustainable fisheries, EBM and the WSSD targets.	• The countries agree on the scope and priority of the transboundary issues and develop interventions to address them with the SAP.	 Development of CLME Vision, LMR management and ecosystemic objectives. Endorsement of TDA Pre-feasibility studies of key interventions 	 The 23 CLME countries and the numerous CLME organizations/institutions are willing to work together under a single fisheries management and governance framework Baseline regulatory fisheries activities are implemented. Government commitments to development of sustainable fisheries, EBM approach and WSSD fisheries targets are maintained No serious events occur to modify current political stability in the region. Estimates of moderate economic growth and social stability.
	2. Regional and sub- regional governance framework(s) incorporating the key policy cycle components (decision making; implementation; review and evaluation; data and information; analysis and advice)	 The countries meet to discuss LMR issues at various fora and at various levels, with differing national focal points. Stakeholder involvement and inter-sectoral coordination is not structured Regional and sub-regional LMR governance frameworks are not articulated 	• Establish a regional LMR governance framework based on existing fora and organizations, which will link in with frameworks at national and sub- regional levels and give opportunity for stakeholder advocacy. The governance framework (s) will be linked to the necessary technical institutions and there should be	 Structured involvement of key stakeholders at national, sub-regional and regional levels in the decision making process. The concept of subsidiarity demonstrated between levels Agreed mandate for new framework MoUs between existing 	

SECTION II: STRATEGIC RES ULTS FRAMEWORK AND GEF INCREMENT

Target Unless otherwise sta Project Strategy	<i>ited these</i> Indicator	Base Line	are targets for Project completion	Means of Verification	Assumption
	are established and operational by end of project.		unbroken information and knowledge flow	organizations and institutions at regional and sub-regional levels	
	3. Decision support framework(s) agreed and applied for key transboundary fisheries and the CLME ecosystem.	• Decision frameworks have been developed for individual fisheries (flying fish) but have not been implemented. There is no general decision framework for the CLME LMR and ecosystem and there is no adaptive management framework.	• Decision frameworks and associated management plans developed for key transboundary fisheries at the regional and sub-regional levels. Output from a Regional Environmental Monitoring Programme and Integrated Information Management System used to support decision frameworks. Decision frameworks to reflect an adaptive management approach with threshold trigger indicator levels	 Management plans agreed with clear targets and interventions REMP and IMS developed and operationalised in 50% of participating states Management plans take into account environmental variability, including climate change. 	
	4. Regional planning framework (SAP) to address transboundary issues as they relate to LMR developed	• There is currently no comparable framework for the CLME	 A regional SAP to operationalise CLME vision and management objectives and strengthen the LMR governance by end of the project. The SAP will incorporate the associated fisheries management plans and commit the countries to short and medium term interventions The SAP is supported by bi- lateral and multi-lateral donors as well as the participatory states. The SAP has mechanisms in place to be monitored and evaluated bi-annually and recast every five years 	 SAP document endorsed by the participating states. M&E framework agreed Institutional framework agreed for coordination of SAP implementation 	

Target Unless otherwise sta Project Strategy completion	Indicator	Base Line	are targets for Project	Means of Verification	Assumption
OUTCOME 1: Analysis of Transboundary Issues relating to the management of LMR and Identification of Needed Actions usually bi-lateral or s regional, rarely regio Understanding of the transboundary nature fisheries such as the s lobster and conch as different stocks and l dispersion is becoming	nal. of spiny the arval	• Provisional agreement only on the perceived problems relating to the transboundary fisheries of the CLME. The knowledge regarding transboundary pollution (PTS, PoPs) is extremely limited. Transboundary issues are	• Agreement on the transboundary issues, their scope and priority, supported by strong, verifiable scientific evidence by the end of year two.	• TDA document finalized and endorsed by the countries	The countries are willing to share data and information on fisheries and the environment. Regional agreement on the findings of the TDA and listings of priority interventions Institutional framework established to manage and maintain the IMS.
 Agreement on needed interventions sub-regional and regional levels to address underlying an root causes for the major transboundary issues fish fisheries, but ma plans have not been implemented. 	at nd	• There is no consensus on how to address the transboundary issues and no clear governance framework by which to address them. FAO WECAFC Ad hoc working groups have been established for the spiny lobster and flying	• A listing of priority interventions to be implemented to address transboundary issues and management of transboundary fis heries from an EBM perspective	• Management plans for specific fisheries agreed with timetable and budgets (linked to outcome 3 - Pilot projects)	
3 Number of agreemen on target and limit catch reference point for transboundary fisheries with reference to ecosysten health. usually understood a managed at bi-lateral	s n	 Limited knowledge of the linkages between catch data, ecosystem integrity, and energy transfer between trophic levels. The knowledge regarding transboundary pollution (PTS, PoPs) is extremely limited. Transboundary issues are 	 Improved catch data for priority transboundary fisheries. Assessment of the impact of the Shrimp fishery on the ecosystem of the Brazil - Guianas shelf and mitigation measures agreed 	• Endorsed multi-lateral fishery management plans for large pelagics, flying fish, lobster, and shrimp and groundfish fisheries based on EBM approach.	

Target Unless otherwise sta Project Strategy	ted these Indicator	Base Line	are targets for Project completion	Means of Verification	Assumption
	4. An integrated Information Management System to track trends in fishery and environmental status as a tool for EBM is developed and operational by the second year of project implementation	 regional, rarely regional, levels Fisheries catch data compiled by FAO members is fragmented and not quality assured. No system available to enable data to be interrogated and analysed to support a decision support framework. Environmental data is not compiled regionally or sub- regionally and cannot be compared and contrasted with fisheries data. 	 Creation of a meta-database of CLME fisheries and environmental data and a database supporting the regional environmental monitoring programme and the decision frameworks. Agreement on institutional framework for the management and upkeep of database. 	• IMS launched and practitioners trained in its use. Countries providing data from implementation of the REMP	
Outcome 2: SAP Development and identification of reforms and investments for management of shared living resources	1. A long-term vision for management of shared MLR of the CLME underpinned by objectives and targets agreed to by participating countries	• There is no existing overarching agreement between the CLME countries on management of the transboundary fisheries. Existing agreements are bilateral, sub-regional or international and on a fishery by fishery basis. Ecosystem- based management approaches are not applied in the region.	• An achievable long-term vision for the development and management of the LMR of the CLME which addresses sustainable management, EBM and meets the WSSDs targets for fisheries.	• Vision incorporated into national fisheries policy and planning documents.	 Long-term political and financial commitment to SAP implementation National fisheries authorities are willing to harmonize management strategies for transboundary fisheries Countries are able to endorse SAP through national planning
fram time imp agre and inte top LM sup	2. A planning framework and timetable for implementation of an agreed set of regional and sub-regional interventions (SAP) top address priority LMR issues is supported by participating countries	• No regional plan exists which addresses the issues of management of transboundary LMR taking into account the EBM approach. Single species and fishery plans have been developed but in many cases implementation is weak.	• A SAP that will provide a road-map for regional development and management of transboundary fisheries.	 Signing of a regional SAP. Financial commitments by the signatory states to SAP implementation. Reference to SAP in the national fisheries policy and planning and in other related sector plans. 	 The countries and regional organizations are prepared to cooperate within a single framework The management framework is self financing beyond the life of the project

Target Unless otherwise sta Project Strategy	<i>ted these</i> Indicator	Base Line	are targets for Project completion	Means of Verification	Assumption
	fisheries governance framework with cross- sectoral linkages and vertical linkages to the sub-regional, national and local levels.	• There are numerous regional and sub-regional fora under which address management of the CLME fisheries to a greater or lesser extent (CARICOM, ACS, CFRM, ICCAT, WCAFC, OSPESCA). However their mandates are fragmentary and the inter-relationships are not clear. Involvement of stakeholders is not uniform and is often not structured	• A flexible governance framework based on existing institutions and organizations which will represent all Caribbean states and will provide clear linkages to the sub-regional, national and local levels and provide a mechanism for stakeholder involvement in the decision making process	• A signed agreement on the mandate of the regional governance framework and financial mechanism defined	• National funding is available for execution of the monitoring and evaluation framework, in particular the REMP
	4. M&E framework developed to track implementation of the SAP and the status of the CLME fisheries and environment, based on GEF IW indicators	• There are currently no agreed indicators for tracking trends in the fisheries and environmental status. National monitoring results are often incomparable and do not address transboundary issues. Monitoring programmes have evolved organically and often don't support the decision frameworks adequately.	• To develop and establish a monitoring and evaluation framework to track fisheries and environmental trends and to support agreed decision framework(s). The framework to include a regional environmental monitoring programme (REMP) based on selected environmental status indicators	• Monitoring data produced by the countries and incorporated into the IMS.	
	5. Functional inter- ministerial or inter- sectoral committees in each participating country support the SAP development process and lay the bases for future SAP implementation	• Inter-ministerial or inter- sectoral groups exist in several countries but are largely not focused on fisheries management issues, which still has a strong sectoral focus in almost all countries	• Effective inter-ministerial or inter-sectoral groups are successful in engaging a broad group of stakeholders in support of EBM LMR approaches	• Country reports to the Steering Committee	• A diverse range of stakeholders, including resource users at all levels and the private sector, understand the benefits of EBM approaches and are supportive of any required trade- offs
	6. Project web-site established and maintained	• CERMES and IOCARIBE host summary project web- pages	• A comprehensive, bi- lingual, information and discussion web site up-dated regularly and hosting GIS	 Web-site updated regularly Number of web-sites hits Media material 	• The local ISP can provide the band-width necessary to support the web-site and IMS

Target Unless otherwise sta Project Strategy	ted these Indicator	Base Line	are targets for Project completion	Means of Verification	Assumption
			elements of the IMS.	incorporated • Linkages from key web- sites and retrievable using Yahoo and Google	• STAG members are fully engaged in the TDA/SAP process and are willing to devote their time to the process
					• Countries and donors are willing to cooperate in development and support of the SAP
					• The size of the inception and Steering Committee meetings is limited and that representation will be at the sub-regional level.
	7. A Stakeholder Advisor Group (STAG) created	• No specific stakeholder group exists currently in any of the regional or sub-regional fisheries mandated organizations	• A regional forum at which the a wide range of stakeholders can express their views regarding fisheries management and be heard by heard by the key decision makers	 STAG meeting meetings STAG representation on SCM Comments from STAG on TDA and SAP 	2. A Stakeholder Advisor Group (STAG) created
	8. Friends of the Project group established	N/A	•An informal group of bilateral and multi-lateral donors supporting implementation of the SAP	 FoP meeting minutes Attendance of FoP at the SCM Support of SAP components by FoP members 	3. Friends of the Project group established
Outcome 3: Targeted projects aimed at strengthening the policy cycle and early implementation of the SAP	1. Agreement on pilot sites for the spiny lobster and reef fishery which will enable a range of governance models/management techniques to be tested under differing social, economic and environmental baseline conditions	• The CLME spiny lobster fisheries are subject to varying levels of governance at the national level. Size restrictions and close seasons are imposed and implemented through the suppliers rather than the local fishermen. Some self- governance pilot projects have been implemented at the local level but they are the exception rathet than the rule. At the sub-	• Establish a set of governance models and replicability plans for the Spiny Lobster and Reef fisheries at the national and local levels which can be replicated throughout the region. The spiny lobster model will be based on the sub- regional management plan developed based on local self- governance site-specific trials	 Agreed fisheries management plans with clearly defined roles and responsibilities at the national and local levels and fishery targets. Meeting minutes of fishery management bodies Dissemination of results at sub-regional and regional 	 Full national and local participation and support to demonstration projects Acceptance by the national authorities of the mandates of the local management bodies Strong support from and collaboration with regional and sub-regional fisheries management bodies

Target Unless otherwise sta Project Strategy	<i>ted these</i> Indicator	Base Line	are targets for Project completion	Means of Verification	Assumption
		regional level WECAFC has held a series of meetings to discuss transboundary implications of stock management and established an Ad hoc working group. • The reef fisheries associated with Marine Protected Areas are highly protected by legislation and fishing is excluded. The management of MPAs for multiple use and where fishing is allowed under strict management control is uncommon. Ownership and governance by the local communities in conjunction with the national authorities has not yet been trialed in the region.	 and which includes the creation of fishery councils. Full register of lobster fishermen and merchants and knowledge of markets Agreements formulated between fishermen councils and merchants to ensure sustainable spiny lobster fishery Models for reef fishery governance based on an ecosystem approach and incorporating the concept of fish refuges developed and ground- truthed at three sites with the aim to increase area of reef under marine management area status by 50% (Seaflower MPA, Pedro Bank and N.W. Hispaniola) 	fora.	
	2. Increased self governance and stakeholder involvement in decision making process in management of lobster fisheries and of multiple-use MPAs	• Stakeholder involvement at the local level is uncommon, although the need to bring them into the decision making process is universally recognized.	 To establish a degree self governance in the Spiny lobster and Reef fishery pilots which will ensure a sustainable fishery and reduce administration costs Area management plans for large marine areas agreed including zoning, close seasons, size limits and quotas supported by a clear decision framework with threshold values identified. Fishery councils established with broad stakeholder involvement including fishermen, fish merchants, 	 Composition of the fishery management bodies and meeting minutes. Local implementation and policing of management plans 	

Target Unless otherwise ste Project Strategy	<i>ted these</i> Indicator	Base Line	are targets for Project completion	Means of Verification	Assumption
			tourism industry, community groups, scientists and local government stakeholders. • Enforcement arrangements agreed and implemented at the local level • Improved compliance with existing fishery management regulations through review of enforcement mechanisms at selected sites		
	3. Improved understanding of the ecosystem in which the two fisheries are imbedded.	• Existing management plans do not take into account the impact of the fishery on the ecosystem or benefits of a healthy ecosystem, although both are acknowledged. There is a lack of scientific information about the interactions and the trophic linkages	 To review existing knowledge of the fisheries to determine appropriate fishery management tools to achieve sustainable mixed fisheries in a healthy robust ecosystem and then to test them through a monitoring and evaluation framework. Spiny lobster fishery data collection records improved with increased returns and improved measurement criteria (over the short project period observable improvement in the stock is unlikely) Comprehensive baselines created for reef fisheries including the identification of indicator species of environment health, sensitive areas and exploitable, over-exploited fish stocks and review of fishing practices and markets. Improved reef fish catch data including increased returns 	 New agreed fisheries management plans based on the EBM approach Final pilot project reports 	

Target Unless otherwise star Project Strategy	ed these Indicator	Base Line	<i>are targets for Project</i> <i>completion</i> and measured parameters and	Means of Verification	Assumption
			environmental status monitoring programme established.		
	4. Improved catch return data and fisheries information	• Spiny lobster catch data compiled by members of FAO and the WECAFC Ad hoc working group is available but coverage is incomplete and the data is inconsistent. There is no socio-economic data available relating to the lobster fisheries. Only limited catch data is available for reef fisheries.	 To agree a monitoring and evaluation framework for both the spiny lobster and reef fisheries which can be replicated throughout the region and will provide information not only catches but also the ecosystem status and socio-economic setting Models for monitoring programs with M PA effectiveness indicators developed and under implementation 	 Agreed M&E framework and database Training in sampling techniques and processing and data sampling Results from two years of pilot project implementation. 	
Outcome 4: Cost- Effective Project Management Arrangements Provided for	1. Establishment of regional Project Coordination Unit	N/A	• A fully operational and equipped PCU established in the offices of IOCARIBE in Cartagena,, Colombia within three months of project commencement.	 Local administration staff appointed PCU hosting agreement signed with IOCARIBE Filing and accounting systems set up and bank account opened. 	Timely and efficient project start- up with quick release of funds
	2 Appoint Chief Technical Advisor and regional technical experts	N/A	• An internationally recruited chief technical advisor appointed within one month of project commencement and regional technical experts within two months.	• Contracts signed	
	3. Cost-effective project delivery	N/A	• Delivery of project outputs to budget and programme at the required technical specification	 Steering Committee reports UNDP Progress reports measured against inception report 	

L

10 February, 2011

Annex E - Financial Reporting as of 2011

The following is the budget plan as presented and accepted at the 3rd Steering Committee Meeting (21-22 November 2011)

Note that there has been no notable alterations in line items from the initial budget, rather the timing of disbursements and expenses has altered, but always with the approval of the UNDP and the Steering Committee.

	LANNED BUDGET per YEAR (in <u>thousands</u> of US\$)						TOTAL spent /									
		2009 2010				2	011			20	2012		2013	budgeted		
Budget Categories		REAL EXPEN- DITURE	APPROVED @ 2nd SCM	REAL EXPEN- DITURE	2010 BALANCE	APPROVED @ 2nd SCM	UNDP- AMENDED AUG- SEP2011	REAL or estimated "REAL" EXPENDITURE FOR APPROVAL @ 3rd SCM	2011 BALANCE, FROM AMENDED BUDGET	APPROVED @ 2nd SCM	UNDP- AMENDED AUG- SEP2011	FOR APPROVAL @ 3rd SCM	2012 BALANCE AFTER AMEND- MENT	FOR APPROVAL @ 3rd SCM	US\$	% of total GEF grant
Project Governance		3	226	184	42	145		90		127		32		90	399	5,7
PCU Operation	24	337	427	526	-99	416		465		413		393]	173	1.917	27,3
Pilots and Case Studies			2.422	1.440	982	652	1	1.250	1	516		872	1	0	3.562	50,8
TDA Termination			81	47	33	11	1	47	1	38		0	1	0	95	1,3
SAP Formulation & Endorsement						89	1		1	74		90	1	0	90	1,3
Communication		2	31		31	74	1	58	1	65		9	1	8	77	1,1
Project Evaluation						58	1	15	1	46		0	1	25	40	0,6
International Consultants						30	1	6	1			0	1	0	6	0,1
Contractual Services Companies & Travel	5	207					1	14	1			16	1	6	249	3,5
Unops Management Fee (7%)	2	38	244	160	84	107	1	136	1	98		99	1	54	489	7,0
GRAND TOTAL	31	588	3.430	2.443	988	1.582	2.592	2.080	511	1.377	1.355	1.511	-156	355	7.008	100%
	RE	AL		REAL				"REAL"				PLANNED		PLANNED		
	APPROVED AT 2dn CLME SCM															
								RE	QUIRIN	G APPRO	OVAL A	T 3rd C		M		

Annex F – Qualifications of Evaluator

Glen Hearns, M.Sc. Ph.D Transboundary Water Initiative

> Institute of Asian Research 1855 West Mall University of British Columbia Vancouver, B.C. Canada V6B 2S8 Tel: (604) 848-4096 email: ghearns@gmail.com

Overview of Skills

- Strategic and decision analyst with fifteen years of experience specializing in multi-stakeholder resource management decisions and integrated assessment.
- Policy, legal, and institutional analyst.
- Facilitator, focusing on resolution of conflicts and negotiation, with over fifteen years experience at various governance levels with communities, local governments, First Nations, international level, and with diverse stakeholder groups.
- Local economic development and participatory planning specialist
- PhD thesis: governance models for shared resource.
- Extensive knowledge in the marine resources, water resources, genetic resources, fisheries and environmental management.
- Honed communications and research skills, including, writing, presentations, and designing workshops and forums.
- Computer knowledge in data base management and analytic tools.

Education

- Doctor of Philosophy in Resource Management (2010), University of British Columbia
- Masters of Science in *Environmental and Natural Resource Policy* (1990-1992), International Institute for Hydraulic and Environmental Engineering, Delft, The Netherlands.
- Bachelor of Applied Science in *Geophysics* (1983-1988), University of Waterloo, Ontario.

Languages

English, French, Spanish, Portuguese (working knowledge)

Summary of Professional Experience

Technical Advisor for International Waters, Transboundary Water initiative, University of British Columbia, 2008-present.

Associate, Compass Resource Management Ltd., 2007-present

Associate, EcoPlan International Decision, 2004-2007

Water Specialist and Project Coordination, Médecins Sans Frontières 2001-2003

Policy Analyst and dispute resolution, Apodaca Associates, 1999-2003

Research Fellow, Faculty of Law, UBC, 1993-1995

Selected Recent Consulting Assignments

Assessment of Institutional Arrangements for implementing IWLEARN 3 (2011) *Client: GEF/UNEP/UNDP – IWLEARN*

Lead Consultant: Developed key recommendations for institutional partners for IW LEARN3's "regional partners for learning". Work involved analysis of different institutions in Africa, the Americas, and Asia; interviews with UNDP/UNEP and GEF practitioners; interviews with institutions; and multi-attribute analysis.

UNEP Development and Implementation of Mechanisms to Disseminate Lessons Learned and Best Practices in Integrated Transboundary Water Resources Management in Latin America (Delta America) – Final Evaluation (2010)

Client and Partner Organization: UNEP/GEF

Lead consultant: Conducted the final evaluation for the DELTA America project (UNEP/GEF Project GF/1020-03-01). The evaluation included a review of all project documentation, financial planning and accounting, monitoring and evaluation mechanisms, analysis of framework logic, and correspondence. The evaluation also included interviews with both project proponents and stakeholders in Washington, Argentina, Brazil and Uruguay. (http://iwlearn.net/iw-projects/1426)

UNEP Managing Hydrological Risks in the lullemenden Aquifer System – Final Evaluation (2009) *Client: UNEP/GEF*

Lead Consultant: Conducted the final evaluation for the IAS project (UNEP/GEF/1030-03-06). The evaluation included a review of all project documentation, financial planning and accounting, monitoring and evaluation mechanisms, analysis of framework logic, and correspondence. The evaluation also included interviews with both project proponents and stakeholders in Niger, Mali and Nigeria (<u>http://iwlearn.net/iw-projects/2041</u>)

Good Practices and Portfolio Learning in GEF Transboundary Freshwater and Marine Legal and Institutional Frameworks (2008-present)

Client and Partner Organization: UNDP/GEF

Lead technical consultant: Provide technical analysis for assessing legal and institutional arrangements in large marine ecosystems (LME), groundwater, and surface freshwater management. The project develops and maintains networks of South South colleagues and practitioners to dialogue regarding key lessons learned, as well as training tools for institutinoal capacity building. Activites include research and analysis on beneficial practices to promote cooperation in shared transboundary waters and legal frameworks for implemting cooperation; analysis of institutional arrangements and functionallity; facilitiating dialogue and conferences on transboundary waters; interviewing and consulting with practitioners; developing learning tools for negotiation and simulation models; project design and budgetting.

Setting Priorities for Grizzly Bear Management – Decision Analysis (2009) *Client and Partner Organization: Ministry of Environment*

Lead consultant: Facilitated a workshop and developed tools to explore objectives and tradeoffs associated with priorities around grizzly bear management in the Province of British Columbia.

Developing Objectives for the Lower Peace River – Decision Analysis (2009) Client and Partner Organization: Ministry of Environment

Lead consultant: Developed a hierarchy of management priorities for the MOE in the Lower Peace River with respect to Site C dam development and combined the Provincial Conservation Framework with local concerns.

Structured Decision Making – Solid Waste Management, (2009)

Client and Partner Organization: Metro Vancouver,

Lead consultant: Responsible for identifying major decision objectives and performance measures and developing consequence tables for trade-off analysis in determining options for municipal waste.

Reservoir Management – Water Use Planning, (2008)

Client and Partner Organization: Metro Vancouver,

Lead consultant: Responsible for training and developing the capacity of the Greater Vancouver Water District to undertake a water use plan for the Capilano and Seymour reservoirs. Work included development of modelling and information processing.

Aquifer Management – Water Use Planning, (2008- on going)

Client and Partner Organization: City of Merritt and Ministry of Environment

Lead consultant: Responsible for developing a multi-objective water use plan for aquifer use in the arid region of British Columbia. This three year initiative involves many different stakeholders and user groups and is only the second such planning initiative in BC.

Collaborative Stewardship – Fish and Wildlife, (2008)

Client and Partner Organization: Ktunaxa First Nation Land Resource Agency

Lead consultant: Responsible for developing a program to promote collaborative stewardship of fish and wildlife between the Ktunaxa and the Province of BC, and the Government of Canada. Literature, interviews and facilitated workshops and meetings were undertaken in conducting the project.

Aquifer Management – Torreon, Mexico, (2008)

Client and Partner Organization: UN Habitat and SEDASOL

Lead consultant: Responsible for developing and delivering a stakeholder process for highlighting action areas in the management of a near surface aquifer accessed by the municipalities of Torreon, Gomez Palacio, Laredo, and Matamoros, with a combined population of 1 million people.

British Columbia – Alberta Transboundary Waters (2007-2008) *Client and Partner Organization:* BC Ministry of Environment

Consultant: Assisting the facilitation of a dialogue group at the provincial level with respect to managing transboundary waters between British Columbia and Alberta. All aspects of transboundary surface and ground-waters are being evaluated and discussed with respect to cooperation in management of water quality, quantity, and ecological integrity. Key elements involve research and analysis of technical problems and their administrative solutions.

Structured Decisions for Rural Care in BC - (2007-2008) *Client and Partner Organization:* Northern Health

Associate Consultant: Constructed a decision tool for Northern Health to determine care level and strategic options for maternity care in northern BC. The work involved interviews with different stakeholders including, care-givers, local community members, First Nations, Northern Health administration. The objective of the decision tool was to assist management in making complex decisions regarding the level of health care that can be provided in rural British Columbia.

Water Service Strategies for Medium sized Cities – Egypt - (2007) *Client and Partner Organization:* UN Development Programme

Lead consultant: Primary consultant assisting local Egyptian teams to analyse and determine strategies for water services and local economic development in medium sized cities in Egypt. As water is a key element to development success in Egypt, the project involved training local teams in the field to conduct a participatory process for determining strategies for water provision in relations to local economic development. Over four years, the project is to develop development programs for 40 medium sized cities.

Nile Basin Information Exchange Agreement – Regional - (2007) *Client and Partner Organization:* World Bank

Project Consultant: Responsible for resource analysis component in developing a 'road map' for initiating an information exchange agreement among the ten riparian countries of the Nile Basin. Work involved policy analysis as well technical hydrological data to develop a needs assessment and protocol for information exchange. The project in landmark, in that it is the first time in over 15 years of effort that the countries have agreed to move forward on a legal agreement.

Central Asian Water and Energy Commission – Regional - (2007) *Client and Partner Organization:* World Bank

Project Consultant: Responsible for reviewing regional water and energy conditions and developing a strategy for conflict avoidance through institutional arrangements, namely the establishment of a Central Asian Water and Energy Commission.

Strategic Planning for Resource and Economic Development – Veracruz, Mexico – (2006-2007) *Client and Partner Organization:* UN Habitat / Estado de Veracruz

Lead consultant, designer and facilitator for participative processes for municipal strategies for planning in Xalapa, Pozo Rico, Veracruz, Cordoba-Orizaba, and Coatzacualcos in Veracruz State, Mexico. Key responsibilities were designing hig- level stakeholder engagement processes incorporating decision analysis techniques for prioritisation of actions with respect to water supply and sanitation, municipal waste, and demand-management energy issues.

Nile Basin Negotiation and Decision-Making – Burundi – (2006)

Client and Partner Organization: UN Food and Agriculture Organisation.

Consultant in designing and delivering training workshops for forty negotiators and diplomats in the Nile Basin regarding decision-making for cooperative use of water resources. Key elements of the project were developing simulation tools to 'replicate' primary interests of basin states and conduct exercises to employ structured decision making techniques and analytical tools.

City Strategic Economic Development Planning (Strategy Planning and Local Economic and Resource Development,). 2004 to 2008

Lead Consultant: Developed and implemented public participation strategies and training for developing programs stimulating local socio-economic development. Programs involved strategic planning, participatory approaches, decision-making and action prioritization, institutional and governance analysis. Programs were primarily focused on poverty alleviation actions incorporating environmental, social and economic determinants. Strategic policies included water resource, waste policies, energy assessment, green space conservation, municipal services, economic incentive creation, public-private partnerships, developing economic enabling environments, governance and institutional reform, amongst others. Municipalities included:

- Matamoros, Mexcio UN-HABITAT Regional Office for Latin America and the Caribbean (Brazil) and SEDSOL.
- San Jose, Costa Rica Municipality of San Jose and UN-HABITAT Regional Office for Latin America and the Caribbean (Brazil)
- Dar es Salam, Tanzania, Municipality of Dar es Salam and Sustainable Cities Initiative, Industry Canada
- Valparaiso and Vina del Mar. Chile SERCOTEC and Sustainable Cities Initiative, Industry Canada
- Iloilo, Philippines, . Municipality of Iloilo and the Canadian Urban Institute

Multi-City Strategic Planning Conference for LED (LED, Strategy Planning, Decision Making) Quito, Ecuador 2005

Client and Partner Organization: UN-HABITAT, GTZ

Lead Consultant: Working with UN-HABITAT to deliver a three-day training event to on strategic planning for LED, including decision analysis and stakeholder engagement. Over 30 municipal officials from 7 different countries participated in the event in conjunction with a larger regional conference on LED and Latin America.

Publications

- Hearns, G., M. Klein, W. Trousedale, C. Ulrich, D. Butcher, C Meiwald, R. Lindstrom, S Eftekhary, J. Rosinski, O. Ramírez and A. Procyk (2009) Development of a support tool for complex decision making in the provision of rural maternity care, *Healthcare Policy*, IN PRESS.
- Hearns, G (2007) Mahakali Treaty: Looking through a new lens at water resource development, in F. Rotberg and A. Swain (eds) *Natural Resources Security in South Asia: Nepal's Water*, Institute for Security and Development Policy, University of Uppsala, Sweden (October, 2007)
- Paisley R, and G Hearns (2006) Lessons Learned and Best Practices from Recent Experiences with the Governance of International Drainage Basins, Texas Tech Law Journal, (*in press*)
- Hearns, G (2003) 'Monsters of the Forest: Fighting Ebola in the Congo', Médecins Sans Frontières Dispatches, Spring.
- Hearns, G. (1999) 'Genetic Resources: Law and Morality' in Proceedings of SOS AMAZONAS Symposium, FUNDES; Tomas Cipriano de Mosquera, Bogota November 16-20, 1999.
- Hearns, G. (2000) 'Intangible Fences: Intellectual Property Rights over Genetic Resources for Food and Agriculture', in C. Schofield et al. (ed) *Permeable Borders and Boundaries in a Globalising World: New Opportunities or Old Problems?* International Environmental Law and Policy Series, Graham & Trotman/Martinus Nijhoff.
- Hearns, G. (1998) 'Collective Action for the Protection of the Marine Environment: Experiences from the Baltic and Mediterranean Seas' in *Maritime Co-operation in the Asia Pacific*, AUS-CSCAP.
- Hearns, G. (1997) 'Transboundary Protected Area Coordination: Experiences in Central America and Opportunities in the South China Sea.' in G. Blake *et al.* (ed.) *International Boundaries & Environmental Security: Frameworks for Regional Co-operation*, International Environmental Law and Policy Series, Graham & Trotman/Martinus Nijhoff.
- Hearns, G. and Stormont, W. (1996). Managing Potential Conflicts in the South China Sea, *Marine Policy*, Vol. 20. No. 2. pp. 177-181.
- Hearns, G. and Tyedmers, P. (1995). Poseidon's Trident: Biological Diversity Preservation, Resource Conservation and Conflict Avoidance in the South Chins Sea, in G. Blake *et al.* (ed.) *The Peaceful Management of Transboundary Resources*, International Environmental Law and Policy Series, Graham & Trotman/Martinus Nijhoff.

Amezaga, J. and Hearns, G.(1991). *Chemical Time Bombs in the Mediterranean*. Mondial Alternative, Periodic Publications Series. Amsterdam. Autumn 1991

CLME Project (2009a). Caribbean Large Marine Ecosystem Project Adisory Group (PAG) Meeting Minutes - 28 November, 2009, CLME.

CLME Project (2009b). TOR for Steering Committee Members.

CLME Project (2010a). CLME Project Communication Strategy. <u>2nd SCM</u> (Panama, 2010).

CLME Project (2010b). Minutes of the Second Steering Committee Meeting of the Caribbean Large Marine Resources of the Caribbean Large Marine Ecosystem (CLME) and Adjacent Areas - 17-18 November 2010, Panama. <u>SC Meetings</u>. Cartagena, CLME.

CLME Project (2011a). Caribbean Large Marine Ecosystem Project Regional Transboundary Diagnostic Analysis. CPU. Cartagena, Colombia.

CLME Project (2011b). <u>CLME Project Finances</u>. 3rd CLME Steering Committee Meeting 21-22 November, 2011, Cartagena, Colombia.

CLME Project (2011c). Presentations at 3rd Steering Committee Meeting, Nov 2011.

CLME Project (2011d). Recommendations of 3rd Steering Committee Meeting. <u>3rd SCM, 20-22 November, 2011</u>.

CLME Project (2011e). SAP development and endorsement strategy <u>3rd</u> <u>Steering Committee Meeting</u>, 21-22 November, 2011.

CLME Project (2011f). Status of CLME NICs. <u>3rd Steering Committee Meeting</u>, <u>21-22 November</u>, <u>2011</u>.

Debels, P. (2011). Regional Project Coordinator. *Personal Communication* 16, 20 & 21 Nov, 2011; 2 Dec 2011; 15 & 20 Dec 2011.

Donker, M. (2011). Combatting Living Resource Depletion and Coastal Aera Degradation in the Guinea Current LME through Ecosystem Based Regional Actions, GCLME Project UNIDO.

GEF (2006). GEF 4 Operational Strategy, Chapter 4 International Waters, Water Body Based Operation *Large Marine Ecosystems Projects*, GEF.

Giordano, M. and A. Wolf (2003). "Sharing waters: Post-Rio international water management." <u>Natural Resources Forum</u> **27**: 163-171.

Hearns, G. (2010). Analysis of Process Mechanisms Promoting Cooperation in Transboundary Waters. <u>Facutly of Graduate Studies, Resource Management</u> <u>and Environmental Studies</u>. Vancouver, University of British Columbia. **Ph.D.**: 301.

Hearns, G. (2011). Caspian Sea Case Study. <u>Good Governance in International</u> <u>Waters</u>, (<u>www.governance-iwlearn.org/documents</u>).

Heileman, S. (2011). Consultancy to deliver the CLME Project Causal Chain Analysis (CCA) revision, CCA gap analysis and the update of the Reef and Pelagic Ecosystems Transboundary Diagnostic Analysis (TDA), CLME Project.

Hudson, A. (2011). Principal Technical Advisor International Waters UNDP/GEF. *Personal Communication* 15 & 23 December 2011, 3 January, 2012.

Inness, L. (2012). Deputy Director Caribbean Sea LME, Barbados Coastal Zone Management Unit. *Personal Communication* 17 November.

IOC-UNESCO (2011). Design and Development of the Information Management System (IMS) and the Regional Environmental Programme (REMP) framework for the CLME Project.

Lichtenburg, K. (2012). Senior Portfolio Manager EMO IWC. *Personal Communication* 12 January 2012.

Mahon, R. (2011). Professor of Marine Affairs and Director, Centre for Resource Management and Environmental Studies *Personal Communication* 16 November, 2011.

Mahon, R., L. Fanning, et al. (2011). CLME TDA Update for Fisheries Ecosystems: Governance Issues. C. Project.

Mahon, R., P. McConney, et al. (2010). Ocean Governance in the Wider Caribbean Region: Communication and coordination mechanisms by which state interact with regional organisations and projects., CERMES. **Technical Report No. 40. 84p**.

McDonlad, K. (2012). Project Coordinator of Reef Fisheries Pilot Project. *Personal Communication* 28 November.

O Haughton, M. (2012). Deputy executive Director - Caribbean Regional Fisheries Machanism (CRFM). *Personal Communication* 20 December.

Pernetta, J. (2009). Reversing Evironmental Degradation Trends in the South China Sea and Gulf of Thailand - Terminal Report SCS Project.

Phillips, T. (2011). Consultancy to deliver the CLME Project Causal Chain Analysis (CCA) revision, CCA gap analysis and update of the Continental Shelf Ecosystem Transboundary Diagnostic Analysis (TDA). C. Project. Phillips, T. (2012). Coordinator for Continental Shelf Fisheries Pilot Project, CFRM. *Personal Communication* 18 December.

SOPAC (2011). Draft Rules of Operation for a Reallocation Pool for Unspent National IWRM Demonstration Project Funds. <u>Third Meeting of the Regional</u> <u>Project Steering Committee July 2011</u>. Rarotonga Island, Cook Islands. **SOPAC/GEF/IWRM/RSC 3/10**.

Toro, C. (2012). "Secretary for IOCARIBE, IOC-UNESCO."

Troya, J. V. (2011). Regional Technical Advisor - UNDP regional Coordinating Unit for Latin America. *Personal Communication* 23 December.

UN WSSD (2002). Johannesburg Plan of Implementation, Part IV Protecting and manageing the natural resource base of economic and social development, UN Department of Economic and Social Affairs, Division for Sustainable Development.

UNDP/GEF CLME (2009). Sustainable Management of the Shared Living Marine Resources of the Caribbean Large Marine Ecosystem (CLME) and Adjacent Regions - Project Document.

Vanzella-Khouri, A. (2012). Programme Officer UNEP Caribbean Environment Programme. *Personal Communication* 6 December.

Waterbury, J. (1997). "Between Unilateralism and Comprehensive Accords: Modest Steps toward Cooperation in International River Basins." <u>Water</u> <u>Resources Development</u> **13**(3): 279-289.