



Activities of the Caribbean Environment Programme of UNEP in the Wider Caribbean since May 2005 in support of ICRI



The Regional Co-ordinating Unit of UNEP in Kingston, Jamaica (UNEP-CAR/RCU) for the Caribbean Environment Programme (CEP) continues to serve as the regional contact for the International Coral Reef Initiative (ICRI) in the Wider Caribbean Region (WCR), which includes 36 States and Territories.

Activities also respond to the provisions of the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean (Cartagena Convention, 1983) and its three Protocols on response to oil spills (1983), specially protected areas and wildlife (1990) and land-based sources and activities of marine pollution (1999).

Since the last ICRI General Meeting in 2005, the major activities of the CEP in support of ICRI's objectives have been:

1) International Coral Reef Action Network (ICRAN):

UNEP-CAR/RCU is responsible for coordinating the implementation of ICRAN activities in the Wider Caribbean. Since 2004 the major ICRAN activity in the region has been the USAID/UNF Mesoamerican Reef Alliance (MAR) project which is implemented on the ground by international (i.e. CORAL, UNEP-DTIE, WRI, WWF and ReefCheck) and local partners, in close coordination with relevant regional initiatives such as the WorldBank/GEF/CCAD Mesoamerican Barrier Reef System Project.

As the ICRAN MAR Alliance enters its' third year of implementation, the results achieved to date under the components of Watershed Management, Sustainable Tourism and Sustainable Fisheries have forged a concrete mechanism which is capitalizing on existing initiatives and fostering strategic alliances in the region.

In August 2006 implementing partners, relevant stakeholders and agro-industries officials met at the Third Technical Oversight Committee meeting to present advances, to discuss opportunities for collaboration during the last year of the project and for the continuation and expansion of current activities.

Under the *Watershed Management* component, project partners UNEP-WCMC, WWF, and WRI have achieved significant progress in their activities:

- Following the successful delineation of all watersheds discharging on the Mesoamerican reef, a geographic database on the physical environment of the MAR region has been assembled, and utilizing state of the art GIS spatial technology developed by NASA and NOAA, hydrologic analysis of runoff, sediment and nutrient delivery, and total suspended solids (TSS) to coastal waters has been implemented;
- using several scenarios of past, current, and future land-cover change it has been possible to evaluate the influence of human activities on sediment and nutrient delivery, as well as the implications of future development paths and policy options for the MAR region;
- the GIS tools and information produced to date are being used to encourage key stakeholders to adopt a suite of better practices that can reduce impacts on the coastal and marine resources (e.g. reduce the presence of priority pesticides and to control soil erosion). Project partners have been able to bring on board key agribusiness players such as CropLife, Dole and Chiquita, who have signed Memoranda of Understanding for the implementation of Better Management Practices (BMPs) in their fields. In coordination with WWF, these corporations are finding new useful and cost-effective ways to sustain productivity and reduce any possible negative impacts that the use of pesticides has on their products, plants, water, soil, workers, nearby communities and the environment. WWF has engaged in conversations with some of the other major agricultural companies in the region and are currently developing partnerships for the adoption of BMP's in bananas, citrus, palm oil, pineapple and sugar cane crops throughout the 4 countries of the Mesoamerican region; and
- From 15-18 August 2006, a successful information/training Regional Watershed Management Workshop was conducted at Galen University in Belize, with participation of senior managers, decision makers and technical experts from throughout the region. WRI and UNEP-WCMC shared the outcomes of GIS modeling and scenario analysis, while strengthening capacity in the region to undertake such analyses. The workshop also served to brief regional participants on the current advances in the development of partnerships with the agribusiness for the adoption of better practices. Participants viewed this regional forum as an excellent opportunity to review scenarios of land cover change throughout Mesoamerica, while raising awareness of the linkages between human activities on the land and threats to the reef. Based on the preliminary results presented by WRI and WCMC, WWF will select a pilot watershed to collect specific data to validate the models and to pursue implementation of BMPs.

Over the last two years, partners of the *Sustainable Tourism* component, CORAL, WWF, UNEP-DTIE, have facilitated a stakeholder-led process in the marine tourism industry resulting in:

- development of comprehensive conservation and safety standards for marine recreation activities such as scuba diving, snorkeling and boating operations. The development of such recreation standards has been a highly participatory with interactive online collaboration of more than 200 stakeholders in the industry, who voted and added input into the formation of industry led standards;

- local partners now poised to begin a testing program to measure the effectiveness of the standards and voluntary code of conduct, which have received unanimous support throughout the region. Marine recreation providers in each of the four MAR countries will assess their business performance based on the requirements of the standards, identifying both strengths and gaps in environmental performance and sustainable business practices;
- action plans for standards implementation and industry led projects currently underway, with CORAL and WWF funding micro grants to organizations executing conservation projects with a one year duration under this theme. As part of the standards testing phase, incentives for participation have been developed. Pilot sites training workshops with a focus on developing action plans for the implementation of the voluntary standards were held in Mexico, Honduras and Belize;
- UNEP-DTIE continues to disseminate the handbooks on “practical guide to good practice: managing environmental issues in the marine recreation sector” and “supply chain engagement for tour operators, three steps toward sustainability”. Besides their English and Spanish versions, these materials were translated into French and distributed to 163 French-based tour operators involved in Mesoamerican tourism. As continuation of their outreach efforts, UNEP-DTIE will continue to build awareness and getting commitments to the developments and the adoption of the regional code of conduct, and continue to disseminate information on best practices in the marine recreation sector to European and American Based Tour Operators.

Within the *Sustainable Fisheries* Component, project partners, WWF and Reef Check combine efforts to promote the adoption of better fishing practices (BFP) and tourism-based alternative livelihoods. For the past two years, project partners have engaged community stakeholders in education and awareness activities on the need to adopt better fishing practices, and have trained them in ecological and socioeconomic monitoring of reef health using the Reef Check protocol:

- Reef Check trains fishermen to monitor local fish populations in managed and unmanaged areas with the monitoring manuals developed in Spanish and English. This monitoring protocol covers resource management, and coral reef assessments by community stakeholders. Workshops on this protocol have been successfully held throughout the region with over 50 persons trained in Mexico and Honduras, 30 in Belize and 20 in Guatemala;
- WWF has developed best practices manuals in Spanish for Lobster Fishing (English version currently under translation). For finfish, the aim is to promote ecosystem-based fisheries management and increase fishermen capacity to engage in community-based alternative livelihood tourism activities. Workshops held in Belize, Guatemala, Honduras, and Mexico have focused on training fishermen in implementing the the BFP’s. Although there is not much industry interest in purchasing “green (eco-friendly harvested)” lobster, WWF is working with major wholesale buyers of lobster such as Darden to support sustainable-harvested lobster. As a strategy to create

alternative livelihoods, workshops for the development of a code of conduct for whale shark diving will be implemented.

Internationally recognized as the best environmental initiative of 2005 and featured in the November 05 edition of Scuba Diving Magazine, the ICRAN MAR initiative continues to make trendsetting advancements across all three components with a focus on creating and fomenting already existing partnerships in the region.

The role of the *Coordination* unit has been of key importance to support project performance, and this is a result of close follow up, constant communication, and transparency with implementing partners, donors, and stakeholders in the region. The high dynamism of the project activities and the challenges they produce, have called for adopting an adaptive approach that allows addressing changes in the implementation mechanisms as appropriate. Under the supervision of the Project Coordinator, and the Coordination Unit at UNEP-CAR/RCU, this approach has facilitated the reorientation of investments —consequent with the project's objectives— as necessary.

As follow-up to ICRAN activities already implemented in the Wider Caribbean, the following activities are underway:

- a project was developed in 2006 for the economic valuation of coral reef in St. Lucia with the World Resources Institute (WRI) and building upon the *Reefs at Risk in the Caribbean* report launched in 2004;
- support was provided to the *GCRMN Sub-regional Nodes: i)* the Southern Tropical America (STA) Regional Node, coordinated by INVEMAR in Colombia to continue monitoring for one more year in Colombia, Costa Rica, and Venezuela (Brasil participates with separate funding); *ii) Eastern Caribbean Node* to reactivate the node and using ReefCheck teams and methodology, *iii) Netherlands Antilles Coral Reef Initiative (NACRI)* to support monitoring efforts in the countries of Saba, Saint Maarten, Saint Eustatius, Bonaire and Curaçao. Additional information from the Tropical Americas nodes can be found in the GCRMN report to the ICRI CPC; and
- as a result of ICRAN Action Phase in the Caribbean, a compilation of better practices and lessons learnt is being documented by UNEP-CAR/RCU and will be made available for dissemination during 2007.

2) The Caribbean Marine Protected Area Network and Forum (CaMPAM)

Since its reactivation and expansion at the **White Water to Blue Water Conference** in 2004, the network has benefited from its close partnership with the Gulf and Caribbean Fisheries Institute (GCFI):

- CaMPAM sessions were held at the 58th GCFI Symposium in 2005 and MPA managers and fishers from the region had the opportunity to share information and experiences from their own sites;

- the MPA database was redesigned, web-based and made more user friendly and currently it is being updated and populated;
- CaMPAM was represented at the Latin American Marine Ecology Congress in Chile in 2005 and participants discussed the potential application of the CaMPAM Network and Forum model to the Tropical Eastern Pacific Marine Corridor and other subregional MPA initiatives; and
- Coordination was developed with the UNESCO-World Heritage Center on the nomination of marine WHS in the Caribbean.

Additionally CaMPAM continued the following activities:

- **The fifth Training of Trainers course on MPA management** was held in February 2006 with the 3-year grant of US \$200,000 from the MacArthur Foundation, to continue the training initially funded through ICRAN and to increase the number of trained MPA managers in the region under the CaMPAM Training of Trainers (ToT) Programme. Ten participants from E speaking countries were trained and to date local follow-up training has been conducted in Belize, Guadeloupe, French Guyana, and additional courses are planned for the Bahamas, Grenada, Jamaica and St. Vincent & the Grenadines. The fourth training course was convened in late 2004 for Spanish speaking-countries. Following the implementation of the local courses, an evaluation of the entire ToT will take place for impact and needs assessment and for updating of the programme, and subsequently finalization of the updating of the manual. This will be done with funding from the MacArthur Foundation and The Nature Conservancy.

- **The Regional Training Workshop on Socio-economic Monitoring for Caribbean Coastal Management (SocMon Caribbean)** was convened in Soufriere, St. Lucia, 9 – 13 May 2005 with logistical assistance from the Soufriere Marine Management Area (SMMA) and the Department of Fisheries of Saint Lucia and funding from NOAA and UNEP-CEP. Eighteen participants from 8 countries: Anguilla, Antigua & Barbuda, Grenada, Jamaica, Mexico, Saint Lucia, Saint Vincent & the Grenadines, and Trinidad & Tobago were trained in using "Socioeconomic Monitoring Guidelines for Coastal Managers in the Caribbean: SocMon Caribbean", to complement their existing monitoring programmes. Local socioeconomic monitoring activities are now underway in

- Xcalak NP, Mexico
- Point Sable, St. Lucia
- Shoal Bay/Island Harbour MP, Anguilla
- Montego Bay MP, Jamaica
- Cades Bay Marine Reserve, Antigua & Barbuda
- SMMA, St Lucia
- Sandy Island Oyster bed MP, Grenada

- **Small Grants Fund for promoting sustainable fishing practices and alternative livelihoods for fishers.** This pilot programme was initiated in 2005 with funding provided from the Swedish International Development Agency (SIDA), and included an exchange programme. Selected proposals include: "Identification of Reef Fish Spawning Aggregations Sites in Los Roques Archipelago National Park, Venezuela", "Identification of Spawning Aggregations Sustainable Management of multi-species Reef Fish Spawning Aggregations: Exchanging Fisher Experiences (Belize-Venezuela)", Promoting Sustainable Fisheries in Kuna Yala, Panama (and exchange

Mexico-Panama), and Exchange Programme on Sustainability of Coastal Shrimp Fishing within two Caribbean Countries: the Dominican Republic and Cuba.

3) Integrating Watershed and Coastal Area Management (IWCAM) in the Small Island Developing States (SIDS) of the Caribbean

The five-year GEF/UNEP/UNDP Project Integrating Watershed and Coastal Area Management (IWCAM) in the Small Island Development States (SIDS) of the Caribbean, with a value of USD \$22 million commenced implementation in 2006. The thirteen participating SIDS are: Antigua and Barbuda; The Bahamas; Barbados; Cuba; Grenada; Dominica; Dominican Republic; Haiti; Jamaica; Saint Kitts and Nevis; Saint Lucia; Saint Vincent and the Grenadines; Trinidad and Tobago.

4) Other UNEP-CEP activities of relevance:

- the GEF/UNEP Project “Reducing pesticide run-off to the Caribbean Sea” commenced implementation in 2006 to reduce the use of, and reliance on pesticides in agricultural activities through the development and implementation of national action plans. In addition to national reports, the project will develop mechanisms for regional cooperation and strengthen institutional, policy and legal infrastructures. Colombia, Costa Rica and Nicaragua will benefit directly from the project although efforts will be made to share experiences and lessons learnt with all the countries of Central America;
- wastewater management continues to be a key focus of the Protocol on Land-based Sources and Activities of Marine Pollution (LBS). Following the preparation of the sewage needs assessment and the publication of CEP Technical Reports 45 (Sewage Needs Assessment Manual) and 46 (Use of Submarine Outfalls), two pilot projects were initiated in Saint Lucia and Jamaica to develop national planning mechanisms to control marine pollution from domestic sewage, and detailed project plans for improving infrastructure for sewage and wastewater management. Two regional training workshops within the framework of the UNDP UNEP GEF project on the rehabilitation of Contaminated Bays (Cuba) took place in 2004 and 2005, and several study tours have been completed. A lessons learnt workshop is scheduled for 2006 and a follow up GEF Project is under discussion;
- the successful completion of the Hurricane Mitch Project in Central America resulted policy dialogue and the formulation of solutions involving NGOs, private sector, local communities and Governments. The integrated watershed management plans developed for Nicaragua, Honduras and Guatemala provide opportunities for the development of new projects and activities to implement these plans. A follow up pilot project for the Tela Watershed in Honduras received financial support from Sida and this new project is reflected in the 2006/2007 work plan;
- in support of the UNEP Global Programme of Action, National Programmes

of Action (NPAs) were completed in Jamaica, Trinidad & Tobago, and Saint Lucia. A Regional Workshop on NPAs was convened in conjunction with the second ISTAC Meeting held in Mexico in 2005 and a CEP Technical Report on Lessons Learnt in NPA Development in the Caribbean published. Continued collaboration with NOAA and UNEP GPA took place in the development of strategies for the financing of NPAs and linking them to existing environmental strategies such as the National Environmental Management Strategies (NEMS) of the OECS. The increased regional and global focus on marine litter as a major pollutant is reflected in planned activities for the 2006/2007 biennium; and

- assessment in 2006 of marine invasive alien species in the Wider Caribbean, including review of relevant national and local agencies and legislation available, in collaboration with UNEP Regional Seas Programme, GISP and CABI.

5) Other Relevant Regional Initiatives

White Water to Blue Water Initiative.

Following the WW2BW Conference a number of partnerships have been developed and are ongoing. Additional information and outputs of this on this important regional initiative can be found on the WW2BW partnerships website at www.ww2bw.org

The 59th Annual Meeting of the Gulf and Caribbean Fisheries Institute (GCFI)

The meeting will be held 6-11 November 2006 in Belize. Sessions will focus on presentation of scientific and technical papers and workshops on subjects related to fisheries status and management, fish species population and ecology, marine science education, essential habitats, biology and management of fish spawning aggregations, and science and management of MPAs. UNEP-CEP and GCFI is facilitating the attendance of a number of MPA managers and fishers from the Wider Caribbean Region with funding from SIDA, UNEP, NOAA, and Environmental Defense. For more information contact www.gcfi.org

A special MPA workshop in support of CaMPAM objectives will also be held with support from NOAA to address connectivity issues. The workshop will address how satellite remote sensing can be applied in management of Marine Protected Areas (MPA), including assessing environmental processes that lead to connectivity. The discussion will include examples of river plumes, currents, and implications of global change for region. The workshop will serve as a starting point to explore new tools and partnerships among people working in the region.

GEF Pipeline Project – Sustainable Management of the Shared Living Marine Resources of the Caribbean Large Marine Ecosystem (LME) and Adjacent Regions

This project is being developed by UNDP and IOCARIBE with GEF funding and is currently completing the needs assessment and regional consultative process.

UNWTO/UNEP/UWI Regional Conference on Building Tourism Resilience in Small Island Developing States, The Bahamas, 7 – 9 June, 2006. About 250

academics, researchers, bureaucrats, tourism and hospitality professionals, industry practitioners, NGOs and other regional and international funding agencies met towards maximizing economic benefits and sustaining tourism in development. This conference emanated from the recognition that while international tourism is at the forefront of most economies in small island developing states and is a suitable alternative to generating foreign exchange and aiding in development, these States continue to face critical issues that contribute to the vulnerability of their tourism sector and the natural environment on which this economic activity is dependant. There was also the recognition of the need to clearly identify critical tourism vulnerability issues with new ideas and coordinated strategies towards maximising and sustaining the economic benefits of tourism in SIDS and towards using tourism as an instrument in diversifying economies, stimulating export growth, promoting private sector development, reducing poverty levels and creating employment for their people. The conference resulted on a *Call to Action* to enhance the resilience of the region's tourism sector, targeted to regional Ministers of Tourism, private sector organisations and tourism businesses, and regional and international funding and technical agencies.

29th Annual Caribbean Tourism Conference (CTC-29) and Twelfth Meeting of the CTO Sustainable Tourism Technical Committee (STTC), The Bahamas, 20-26 October 2006. The Conference, organized by the Caribbean Tourism Organization (CTO) will review the progress on the Sustainable Tourism Development Strategy for the Caribbean and the Regional Tourism Policy Framework. The STTC was established as an advisory body for the further development of the CTO's Regional Sustainable Tourism Strategy.

Green Globe International Conference and Caribbean Green Tourism Conference “Enhancing the Business of Tourism – The Path to Sustainability”, Jamaica, 1-3 November 2006. The 2006 edition is organized by the Caribbean Alliance for Sustainable Tourism (CAST) assisted by its parent organization, the Caribbean Hotel Association, and Green Globe Asia Pacific (GGAP). The goal of the conference is to determine the sustainability priorities and actions. Themes include energy conservation, wastewater treatment, sustainable building design, and air quality. www.caribbeanhotelassociation.com