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the Protocol Concerning Pollution from Land-
Based Sources and Activities (LBS) in the Wider
Caribbean Region

Mexico City, Mexico, 22 – 26 August, 2005

DRAFT WORKPLAN AND BUDGET

**SUB-PROGRAMME ON THE
ASSESSMENT AND MANAGEMENT OF ENVIRONMENTAL
POLLUTION
IN SUPPORT OF
THE PROTOCOL CONCERNING LAND-BASED SOURCES
OF MARINE POLLUTION
FOR
2006-2007**

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Assessment and Management of Environment Pollution

Background

1. This workplan and budget covers ongoing activities and those to be developed under the Assessment and Management of Environmental Pollution (AMEP) sub-programme of UNEP's Caribbean Environment Programme (CEP) for the 2006-2007 biennium in support of the Protocol to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region (Cartagena Convention) Concerning Pollution from Land-based Sources and Activities (LBS Protocol). This workplan and budget is presented to the Third Meeting of the Interim Scientific Technical and Advisory Committee of the Protocol to the Cartagena Convention Concerning Pollution from Land-based Sources and Activities (LBS/ISTAC) for comment and revision. Following endorsement by the LBS/ISTAC this workplan will be recommended to the Twelfth Intergovernmental Meeting on the Action Plan for the Caribbean Environment Programme and Ninth Meeting of the Contracting Parties to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region (12th IGM), for approval.

2. As a subprogramme of the CEP, the AMEP workplan and budget is developed for a two-year period within the context and realities of the Wider Caribbean and considering other relevant initiatives. The following projects and activities are designed to meet the needs of the continuing development of the LBS Protocol, as well as to support its current objectives, and the needs of the Governments for ratification and implementation. Many of the projects presented below are ongoing from the 2004-2005 biennium. This is largely due to the significant AMEP workplan that was approved at the 11th IGM and the projected continuing workload for these projects. In addition, the proposed workplans of the two Regional Activity Centres (RACs), as recommended by the Second ISTAC, have been incorporated into this proposed workplan.

Projects and activities

(a) Programme coordination

Objectives

3. The objectives of the coordination of the AMEP/LBS programme are to:

- a) promote ratification of, and accession to, the LBS Protocol by the Contracting Parties to the Cartagena Convention and gain support for the programme in collaboration with the LBS RACs
- b) ensure that the formulation and implementation of the programme activities satisfy the requirements and needs of the LBS Protocol
- c) enhance coordination, collaboration and communication with organizations relevant to the AMEP/LBS Protocol objectives
- d) oversee the day-to-day activities and general coordination of the various AMEP projects, and
- e) coordinate with the Directors of the two LBS RACs to ensure a cohesive and coordinated workplan in support of the LBS Protocol.

Activities

4.The AMEP Programme Officer at CAR/RCU will continue to provide overall coordination and supervision of the implementation of the programme activities for the next biennium. The CAR/RCU Programme Officer for the CEPNET subprogramme will also provide assistance in the area of information management while the Coordinator of CAR/RCU will continue to play a critical role in promoting ratification of the Protocol.

5.The LBS Protocol will continue to serve as the regional instrument for the implementation of the GPA in the Caribbean. Coordination with other regional programmes and organizations and with existing regional or global initiatives relevant to AMEP/LBS will be promoted and sought. Fund-raising efforts for the programme will be continued in consultation with the Coordinator of CAR/RCU and in coordination with relevant Governments, donors and partner organizations.

6.The Secretariat will convene the Fourth Meeting of the LBS/ISTAC where the AMEP Programme Officer will present the AMEP/LBS workplan and budget for the biennium 2008-2009, in keeping with the objectives of the Protocol and within the context of the CEP Strategy.

7.The Secretariat will undertake activities promote ratification/accession to the Protocol Concerning Pollution from Land-based Sources and Activities, (LBS) for the countries of the WCR in collaboration with the LBS RACs, offering the member states of the Caribbean Environmental Program the necessary information about the protocol and its annexes.

8.The Secretariat will intensify efforts to mobilize funding to support the projects entitled “Joint Regional Project for the Development of Safe Recreational Water Environments in the Wider Caribbean Region” and “Joint Regional Project to Assist Governments of the Wider Caribbean Region in Classifying their Waters so as to Facilitate the Implementation of the LBS Protocol” both of which will be facilitated by the two LBS RACs.

9.The following provides a summary of new and ongoing projects for the 2006-2007 biennium.

Ongoing Projects

(b) Reducing Pesticide Run-off to the Caribbean Sea (Global Environment Facility Project)

Background

10.Annex IV to the LBS Protocol addresses the regionally accepted hypothesis that non-point source pollution from agriculture is a significant contributor to marine pollution in the Wider Caribbean Region. In May 1999, CEP received a GEF/Project Development Fund (PDF) Block B grant to develop a project that would improve pesticide management in four countries to ultimately reduce pesticide run-off to the Caribbean Sea. The original four participating countries were Colombia, Costa Rica, Nicaragua and Panama.

11.The PDF guided the development of four national plans to improve pesticide management, thereby reducing run-off to the Caribbean Sea. National committees of stakeholders developed these national plans with facilitation by the Ministries of the Environment. A regional workshop held in 2001 concluded with a GEF Project Brief with the submission of the Project Brief to the

GEF Secretariat for approval in 2002 for three of the original four countries. Panama opted not to continue with the project. The May 2002 meeting of the GEF Council approved the project for funding.

Objective(s)

12. The main objective of the project is to protect the marine environment of the Caribbean Sea by reducing the use of, and reliance on, pesticides in agricultural activities and improving overall pesticide management. The project will assist Colombia, Costa Rica and Nicaragua to implement management practices to control the use of pesticides in the agricultural sector.

Activities

13. The activities for the project will centre around three main components with various subcomponents:

i. Project Coordination

This component includes the establishment of the project steering committee, project management team, project advisory panels on monitoring and evaluation, and an education and training subcomponent. This component of the project also involves the development of demonstration project criteria and approval of the demonstration projects.

i. Demonstration Projects

Demonstration projects will be implemented in each of the three project countries and will focus on improving agricultural practices on different sized farms (subsistence, low intensity and high intensity) using control farms for comparison. Once the project sites and activities are selected, training will be conducted with farmers on measures for reducing pesticide runoff. Such measures will include integrated pest management, good agricultural practices and integrated waste management. Training will also be provided in monitoring and assessment to establish a baseline and for site evaluation. The demonstration farms will be also monitored for crop yields, worker safety, pesticide runoff and cost of production compared to the control farms. This will be used to assess the effectiveness of measures employed.

i. Institutionalising Improved Pesticide Management and Strengthening Capacity for Reducing Pesticide Runoff

This component contains two subcomponents. The first is designed to sustain the improvements that will have been gained in the project for reducing pesticide runoff. This component will: determine the relevant legislative and policy changes necessary to provide incentives for improving agricultural practices; establish a crop certification programme; conduct a train the trainers programme; and establish a coastal monitoring programme. The second subcomponent is designed to further disseminate the lessons learnt throughout the WCR. This will be accomplished through publication of case studies, development of a project website, convening of a regional workshop, and the development and dissemination of education and awareness materials.

(c) Integrating Management of Watersheds and Coastal Areas in Small Island States in the Caribbean (IWCAM – Global Environment Facility project)

Background

14. A full-size project has been developed within the context of the GEF Operational Program 10 with two GEF PDF B grants of US\$ 316,000 and co-financing of US\$ 296,050. The fully costed Project Brief, entitled “Integrating Watershed and Coastal Area Management in Small Island Developing States of the Caribbean”, was approved by the GEF in the May 2004 Council Work Program. Total project financing will be GEF US\$ 14 million and co-financing (from the Secretariat of the Cartagena Convention, CEHI, UNDP, Governments of participating countries, and other partners) amounting to approximately US\$ 22 million.

15. The Project’s main focus is on demonstrating integrated watershed and coastal area management systems for thirteen Caribbean SIDS. The demonstrations will stress the need for the development of a cross sectoral management approach which, would address the requirements for institutional and infrastructural realignment; adoption of modalities for sectoral participation; capacity building; linkages to social and economic root causes of environmental degradation; and the overall need for sustainability.

16. The GEF operational strategy recognizes the special conditions and needs of Small Island Developing States to develop more integrated approaches to land and water management as a mechanism to address threats to their water resources. GEF Operational Programme No. 9 targets six major issues, three of which are addressed by this project: coastal area management and biodiversity; land and marine-based sources of pollution; and protection of water supplies.

17. Integrating Management of Coastal Areas and Small Island Developing States in the Caribbean (IWCAM) is being co-executed by CAR/RCU and the Caribbean Environmental Health Institute (CEHI). UNEP is co-implementing the project with the United Nations Development Programme (UNDP).

Objectives

18. The objective of the full-size project is to strengthen the capacity of the participating countries to implement an integrated approach to the management of watersheds and coastal areas. The long-term goal is to enhance the capacity of the countries to plan and manage their aquatic resources and ecosystems on a sustainable basis. The project recognises the integrated and interlinked nature of watersheds and coastal areas in small islands and aims to develop a more integrated and coordinated management approach, both at the national and the regional levels, with a strong emphasis on an expanded role for all stakeholders within a participatory management framework.

Activities

19. The Project comprises four components (1) Project Management and Co-ordination; (2) IWCAM Demonstration Projects; 3. Strengthening Capacity for IWCAM; 4. Sustaining Support and Capacity for IWCAM) consistent with the global objectives and the need to address the root causes identified during the project preparation process.

20. Component 1 will be divided into three sub-components of supporting activities, which will enable project management and coordination, regional monitoring, and the strengthening of regional partnerships.

21. Component 2 will support the demonstration of working examples of IWCAM within a defined watershed and/or coastal system boundary, addressing priority issues as identified in the root cause analysis.

Sub-component	Country	Title of demonstration project
A: Water Resource Conservation and Management	St. Kitts and Nevis	Rehabilitation and Management of the Basseterre Valley as a Protection Measure for the Underlying Aquifer
	St. Lucia	Protecting and Valuing Watershed Services and Developing Management Incentives in the Fond D'or Watershed Area of St. Lucia
B: Wastewater Treatment and Management	Antigua and Barbuda	Mitigation of Groundwater and Coastal Impacts from Sewage Discharges from St. John
	Bahamas - Exuma	Marina Waste Management at Elizabeth Harbour in Exuma, Bahamas
	Dominican Republic	Mitigation of Impacts of Industrial Wastes on the Lower Haina River Basin and its Coast
C: Land-use Planning, Zoning and Alternative practices	Bahamas - Andros	Land and Sea Use Planning for Water Recharge Protection and Management in Andros, Bahamas
	Trinidad and Tobago	Land-Use Planning and Watershed Restoration as part of a Focused IWCAM Demonstration in the Courland Watershed and Buccoo Reef Area
D: Targeted Model IWCAM	Cuba	Application of IWCAM Concepts at Cienfuegos Bay and Watershed
	Jamaica	An Integrated Approach to Managing the Marine, Coastal and Watershed Resources of east-central Portland

22. Component 3 addresses the need to strengthen institutional capacity, while improving and reforming policy and legislation to provide better support for effective implementation of IWCAM in the region. Component 3 will also identify deficiencies and barriers to IWCAM, develop solutions to the barriers, and identify incentives to encourage national and regional institutions to establish appropriate institutional frameworks for IWCAM.

23. Component 4 will assist in implementing the reforms addressed under Component Three through effective awareness raising and training at various levels of society and government.

24. The GEF has also allocated resources within the IWCAM to assist the Project countries in developing National Integrated Water Resources Management Plans.

25. During project implementation a strategy will be developed to ensure the successful replication of demonstration projects and the sharing of lessons and best practices within the region and with other SIDS.

(d) Training for Rehabilitation of Contaminated Bays

Background

26. This project was designed to address one of the priority issues for the region, that of eutrophication resulting from excess inputs of nutrients to the coastal zone and adjacent international waters. Funding was originally provided by GEF to develop pre-feasibility studies for the rehabilitation of the heavily contaminated bays of Kingston Harbour in Jamaica and Havana Bay in Cuba. The project also included a knowledge-sharing component and was to be implemented over five years.

27. Only Cuba undertook to proceed with national project activities that included the design and construction of appropriate wastewater treatment facilities at a demonstration level, including nutrient controls and sludge utilisation. Under the project requirements, discharges from the treatment facilities designed and constructed under this project, must comply with the provisions of the LBS Protocol. In addition, a regional component to the project was designed to allow for capacity building in sewage treatment, nutrient removal technologies, and sludge reuse and disposal.

28. UNDP manages the bilateral aspects of the project with Cuba while CAR/RCU provides the regional coordination and knowledge-sharing component of the project for the Wider Caribbean Region. The regional activities ensure coordination of effort and compliance with the Cartagena Convention and its protocols relevant to project areas.

Objective(s)

29. The objective is to support the design and construction of appropriate wastewater treatment facilities and nutrient control. Discharges from any facilities designed and constructed under this project are to comply with the provisions of the LBS Protocol.

Activities

30. Final regional workshop. Following the completion of the Havana project, a regional workshop will be convened by UNEP-CAR/RCU in coordination with the participating national agencies to review lessons learnt from the treatment technologies employed at the site. This three to five-day workshop will have regional implications for technology transfer for future activities in the region. (NB: The actual dates of implementation for this workshop are dependent on the conclusion of the national Cuban project.)

31. Opportunities to replicate the national Cuban project and/or to develop a broader regional project for possible submission to GEF will be explored.

(e) Second Regional Overview of Land-based Sources and Activities in the Wider Caribbean Region

Background

32. In 1994, CEP concluded the first Regional Overview of Land-based Point Sources in the Wider Caribbean Region (CEP Technical Report No. 33). As such, the overview data is more than ten years old and is approaching the end of its usefulness to CEP Governments as a current information source. The second overview will confirm or reconfirm priority sources and pollutants in the Wider Caribbean through the identification of source categories and their discharges. Descriptions of source categories will be detailed, as well as new or emerging sources of concern, including urban run-off, solid waste and leachate from solid and hazardous waste landfills. Although the project will, for financial purposes, utilize existing information, the most current data will be sought for the project.

Objective(s)

33. The objective of the project is to provide an update of available information on all point and non-point source discharges into, or impacting, the Convention area (as established by the Cartagena Convention and LBS Protocol). The second overview will establish a new baseline from which to measure progress under the LBS Protocol and will confirm or reconfirm priority sources and pollutants in the Wider Caribbean including heavily contaminated bays.

Activities

34. Data collection. Using the developed methodology, new updated data will be collected in consultation with LBS focal points in the region, as well as other regional or global organizations;

35. Organize a sub-regional experts workshop to review first draft of updated Technical Report # 33; and

36. Submission and approval of updated Technical Report # 33 to the 12th IGM.

37. The LBS RACs will be responsible for coordinating this activity.

(f) Support to the further development of Technical Report 33.

Background

38. During the biennium 2004-2005, the Secretariat implemented the project entitled "Second Regional Overview of Land-based Sources and Activities in the Wider Caribbean Region" within the agreements of a MoU signed between Cimab-RAC and CAR/RCU, which was completed in June, 2005. During the implementation of this project, which is expected to be completed in early 2006, it was recognized that additional support was required to finalize the updated report. The activities presented are therefore expected to build upon ongoing work by CIMAB that includes the revision of existing methodologies for the characterization of pollution originating from land based sources in the WCR, the elaboration of an updated methodology to be used region wide for the characterization of land-based point sources of pollution, and the

development of guidelines for estimating the load from non-point sources of pollution into coastal areas.

Objectives(s)

39. The primary focus will be on the collection and documentation of all existing data in the region which will involve literature compilations and the use of the chosen methodology in collecting additional pollution data throughout the region. Existing data will be supplemented from ongoing studies and related project activities under the Caribbean Environment Programme and other relevant regional initiatives. The findings will be presented in various visual formats including informative maps developed with GIS.

Activities

40. The main activities are expected to include:

- Review of 1994 Report and assessment of suitability of original pollutant indicators and sources.
- National Surveys of pollutant loading data and environmental quality data.
- Literature review and compilation of electronic database for Bibliography.
- Regional Consultative Workshop for the Wider Caribbean Region.

Expected Results

41. The expected results are:

- Electronic Bibliography of pollutant studies and environmental quality studies in the region compiled.
- National Reports on the state of the marine environment including pollutant inputs prepared using recommended methodology.
- Recommendations made on the most appropriate information system(s) to be used for presenting data compiled in the report.
- Increased collaboration between UNEP-CAR/RCU Secretariat, Regional Activity centres, LBS focal points and collaborating institutions.

(g) Evaluate Needs Assessment Guidance to Develop National Plans for Domestic Waste Water Pollution Reduction through Implementation of Sewerage Needs Assessment Pilot Projects in the Wider Caribbean and Effective Dissemination of the Guidance Document

Background

42. This is a follow up to the **Sewage Collection and Treatment: Implementing Annex III** which was designed to assist Contracting Parties and other CEP member countries in meeting sewage-specific obligations contained in the LBS Protocol. The general obligations, which are partially met through the project, were expected to involve the development of plans for the reduction and control of pollution from sewage.

Objective(s)

43. The project aims to assist in the development of national plans for two pilot countries to comply with the requirements of Annex III to the LBS Protocol with regard to domestic wastewater. It also involves the testing of the national sewage treatment needs-assessment guidance developed as an output of the earlier project.

Activities

44. The proposed activities are expected to include the:
- Completion of projects in two pilot countries.
 - Preparation and dissemination of case studies.
 - Mobilization of additional funding to facilitate two additional pilot projects.
 - Elaborate possible regional proposal for consideration by GEF and other funding agencies based on results of pilot projects.

(h) Small Grants Programme — Best Management Practices for Agriculture*Background*

45. Annex IV to the LBS Protocol, on agricultural non-point sources, calls for the development of national plans that include education, training and awareness programmes for agricultural workers on “structural and non-structural best management practices”. The activities already completed or under way by CEP include CEP Technical Report No. 41, which surveyed best management practices currently in use in the region and the GEF project (described above) on Reducing Pesticide Run-off. This project will implement small-scale demonstration activities on the appropriate use of fertilizers, alternative crop cultivation methods and environmentally friendly livestock management techniques.

Objective(s)

46. The objective of this project will be to pilot innovative practices through practical application and disseminate the results to other countries and localities of the Wider Caribbean. Under this project, AMEP proposes to operate a small grants programme (maximum amount of US\$5,000) to assist in the implementation of small pilot demonstration projects. Participants will be expected to provide a counterpart contribution (in-kind or cash) and provide a project outline and summary for regional dissemination. At the end of the project period, a summary document will be prepared and the results will be available via the CEP/GPA Clearinghouse node.

Activities

47. The project will enter a full implementation phase during this biennium with EARTH University being responsible for coordinating the programme.

48. There will be a continuous review of project proposals and signature of agreements with national project implementing agencies, following which, the national implementing agencies will proceed to develop their projects according to the agreed workplans.

49. Project summaries and results will be submitted by implementing agencies. Results will be compiled and disseminated. The secretariat proposes that this program is extended to other member countries provided that additional funding can be mobilized and becomes an ongoing project activity.

New Projects

(i) Development of National Programmes of Action (NPAs) – Phase 2

Background

50. The marine and coastal ecosystems of the wider Caribbean particularly coral reef systems are under increasing threats from point and non-point sources of pollution, over exploitation, conflicting resource usage and alteration of the coastal environment as a result of current coastal development practices.

51. Fragmentation of governmental authorities and the competing interests of all sectors (governmental, agricultural, development, tourism) and stakeholders within any given watershed have hindered the development of a common vision for growth and development. This project will demonstrate the viability of using a collaborative approach to the development and implementation of NPAs utilizing an integrated planning approach tailored to country needs.

52. The project will build upon lessons learnt from earlier pilot projects for the development of NPAs in Jamaica, Saint Lucia, Trinidad and Tobago and Barbados. It will also provide coordinating support to the new regional partnerships between UNEP-CAR/RCU, the GPA Secretariat and the GPA Node of NOAA which is aimed at facilitating the development of NPAs in a potential total of fifteen countries of the Wider Caribbean Region. This partnership will allow for more effective use of resources, both financial and human, to refine existing models and guidelines for the preparation of NPAs. These will be disseminated through regional workshops to promote replication and increase the national and regional institutional capacity to implement the NPAs within the national development agendas.

Objectives

53. The overall goal of the project is to build capacity in CEP countries for the development and implementation of NPAs to assist in the protection of the Caribbean marine environment from pollution entering from land-based sources and activities. Specific objectives of this phase will include:

- To assist in mobilizing resources and partners (including the private sector) for the implementation of specific projects for NPAs already developed;
- To assist countries in the development of financial strategies and the promotion of public-private partnerships, which can be used to develop and implement selected projects;
- To facilitate the development and implementation of NPAs or similar strategies and action plans in other member countries.

Activities

54. The main activities to be done will include:

- assessing the willingness and capability of additional countries to develop an NPA;
- supporting willing countries with an initial assessment of ongoing or planned policies, expenditure, legislation and other activities that meet the objectives of the GPA;
- supporting the convening of initial stakeholder consultative meetings at the national level;
- promoting the development of full scale NPAs, including pilot projects, in selected countries; and
- integrating pilot projects being developed under GEF funded projects among others within the policy framework of an NPA.

(j) Support to the Activities of the Regional Activity Centres in Promoting Integrated Management of Solid and Hazardous Wastes, and an Integrated Life Cycle Approach to the Management of Chemicals in the Wider Caribbean

Background

55. Decision XII of the 11th IGM of the Cartagena Convention encouraged the Secretariat to continue to cooperate with, as appropriate, ongoing activities by the Basel Convention in the areas of used oil and used lead acid batteries in the Wider Caribbean Region through the Basel Convention Regional Centres, particularly through the Regional Centres for the Caribbean and Central America located in Trinidad and Tobago and El Salvador respectively, and with the LBS RACs in Trinidad and Tobago and Cuba.

56. It further recommended the development of a Regional approach for the integrated management of hazardous wastes and solid wastes in the Caribbean, in support of the Action Plan, the Cartagena Convention and its Protocols, the Basel Convention, and the MARPOL 73/78 Convention.

57. This project will be carried out by the Regional Activity Centres of the LBS protocol, Centro de Ingeniería y Manejo Ambiental de Bahías y Costas (CIMAB), Cuba and the Institute of Marine Affairs (IMA), Trinidad and Tobago working in collaboration with the Basel Regional centres in El Salvador and Trinidad and Tobago.

58. Further modification of the proposed activities may take place following discussions with the BASEL Secretariat on the development of a GEF PDF B proposal for the integrated management of wastes and chemicals in African, Pacific and Caribbean SIDS.

Objective(s)

59. The focus will be on the development and implementation of joint integrated strategies for the reduction and control of pollution of the marine environment from solid and hazardous wastes.

Activities

60. The main activities to be undertaken are:

- Development of a regional strategy on best management practices to control run-off and leachate from sanitary landfills and recycling operations that may impact coastal areas or marine watersheds;
- Guidelines on the use of waste to create artificial reefs (tyres and shipwrecks.);
- Sub-regional training workshops for the Caribbean and Central America.

61. The Secretariat will continue to collaborate with the BASEL Secretariat on ongoing projects in the areas of used oil, used lead acid batteries and outdated pesticide stockpiles.

Expected Results

62. The expected results of this project are:

- Regional Strategy to control run-off and leachate
- Guidelines on the use of waste to create artificial reefs
- Increased ratification/accession to the LBS protocol
- Increased collaboration between UNEP-CAR/RCU Secretariat, BASEL Secretariat and their respective regional centres

(k) Capability Development in Geographic Information System for LBS/RAC-Cimab

Background

63. The effective implementation of the LBS Protocol will be enhanced through continued technical support by the two LBS RACs to member Governments. One such area of support will be to assist Governments to improve the presentation and dissemination of data and information to the general public and key decision makers.

64. Many of the proposed and ongoing projects within the 2006/2007 Work Programme involve the generation of environmental quality and pollution data. The ability of the LBS RACs to effectively compile, process and present this data will be critical. The strengthening of the GIS capability of RAC CIMAB will contribute to this need.

Objective(s)

65. The main objective is to develop the institutional capabilities of the LBS/RAC-Cimab in the use of Geographic Information Systems (GIS).

Activities:

66. The main activities to be undertaken will include:

- A Needs Assessment for RAC CIMAB
- Acquisition of Hardware and software
- Installation of upgraded systems
- Conducting of Training programme(s)

- Development of a regular monitoring, maintenance and evaluation programme.

Expected results:

67.The expected results of the project include:

- well established GIS computing environment
- trained base of technicians and professionals in the development of GIS database and GIS use of information
- GIS products available for dissemination and demonstration
- Metadata catalogue of archived and new data and information, and
- increase in the number and variety of services offered by LBS/RAC-Cimab to CEP and member countries.

(I) Regional Network in Marine Science and Technology for the Caribbean: The Know-why Network

Background

68. There are several issues of common concern that need to be addressed in order to facilitate the entry into force and implementation of the LBS Protocol. Following Recommendation V of the Second Meeting of the Interim Scientific Technical and Advisory Committee (ISTAC) to the Protocol concerning pollution from land-based sources and Activities in the Wider Caribbean, held in Managua, Nicaragua May 12-16 2003 to update the UNEP study 1994, UNEP CAR/RCU began a project in order to update Technical Report No 33 “The regional perspective on pollution from land-based sources and activities in the Wider Caribbean”. This project, which was facilitated by RAC CIMAB was designed to provide additional existing data and information regarding the discharge of pollution from land based sources into the marine environment of the WCR.

69. In order to further more effectively utilize this data to guide decision making and to facilitate implementation of the LBS Protocol, UNEP CAR/RCU, RAC-CIMAB, RAC-IMA, Marine Research Institute of the Ministry of Environment of Colombia (INVEMAR), IOCARIBE and the Swedish International Development Agency-SIDA have developed a partnership called “Regional Network in Marine Science and Technology for the Caribbean: The Know-why Network”. The Ocean Data and Information Network for IOCARIBE and Latin-American Regions – ODINCARSA, an IOC/IOCARIBE Programme, are expected to provide additional expertise and technical support.

70. The LBS-RACs will provide scientific and technical support to the Secretariat including the compiling, updating and disseminating data and reports to the States and Territories, as well as to the relevant partner organizations participating in the Programme. Technical advice will also be provided on crucial components such as the development and evaluation of assessment and monitoring programmes, and of existing and proposed information systems.

Objective(s)

71. The overall objective of this project is to implement articles VI, VIII and IX of the LBS Protocol, namely monitoring and assessment and development of information systems and reporting. The specific objectives are to:

- update existing information of all point and non-point sources of pollution into the Convention area through additional scientific analysis;
- enhance the capacity of the CEPNET by developing the pollution information module; and,
- enhance countries capacity for using other technologies, such as remote sensing and mapping of pollution data and information.

Activities

72. These are expected to include:

- identification, compilation and synthesis of existing and new information on point and non-point source discharges into, or impacting, the Wider Caribbean;
- implementation of monitoring programmes in selected hotspots, rivers and coastal areas. Such programmes will provide additional data and information that will allow the definition of a new baseline and serve as a benchmark for measuring the impacts of projects and activities undertaken within the framework of the LBS Protocol;
- Establishment of a collaborative framework or mechanism for consultation and collaboration in the development of monitoring and assessment methodologies and application of appropriate environmental quality standards;
- An analysis of the key issues pertaining to transboundary pollution, including a needs assessment and identification of possible solutions within the framework of the LBS Protocol; and
- Training and capacity building in planning and management of pollution and water quality data and information management.

(m) Promotion of the LBS Protocol

Background

73. Several meetings and workshops held under the CEP have reiterated the importance of providing decision makers in Government Ministries and Agencies with the scientific, technical and economic knowledge to undertake the decision of ratifying or acceding to the Protocol, so that the Protocol will come into force. The importance of increasing the visibility of the protocol among a wide range of stakeholders has also been emphasized.

74. In response to this need, two parallel sets of activities have been developed by the two LBS RACs. The first is a demonstration project facilitated by RAC IMA, which will identify the socio-economic advantages of ratifying/acceding to the LBS Protocol, in which the main consequences for the Caribbean countries in implementing or not implementing the Protocol would be studied. Funding for this activity was provided from the US Department of State, Bureau of Oceans and International Environmental and Scientific Affairs and will result in the development of guidelines for the ratification and implementation of the LBS Protocol.

75. The second activity, facilitated by RAC CIMAB was aimed specifically at promoting the ratification/accession to the LBS protocol in the Spanish speaking countries of the Wider Caribbean Region with funds provided by the Swedish Government. The main activities that were proposed were a national workshop in Cuba and a sub-regional workshop in Costa Rica. The summary of the sub-regional workshop can be found in UNEP(DEC)/CAR WG.28/INF.4.

76. In direct response to the recommendations of this sub-regional workshop, additional financial support was mobilized to conduct national promotional workshops in those Spanish speaking countries. This will be done in collaboration with UNEP GPA and NOAA to ensure synergies with proposed national workshops for development of National Programmes of Action.

Objective(s)

77. The main objectives of this project are to:

- assist countries to meet legislative, technical and regulatory requirements necessary to ratify and implement the LBS Protocol
- increase the exchange of information and cooperation among the participants of the various workshops to facilitate the future establishment of a Regional Activity Network (RAN)

Activities

78. The main activities to be undertaken include:

- development of an educational brochure on the LBS Protocol for decision-makers in government ministries and agencies by RAC IMA;
- dissemination of the results of two case studies to government decision-makers in the Wider Caribbean by RAC IMA. The case studies will focus on assessment of legislative, regulatory and technical requirements for the implementation of the LBS Protocol, particularly as it relates to public health, and social and economic development in the context of sustainable tourism;
- convening of a regional workshop to present the results of two case studies to government decision-makers in the governments in the region and to representatives of the LBS Regional Activity Network (RAN) by RAC IMA;
- production of an educational DVD on the LBS Protocol aimed at the general public by RAC IMA;
- convening of national promotional workshops for Spanish speaking countries by RAC CIMAB; and
- production of additional promotional material on the LBS protocol in English, Spanish and French by the Secretariat with support from the two LBS RACs.

(n) Tela Project

Background

79. In connection with the post MITCH extreme event, watershed management plans have been developed for Honduras, Guatemala and Nicaragua. In this context, the Tela Municipality has been successful in mobilizing the various stakeholders in the identification of problems and developing of a plan of activities. These experiences are of interest to share also with other municipalities in the region and in preparing their response to possible future similar events. The local community organization will work on reforestation and works at basin levels to upgrade the river, since it causes floods and contamination problems in the Port of Tela (a tourist city with a population of about 50,000 inhabitants).

80. The Honduras Water Platform organization is willing to collaborate with the initiative. The focus will be to promote management and implementation of activities in the river basin that in a better way than earlier take adverse events into consideration.

Objective(s)

81. To promote the sustainable development of the communities of Miramar and La Esperanza De Santiago in the Banaderos River Basin through the implementation of conservation measures for the protection of natural resources. These measures will focus on the reforestation of the River Basin, which will assist in the protection of the Banaderos River Basin from further pollution and degradation, and also provide revenue-earning opportunities for the community.

Activities

82. Reforestation of 50 hectares of the Banaderos River Basin with fruit and hardwood trees; This is expected to contribute to:

- Reduction in run-off and sedimentation in the watershed thereby reducing the vulnerability of the adjacent communities to heavy rainfall events;
- Improvement in the economic livelihood of the two communities; and
- Increased awareness of the communities on environmental education, reforestation, pesticide use, watershed protection, and the protection of natural resources.

(o) Assessment of damage to coastal areas in Jamaica caused by Hurricane Ivan

Background

83. Jamaica was significantly impacted by the passage of Hurricane Ivan in September 2004. Damage to coastal areas was caused by the high winds, flood rains, coastal flooding and storm surges associated with the hurricane. UNEP CAR/RCU proposes to provide assistance to the Jamaican government to make a post disaster environmental assessment of the effects of the hurricane on the natural resources and coastal environment focusing on the most severely affected sections of Jamaica's South and West coasts.

84. The lessons learnt in the execution by UNEP CAR/RCU of a similar review after Hurricane Gilbert in 1988 will be drawn upon. In addition, UN ECLAC has in collaboration with other agencies developed the methodology to assess disaster impacts on social, economic and environmental systems and these guidelines are being applied to the post hurricane rehabilitation and reconstruction programmes in Jamaica. The OECS Technical Manual for Post Disaster Rapid Environmental Assessment (REA) will be also be applied to the assessment exercise to aid in addressing and prioritizing activities to be undertaken in the short, medium and long term in response to the impacts.

85. It should be noted that other development partners have agreed in principle to complement this contribution to an assessment of the Hurricane Impacts on Natural Resources and Coastal Systems thus leveraging the support to the GOJ up to approximately US\$50,000.

Objective(s)

86. To facilitate a joint and integrated assessment of the damage to coastal areas by the Jamaican Government, the University of West Indies, the Planning Institute of Jamaica (PIOJ) and UNEP CAR/RCU, and to prioritize mitigating and remedial actions.

Activities

87. The proposed assessment project will be directed specifically to the review of damage to natural systems (including reefs, sea grass beds, beaches, wetlands and watersheds) as well as coastal defence problems related to near shore changes, beach and coastal erosion. The assessment will also consider possible future impacts related to the increased intensity in weather generated problems due to climate change. The assessment will, together with other information, form a basis for development of a master plan for the damaged areas.

(p) Other Related Partnership initiatives

COCATRAM, SICA/CCAD, and UNEP CAR/RCU

88. A partnership was developed between COCATRAM, SICA/CCAD, and UNEP CAR/RCU to develop a proposal for strengthening the institutional capacity of port authorities and maritime administrations in Panama, Costa Rica, Honduras, Nicaragua, El Salvador and Guatemala.

89. Within the framework of the project PROARCACOSTAS funded by USAID, an Environmental agenda for maritime transport in Central American countries was defined (2000-2001). This agenda focuses on the strengthening of the institutional capacity of port authorities in the involved countries with regard to responsible maritime administrations, including the use of integrated planning and management-related tools, such as environmental impact and risk assessments.

90. An expert on maritime administrative procedures will review the maritime administrative procedures in participating countries. The result of the review will be presented and discussed in a regional workshop with the aim to harmonize the maritime administrative procedures of port authorities in the involved countries.

91. The detailed project plan will be developed in cooperation between COCATRAM and UNEP-CAR/RCU.

ANNEX II
BUDGET

Activity	2005 (6 months)			2006			2007		
	CTF	Other	Total Cost	CTF	Other	Total Cost	CTF	Other	Total Cost
1. AMEP Programme Coordination (Overall Coordination and Common Costs)	82,019 Budgeted in OCCC	0	82,019	200,000 Budgeted in OCCC	0	200,000	300,000 Budgeted in OCCC	0	300,000
2. Reducing Pesticide Run-off to the Caribbean Sea (GEF) ¹	0	19,500 (GEF)	19,500	0	2,202,500 (GEF)	2,202,500	0	384,000 (GEF)	384,000
3. Integrated Watershed and Coastal Area Management (IWCAM) in SIDS (GEF) ²	0	2,689,040 (GEF)	2,689,040	0	1,309,165 (GEF)	1,309,165	0	1,270,090	1,270,090
4. Training for Rehabilitation of Contaminated Bays (GEF)									
• <i>Convene Regional Workshop</i>	0	0	0	0	103,000	103,000	0	0	0
5. Regional Overview of Land Based Sources and further support to development of TR 33 (Sida & UNEP GPA)									
• <i>Consultant</i>	0	7,500	7,500	0	0	0	0	0	0
• <i>Ballast Water Workshop</i>	0	15,000	15,000	0	0	0	0	0	0
• <i>Meeting of Experts</i>	0	0	0	0	25000	25,000	0	0	0
• <i>Regional Workshop</i>	0	0	0	0	15000	15,000	0	0	0
• <i>Report Preparation and Dissemination</i>	0	0	0	0	3600	3,600	0	0	0
SUB TOTAL	0	22,500	22,500		43600	43,600	0	0	0
6. Sewerage Needs Assessment Pilot Projects (Sida & UNEP GPA)									
• <i>Pilot projects x 2</i>	0	20,000	20,000	0	30000	30,000	0	0	0
• <i>National Workshops</i>	0	2,500	2,500	0	0	0	0	0	0
• <i>Dissemination</i>	0	0	0	0	1000	1,000	0	0	0
SUB TOTAL	0	22,500	22,500	0	31,000	31,000	0	0	0

Activity	2005 (6 months)			2006			2007		
	CTF	Other	Total Cost	CTF	Other	Total Cost	CTF	Other	Total Cost
7. Small Grants Programme: Best Management Practices for Agriculture	25,000	5,000	30,000	25,000	5000	30,000	0	0	0
8. Development of National Programmes of Action (NPA) – Phase 2									
• <i>Compile report lessons learnt from existing NPAs;(From Phase 1)</i>	0	10,000	10,000	0	0	0	0	0	0
• <i>Develop financing and strategic planning strategies for completed NPAs;</i>	0	0	0	0	15,000	15,000	0	0	0
• <i>Support development and implementation of new NPAs</i>	0	0	0	0	0	0	0	0	0
SUB TOTAL	0	10,000	10,000	0	15,000	15,000	0	0	0
9. Integrated Management of Chemicals and Wastes (Sida) ³		“Sida”							
• <i>Regional Strategy</i>	0	0	0	0	10,000	10,000	0	0	0
• <i>Sub-regional workshops x 2</i>	0	0	0	0	25,000	25,000	0	0	0
• <i>Guidelines on Artificial Reefs</i>	0	0	0	0	5,000	5,000	0	0	0
SUB TOTAL	0	0	0	0	40,000	40,000	0	0	0
10. Capacity Development in GIS for CIMAB RAC (Sida)									
• <i>Software</i>	0	3,000	3,000	0	0	0	0	0	0
• <i>Hardware</i>	0	15,300	15,300	0	0	0	0	0	0
• <i>Shipment of Equipment etc.</i>	0	2,980	2,980	0	0	0	0	0	0
• <i>Training</i>	0	0	0	0	12,000	12,000	0	0	0
• <i>Hosting of website</i>	0	0	0	0	2,000	2,000	0	0	0
SUB TOTAL	0	21,280	21,280	0	14,000	14,000	0	0	0
11. Regional Network in Marine Science and Technology – “Know Why Network” (Sida) ⁴	0	8,800	8,800	0	150,000	150,000	0	50,000	50,000

Activity	2005 (6 months)			2006			2007		
	CTF	Other	Total Cost	CTF	Other	Total Cost	CTF	Other	Total Cost
12. Promotion of the LBS Protocol (Sida & US Dept. of State)									
• Conduct national promotional workshops (Spanish)	0	30,000	30,000	0	0	0	0	0	0
• Implement promotional activities	0	30,000	30,000	0	72,000	72,000	0	0	0
<i>SUB TOTAL</i>	0	60,000	60,000	0	72,000	72,000	0	0	0
13. Tela Project (Sida)	0	20,000	20,000	0	14,800	14,800	0	0	0
14. Assessment of Damage to Coastal Areas in Jamaica (Sida)	0	26,100	26,100	0	0	0	0	0	0
15. Regional Action Plan on Marine Litter (UNEP Environment Fund)	0	0	0	0	35,000	35,000	0	0	0
<i>TOTAL PROJECT COSTS</i>			3,011,739			4,080,065			2,004,090
<i>PROGRAMME SUPPORT COSTS (13%)⁵</i>			11,436.8			22,873.6			22,873.6
GRAND TOTAL			3,027,175.8			4,102,938.6			2026963.6

¹ 4 year Project (2006-2009)

² 5 year Project (2005-2009)

³ Specific Activities may be modified and incorporated into larger joint GEF Project with UNEP GEF and BASEL Secretariat

⁴ 4 year Project (2005-2008)

⁵ Programme Support Costs are not levied on GEF funds or on contributions from UNEP GPA and UNEP Nairobi.

ANNEX 1¹(Rev 1)
SUMMARIZED WORKPLAN AND TIMETABLE (2006-2008)

Activities	2006	2007	2008
AMEP Programme Coordination			
Reducing Pesticide Run-off to the Caribbean Sea (GEF)			
Regional Network in Marine Science and Technology – “Know Why Network” (Sida)			
Small Grants Programme: Best Management Practices for Agriculture		Source of Funding to be identified	Source of Funding to be identified
Development of National Programmes of Action (NPA) – Phase 2		Source of Funding to be identified	Source of Funding to be identified
Regional Action Plan on Marine Litter (GEF PDF B)		Proposed GEF Project (UNEP Regional Seas)	Proposed GEF Project (UNEP Regional Seas)
Integrated Management of Chemicals and Wastes (GEF PDF B)		Proposed GEF Project (UNEP Chemicals, BASEL and RCU)	Proposed GEF Project (UNEP Chemicals, BASEL and RCU)
Sewage Needs Assessment Pilot Projects		Proposed GEF Project (UNEP CAR/RCU)	Proposed GEF Project (UNEP CAR/RCU)
Training for Rehabilitation of Contaminated Bays		Proposed GEF Project (UNEP CAR/RCU and UNDP)	Proposed GEF Project (UNEP CAR/RCU and UNDP)
Promotion of the LBS Protocol		Incorporate into AMEP Programme Coordination	Incorporate into AMEP Programme Coordination
Enabling Implementation of LBS Protocol (New Initiative)	-	-	Proposed GEF Project (UNEP CAR/RCU)
<i>Joint Regional Project to Assist Governments of the Wider Caribbean Region in Classifying their Waters</i>	-	-	-
<i>Joint Regional Project for the Development of Safe Recreational-Water-Environments in the WCR</i>	-	-	-

¹ This Summarized WorkPlan and TimeTable presents only ongoing projects that are expected to continue into 2008 and possible new projects (GEF).

ANNEX 2¹ (Rev 1)**PROJECTED BUDGETARY REQUIREMENTS FOR SELECTED PROJECTS (2006-2008)**

Activity	2006			2007			2008		
	Budgeted		Required	Budgeted		Required	Budgeted		Required
	CTF	Other		CTF	Other		CTF	Other	
1. Small Grants Programme: Best Management Practices for Agriculture (5 pilots per year)	25,000	5,000	0	0	0	25,000	0	0	25,000
2. Development of National Programmes of Action (NPA) – Phase 2 (Two countries per year)	0	15,000	50,000	0	0	50,000	0	0	50,000
3. Sewage Needs Assessment Pilot Projects (Three countries)	0	31,000	60,000	0	0	0	0	0	0
4. Joint Regional Project to Assist Governments of the Wider Caribbean Region in Classifying their Waters	0	0	206,000²	-	-	-	-	-	-
5. Joint Regional Project for the Development of Safe Recreational-Water-Environments in the WCR	0	0	188,000²	-	-	-	-	-	-
TOTAL	25,000	51,000	504,000	0	0	75,000	0	0	75,000

¹ This revised budget shows only projects whose continued implementation will require additional financial resources between 2006-2008 that have not yet been identified.

² Total project costs