



Operating Plan

July – December 2000

Caribbean:
Planning for Adaptation to Global Climate Change
A Joint Project of OAS-CARICOM-UWICED-World Bank-GEF

DRAFT

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Organization of American States

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Acronyms

ARNC	Acting Regional Network Coordinator
CARICOMP	Caribbean Community Productivity
CARICOM Secretariat	Caribbean Community Secretariat
CDB	Caribbean Development Bank
CGLIS	Certificate in Geographic and Land Information Systems
CORS	Continuously Operating Reference Station
CPACC	Caribbean: Planning for Adaptation to Global Climate Change Project
CRISs	Coastal Resources Information Systems
CTO	Caribbean Tourism Organization
GEF	Global Environment Facility
GHG	Greenhouse Gases
GIS	Geographic Information Systems
GPS	Global Position System
GS/OAS	General Secretariat of the Organization of American States
ICZM	Integrated Coastal Zone Management
IMA	Institute of Marine Affairs
IMPACC	Implementing Planning for Adaptation to Climate Change
ISC	Information Systems Coordinator
MOU	Memorandum of Understanding
NFPs	National Focal Points
NGOs	Non-governmental Organizations
NICUs	National Implementing Coordination Units
NOAA	National Oceanic and Atmospheric Administration
OECS/NRMU	Organization of Eastern Caribbean States/Natural Resources Mgmt. Unit
PAC	Project Advisory Committee
PDF	Project Development Facility
PLC	Project Local Coordinator/Consultant
PRO	Public Relations Officer
QA/QC	Quality Assurance/Quality Control
RAC	Regional Archiving Center
RPIU	Regional Project Implementing Unit
SIDS	Small Island Developing States
SIDSnet	SIDS Network (UNDP project)
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
US NGS/NOAA	U.S. National Geodetic Services of NOAA
UWI	University of the West Indies
UWICED	University of the West Indies Centre for Environment and Development

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Executive Summary

Project Implementation

The next six months (July - December 2000) will be a period of much activity in the Caribbean: Planning for Adaptation to Global Climate Change project (CPACC). It is expected that the first draft output from each component will be generated. Significant efforts will be directed toward the preparation of a Project Development Facility (Block B) for the Global Environment Facility (GEF) funding of a new activity, Implementing Planning for Adaptation to Climate Change, and the establishment of the Climate Change Center. The following tasks will be undertaken:

Caribbean Climate Change Center. A PDF-B for GEF funding will be developed with three main objectives: (1) prepare a full project proposal for the project: Implementing Planning for Adaptation to Climate Change (IMPACC); (2) establish the Caribbean Climate Change Center (CCCC); and (3) conduct extensive regional and national consultations on the two previous ideas. Several governments, from inside and outside the region, as well as representatives of the private sector have pledged financial and technical support.

Components. With regards to project activities, it is expected that the following activities will be completed during this period:

Component 1: Design and Establishment of Sea Level/Climate Monitoring Network (Regional). To geocentric fixing the monitoring sites the project will sponsor a second round of GPS surveys. A workshop on Global Position System (GPS) will take place in St. Vincent and the Grenadines.

Component 2: Establish Database & Information Systems (Regional). Computer systems will be purchased for Component 1 agencies that do not have direct access to Internet. The Regional Archiving Center will be located in the University of the West Indies (UWI) at St. Augustine as well as the ground-satellite station.

Component 3: Inventory of Coastal Resources and Uses (Regional). The inventory would be completed and in the web for public access. New data to support pilot components will be purchased in the form of remote sensing imagery.

Component 4: Formulation of a Policy Framework for Integrated Coastal and Marine Management (Regional). The component will be launched at the national level. National issues and position papers on climate change will be produced.

Component 5: Coral Reef Monitoring for Climate Change (Bahamas, Belize, and Jamaica). The Bahamas and Belize will complete the second round of monitoring while Jamaica has completed it for the year. Data from the monitoring exercises as well as from other environmental variables from all sites will be processed.

Component 6: Coastal Vulnerability and Risk Assessment (Barbados, Grenada, and Guyana). Potential impacts will be determined as well as adaptation options. A sub-regional workshop will be conducted in Guyana to present draft national vulnerability and risk assessments.

Component 7: Economic Valuation of Coastal and Marine Resources (Dominica, Saint Lucia and Trinidad & Tobago). The collection and analysis of primary data will be completed. A joint Components 7 and 8 sub-regional workshop will take place in St. Kitts and Nevis. The first national report will be finished by the end of the year.

1 This report was prepared by Claudio R. Volonte, CPACC Technical Coordinator at the GS/OAS and the CPACC/RPIU staff members, Ulric Trotz, Leslie Walling, Ian King, Leisa Perch, Rawleston Moore, and Judi Clarke.

Component 8: Formulation of Economic/Regulatory Proposals (Antigua & Barbuda and St. Kitts & Nevis). The pilot studies will be implemented during this period. National technical reports as well as review of applicability of economic instruments for the region will be completed by the end of the year.

Component 9: Greenhouse Gases (GHG) Inventory and Agriculture and Water Resource Vulnerability Assessment (St. Vincent and the Grenadines). The initial national communication report will be presented to the United Nations Framework Convention on Climate Change (UNFCCC) Secretariat at the Sixth Conference of the Parties (COP6).

It is expected that the National Implementing Coordinating Units (NICUs) will continue to be greatly involved in the implementation of all the project components. NICUs so far have concentrated most of their effort on project implementation. As we move into this phase of operations requiring widespread support for the Climate Change Center and IMPACC, the role of the NICUs will also move into bringing these developments to the notice of the local political and policy-making directorate.

CPACC Administration

Executive Agency: OAS

The General Secretariat of the Organization of American States (GS/OAS) will continue the overall management of CPACC implementation. As executing agency, the GS/OAS will continue its responsibilities for financial disbursements to the Regional Project Implementing Unit (RPIU), technical supervision, and overall project quality assurance, as well as acting as liaison between the RPIU, the World Bank, the GEF and the UNFCCC Secretariat. Specifically, during the next six months, the GS/OAS will:

- Coordinate, together with World Bank, the University of the West Indies Centre for Environment and Development (UWICED) and RPIU staff, the preparation of PDF-B, for GEF funding, to develop a new climate change activity in the Caribbean: Implementation of Adaptation Planning for Climate Change (IMPACC).
- Participate in the UNFCCC Sixth Conference of the Parties (COP6) and coordinate activities to showcase CPACC.
- Follow-up with the XXXth OAS General Assembly resolution on the topic of climate change.
- Coordinate, together with RPIU staff, technical and managerial implementation of Components 1 and 9.
- Coordinate, together with RPIU staff, the World Bank's supervision mission, scheduled for September 2000.
- Prepare, in coordination with RPIU staff, financial reports for replenishment from the World Bank.
- Prepare, in coordination with RPIU staff, progress reports and operating plans.
- Participate in international workshops and conferences relevant to CPACC.

Regional Project Implementation Unit: RPIU

RPIU Staff

During the last reporting period discussions were held with an officer from the Center for Training and Development of the OAS regarding internal staff operation and personnel management issues at the RPIU. Some of the recommendations arising from this interaction will be put in place during this working period and are aimed at improving operational efficiency of staff in the RPIU.

All components are now being implemented, involving a considerable amount of traveling to pilot countries. This has become an essential element in project implementation and has proven to be the most effective means of keeping country teams on track with implementation schedules.

Financial Procedures and Reporting

PriceWaterhouse Cooper will complete the procedural manual. In addition, the RPIU will coordinate with the University to finally fix the technical problem to get connected to the University Accounting System.

CPACC management met at OAS headquarters in June to review and update the budget for the remaining of the project (see Annex 1 for a summary). Internal procedures will be implemented to ensure strict compliance with the budget allocations and to facilitate the expeditious compilation of the monthly expenditure report for submission to the OAS. In this regard the procedural manual will be an invaluable asset.

Project Sustainability

This is a very crucial period for laying the groundwork for project sustainability. The following actions are anticipated:

- Assist OAS/GS in the preparation of a PDF Block B for GEF funding of a new activity to follow-up CPACC: Implementing Planning for Adaptation to Climate Change (IMPACC). Execution of IMPACC will take place in 2001.
- During the National Focal Points (NFPs) and Project Advisory Committee (PAC) meetings (July 17-20, 2000): clarify concepts regarding the configuration and role of the Caribbean Climate Change Center; identify programs of activities which will be undertaken after CPACC is completed (i.e., IMPACC); and define a program of activities which will be undertaken to finalize proposals for the center and IMPACC.
- Continue to support the establishment of the MSC. Program in Climate Change at UWI/Cave Hill campus.
- Utilize the opportunities afforded under Component 4 to actively promote the Climate Change Center and IMPACC at the highest political and policy-making levels in the region.
- Discuss with NFPs the possibility of requesting partial financial assistance from the GEF Interim Funding for National Communications for the improvement of the sea level/climate monitoring stations installed under Component 1.

Education and public relations program

The relationships established with the regional media and private sector at the workshops sponsored by CPACC will be further consolidated. In particular, a mechanism to feed recurrent information to the regional media will be put in place.

Attempts will be made as a pilot project to introduce climate change issues to schools in Barbados through the EduTech program of the Ministry of Education, Culture and Youth Affairs. An education kit and TV clips will be produced. These were to be produced during the last period but due to certain budgetary constraints, had to be rescheduled.

At the annual meeting of the National Focal Points, CPACC will sponsor a short training session in public communications. Thereafter, the focal points will be provided with speakers notes by the RPIU encouraged to communicate with the public (service clubs, schools) on climate change issues.

A memorandum of understanding (MOU) will be finalized with the Caribbean Tourism Organization (CTO) to raise awareness of climate change issues among the members of this organization, especially members of the Caribbean Hotel Association.

Project Advisory Committee (PAC)

The year's meeting of the PAC will be held in Guyana July 19-20, 2000 immediately following a meeting of the NFPs at the same venue. This PAC will set the stage for preparations for the next phase of CPACC and the establishment of the Caribbean Climate Change Center. With this in mind, it is expected that high level representatives of national and regional institutions will attend the PAC meeting.

National Implementation Coordinating Units

It is expected that the NICUs will continue to be greatly involved in the implementation of all the project components. Component 4 will require the utmost cooperation of NFPs and the NICUs, in that implementation is essentially through a process of national consultations. It is expected that the NFPs will play a leading role in ensuring that all the logistical arrangements are in place to facilitate a meaningful interaction with the relevant stakeholders and consultants during country visits.

NICUs so far have concentrated most of their effort on project implementation. As we move into this phase of operations requiring widespread support for the Climate Change Center and IMPACC, the role of the NICUs in bringing these developments to the notice of the local political and policy-making directorate cannot be understated. NICUs will also be expected to generate public awareness and education activities with logistical support provided by the RPIU.

Next six months

The period January – June 2001 will bring the closing of much of the pilot activities, with final outputs and planning for the September 2001 regional workshops. The PDF-B will be under implementation and the Climate Change Center will be near establishment.

Financial Plans

COMPONENT/ ACTIVITY	Expenditures Year 1 (1)	Expenditures Year 2 (2)	Expenditures Year 3 (3)	Balance from total budget	Expected expenditures Jan - June 00
1	438,529	146,108	55,309	171,552	100,600
2	125,043	20,614	10,985	233,284	37,500
3	---	52,299	108,885	554,517	164,500
4	---	---	21,594	282,257	46,500
5	365	56,991	78,603	257,666	24,900
6	---	19,055	72,734	356,509	112,300
7	---	6,918	51,180	250,901	70,500
8	---	4,951	4,443	182,606	44,500
9	---	29,566	43,294	48,140	27,500
RPIU	222,011	446,456	461,235	939,798	230,000
OAS	133,169	146,998	126,689	275,264	90,050
Contingencies	---	---	62,619	180,361	20,000
Total	919,118	929,958	1,097,570	3,702,855	968,850

Note:

(1) Year 1: April 97 – March 98

(2) Year 2: April 98 – March 99

(3) Year 3: April 99 – March 00 (expenditures claimed as of December 1999).

CPACC Technical Activities

Component 1: Design and Establishment of Sea Level/Climate Monitoring Network

Installation of monitoring stations

Completed.

Station Configuration/Equipment Installation

Completed.

Operation and Maintenance and Calibration of monitoring systems

Regarding the earth ground station the GS/OAS, the Acting Regional Network Coordinator (ARNC), and RPIU will arrange its transfer and installation to the Center of GeoSpatial Studies, UWI/St. Augustine, Trinidad and Tobago. A strategic plan will be developed to identify necessary training needs and guidelines for operations and maintenance of the station.

Two tasks that were not completed last six months will be finalized before the end of 2000:

- (a) Training Manual. The ARNC, the RPIU Public Relations Officer (PRO) and the Caribbean Institute of Hydrology and Meteorology (CIHM) staff will produce a training manual on how to maintain and operate the monitoring stations. It is expected that this manual will be produced as a CD-ROM for easy distribution.
- (b) Technical Capacity. The ARNC will visit at least 2 participating countries during this period to improve technical capacity of national institutions and organizations interested in the use and application of data from the CPACC monitoring stations. Specifically the visits will try to respond to some of the recommendations made during the mid-term review, such as:
 - Strengthen technical capacity of the national meteorological offices in retrieving and using data from the monitoring stations;
 - Prepare country specific revenue generation strategies to cover the cost of the long-term maintenance and operations of the monitoring sites;
 - Increase participation by land survey departments in the implementation of Component 1;
 - Increase private sector involvement in the implementation of Component 1; and
 - Conduct demonstration of “add-on” and “voice” options to the monitoring stations.

Data Acquisition and Archiving System

Lee's input.

Geocentric Fixing of Bench Marks

Two activities will be put underway during this period:

- Training to archive and maintain Global Position System (GPS) data online. The U.S. National Geodetic Services of the National Oceanic and Atmospheric Administration (US NGS/NOAA) will provide technical training to regional personnel, possibly from the Institute of Marine Affairs (IMA), on retrieval, archiving, and web site presentation of the GPS survey data results and the Continuously Operating Reference Station (CORS) data.
- GPS Technical Workshop in St. Vincent. It was concluded during the 1998 GPS Survey Campaign that several of the smaller CPACC participating countries lacked knowledge in GPS surveying and they have expressed interest in receiving training in this subject. Given that there

will be a need for national technicians to conduct annual surveys of the monitoring stations it was recommended that a workshop will be organized in St. Vincent and the Grenadines before the end of this year. The agenda of the workshop will include the advantages and applications of GPS surveying.

Component 2: Establishment of Databases and Information Systems

Assessment of current needs

Completed.

Information System Coordinator (ISC)

The Information Systems Coordinator (ISC) will continue to provide technical backstopping support to the implementation of Component 3 with particular reference to GIS and Remote Sensing elements. Travel associated with this activity will include support and oversight at training events, participation in related initiatives (i.e., OECS/NRMU events) and liaising with country representatives.

System Design and Databases

Completed.

System Procurement

Computer systems will be purchased for selected Component 1 lead agencies to facilitate their access and use of data from the monitoring stations and to ensure quality control for those stations under their responsibility. The selected agencies do not currently have means to access the Internet and does Component 1 data. Agencies will have to cover the cost of Internet access. This activity has been delayed from the previous reporting period but should be completed during this one.

CPACC will also purchase MS Office Professional 2000 for designated repositories to support the Coastal Resources Inventory Systems (CRIS).

It is also expected that the satellite download station will be transferred to the UWI campus in Trinidad and Tobago.

Training Program

Completed.

System Implementation, maintenance and upgrading

- (a) Web Management. The web site serves as a major tool for information dissemination to project constituents and the wider public. A UWI student assists the ISC, on a part-time basis, in maintaining and upgrading the web site. Activities will include maintaining the CPACC web site, updating the calendar of events, and uploading reports. During this period, the management of the web site may be transferred to the CPACC Regional Archiving Center (RAC) at UWI/Trinidad and Tobago.
- (b) Maintenance of the CPACC LAN and information systems. The ISC will continue to maintain and trouble shoot problems at the RPIU, including maintaining and securing systems through data back up and virus protection.
- (c) During this period, the ISC will develop the specifications and commence arrangements for the purchase of a new round of computers for NFPs or other designated agency to be delivered early in 2001.

Coordination of National Workshops in Internet Use/SIDSNet

All reporting and dissemination of certificates will be completed. Costs incurred will be met from the United Nations Development Programme Small Island Developing States Network (UNDP SIDSNET).

Component 3: Inventory of Coastal Resources & Use

GIS Installation and Upgrade

CPACC will provide capacity building activities in the area of GIS primarily focusing on the Component 3 repository agencies to support the implementation of this component. In addition, CPACC will provide computer hardware and software where necessary as well as training outside of the structured process associated with the development of CRIS for each country. Specific activities for this period include:

In addition, CPACC will review funding capacity to support the Certificate in Geographic and Land Information Systems (CGLIS) participants for the 2000-2001 program.

Acquisition of computer and software hardware to support Component 3 related agencies. This activity is to support those agencies to properly function as repositories for the Component 3 data. This activity was delayed from previous reporting period and will be completed during the current period.

Coastal Resources Information Systems (CRISs)

Module I: Data Assessment

Data Verification missions to CPACC countries began in May 2000 to confirm and sample the coastal resource and use data types that were identified as existing in each CPACC country through the Data Assessment Survey. The missions will be completed in the first two weeks of July 2000 with missions to St. Vincent, Grenada, Guyana and Dominica. This will bring the Data Assessment exercise to a close.

Module II: The Creation of Metadata.

A regional metadata node for the CPACC countries has been established. The node is listed under "CPACC Caribbean Coastal Resource Metadata Node" and can be accessed through the gateway <http://clearinghouse4.fgdc.gov/registry/>. The node provides access to metadata generated by nine of the twelve CPACC countries. Having established the node, new metadata will be uploaded to the node by any CPACC countries and Non-Governmental Organizations (NGOs), through a specially created web drive.

*Module **IV**: The Acquisition and automation of New Data*

Approximately 70% of the existing baseline coastal resource data required to populate the CRIS has been secured by the consultants. The remaining 30% will be secured by mid-July. The majority of the

new data required to support CPACC pilot project activities in the twelve CPACC countries will be acquired in the form of remotely sensed imagery. Orders for this data will be placed by July 14, 2000.

Component 4: Formulation of a Policy Framework for Integrated Coastal and Marine Management

Methodology

Completed

Framework legislation

The final output of Component 4 has been reworked to more accurately represent the needs and present conditions of participating countries. Instead of creating a generic framework for Integrated Coastal Zone Management (ICZM) (something that most countries can easily accessed) it was agreed that under this component each country will be assisted with the formulation of their individual "National Climate Change Adaptation Policy and Implementation Strategy." During this process countries will be expected to identify certain activities and actions that cannot be undertaken in isolation, and which require a regional approach in order to effectively address specific issues. This would form the "Regional Climate Change Adaptation Policy and Implementation Strategy" to complement and support national policies and action programs.

Implementation

During this period the following tasks will be completed:

(a) Issues Paper

This will be done by in-country teams under the leadership of the NFP and will be facilitated by the use of a template, which will be developed by a consultant in close collaboration with CPACC.

(b) Meeting of consultant, and technical team to review issues paper and hold national consultations.

(c) Inception Mission to all participating countries to:

- Review and finalize issues paper
- Identify nature and scope of appropriate National Climate Change Adaptation Policy and Implementation Strategy
- Develop an appropriate process that will lead to the formulation and subsequent adoption of the Policy and Implementation Strategy at the highest level of government.
- Develop appropriate public education/awareness process
- Identify appropriate interventions to address identified issues

(d) Development of a "Position Paper"

- Identify relevant climate change adaptation issues in the context of each country
- Identify potential strategies and management mechanisms for climate change adaptation planning and management.

Component 5: Coral Reef Monitoring for Climate Change (The Bahamas, Belize, and Jamaica)

Coral Reef Monitoring

(a) The Bahamas

The Bahamas will conduct one more monitoring exercise before the end of the year, depending on availability of manpower and logistic support. The monitoring activities during the next six months will include:

- Completion of the video monitoring for monitoring sites already selected (Sea Viking, New Providence and Walker's Cay, Abaco).
- Finalize the selection of the third monitoring site and put arrangements in place to conduct video monitoring before November 2000.

(b) Belize

Belize took the decision to monitor twice a year, as stated in the original monitoring protocol. The country experienced certain difficulties in the previous period. More intensive technical guidance will have to be provided from RPIU in the next monitoring exercise. The monitoring activities planned for the next six months will include:

- Completion of the video monitoring at South Water Caye in June/July.
- Repeating of the video-monitoring programme for the three monitoring sites (Hol Chan, Glover's Reef and South Water Caye) in October 2000.

(c) Jamaica

Jamaica has completed its scheduled video monitoring for this year.

Data Processing and Analysis

The months of July and August will be used to process, analyze and archive all data received during the last few months (all annual data from Jamaica; one monitoring round of data from the Bahamas and Belize collected by the end of August). A report on the status of the reefs in the Bahamas, Belize and Jamaica based on the video monitoring methodology will be produced by September 2000.

The data processing and analysis activities scheduled to take place between July and December 2000 will include:

- Processing (captured and dotted) of videotapes from the Bahamas will be carried out by the Fisheries Department and sent to the Data Analyst in Jamaica for final analysis.
- Processing and analyzing of videotapes from Hol Chan and South Water Cay, Belize will be carried out in Belize by the recently contracted Reef Biologist. The processed and analyzed data will be sent to the Data Analyst in Jamaica for verification.
- Processing and analyzing of videotapes obtained by Belize during monitoring in October 2000 will be processed and analyzed by the Reef Biologist and sent to the Data Analyst in Jamaica for verification.
- The Data Analyst will conduct processing and analyzing of all videotapes from Jamaica. Videotapes from Glover's Reef, Belize will also be processed and analyzed by the Data Analyst in Jamaica.
- The Data Analyst will assist the Fisheries Department in Belize with the orientation and training of the Reef Biologist in the capture, dotting and analysis process.
- The Data Analyst, with the assistance of Jell Miller will modify the Microsoft Excel spreadsheet currently being used for data entry. This will be used until the draft Component 5 database

prepared in Microsoft Access is finalized. This database will be designed to conform to the codes presently employed by the Caribbean Community Productivity (CARICOMP).

Supporting Documentation

During the next six months pilot countries will be requested to provide Component 5 with supporting spatial (maps, aerial photographs, satellite imagery), environmental (water quality, currents etc) and climatic information.

Archiving Data

The archiving of the data collected will be on going.

Quality Assurance/Quality Control (QA/QC)

A QA/QC document will be prepared and distribute to the pilot countries to be used in conjunction with the Video Methods Protocol.

Component 6: Coastal Vulnerability and Risk Assessment (Barbados, Grenada, and Guyana)

Refinement of Methodology

Completed.

Collection & Evaluation of Information

Completed.

Vulnerability Assessment

For the period June – December 2000, there are a number of activities to be completed. There will be the preparation of contracts for the additional consultants, which may be required. There will be the identification and analysis of the physical impacts on pilot sites in each participating countries, as well as the analysis of the potential socio-economic impacts. Potential adaptation measures will also be examined for each country. National reports on coastal vulnerability for each country should be completed by December 2000.

Component 7: Economic Valuation of Coastal and Marine Resources (Dominica, St. Lucia, and Trinidad and Tobago)

Component 7 is expected to be completed in February 2001 ending with a regional workshop to discuss lessons learnt and to share the experiences of the three participating countries. Over the next six months implementation of the pilot study is expected to continue.

Specifically, the following tasks/activities are to be undertaken:

- Follow-up country visits (August and October 2000)
- Finalization of secondary data collection (August 2000)
- Complete Primary data collection (August/September 2000)
- Joint workshop with Component 8 (August 28th- September 1st)
- Analysis of data (September – November 2000)
- Country Reports 1 (December 2000)

- Sub-regional meeting/workshop on progress (December 2000)

Finalization of Secondary Data collection

(a) Secondary Data Collection

The next step is to collect all available data within each study site. The country team of each island has indicated that some data and information are available on different uses and resources. The consultants will also look for data in regional institutions such as CTO, Caribbean Development Bank (CDB), Organization of American States (OAS), etc.

If any additional data requirements are determined, the consultants will, in collaboration with the country team, determine how best to address these. It is very likely that surveys will be conducted to satisfy the additional data requirements. At this stage the consultants will design and implement any further survey instruments with the cooperation of each country team.

As part of this process follow-up country visits are expected to be conducted during August and October 2000. Any arising issues with data that has been determined to be necessary will be resolved during or after these visits. Continued contact will be maintained with the country team to facilitate this process.

(b) Primary Data collection

Presently primary data collection instruments are to be implemented in St. Lucia and Dominica.

Saint Lucia. The Consultants with the Component Team Leader are presently working to finalize arrangements for the administration and analysis of the survey in St. Lucia. This is expected to be carried out shortly, and to be completed by August/September 2000. The survey in St. Lucia will be implemented to look at beach and coastal area use in the Vigie to Pigeon Point area mainly to assess change in beach use due to changing characteristics and beach experience.

Dominica. The administration of the primary data collection activity in Dominica is expected to be coordinated by the Project Local Coordinator/Consultant (PLC) in collaboration with the National Component Team. The instrument will be implemented to assess visitor use and willingness to pay for the protection of terrestrial and marine park areas in the Roseau/Scots Head area. As soon as the PLC is in place, this is anticipated to be one of his/her major duties.

Data Analysis

As data is collected, data tabulation and analysis is conducted. Most of the significant work in this area is expected to take place upon the completion of all of the fieldwork. As at all previous stages, consultants will keep each country team informed about the progress. In so doing, when data analysis is begun, country teams will have been satisfied with the quality of data as well as the valuation methods that will be used. This will ensure that objectives of the project component and the expectations of team members of each country will not be compromised.

At the end of this stage, a technical country report is to be drafted and submitted for each country.

Assessment and Findings (September – December 2000)

Upon completion of the analysis and formalization of outputs, the consultants and the country teams will start producing draft outputs for each country and will make them available for review. Team members will be expected to review draft outputs as well as coordinate a wider review within the country. At this stage, the cooperation of team members will be crucial to guarantee that the final document meets or exceeds the expectations of each country team.

Further, Reports on Data Gaps and Availability and on Methodologies for the use of Economic Valuation in Policy-making are expected to be delivered in this period. In addition, the consultants will produce an assessment of existing data and identify data needs for economic valuation for the Caribbean region. All of these outputs are to be developed in collaboration with the respective country teams.

Capacity- building (Ongoing)

Training continues to be a key element of the Component and will continue to be conducted as part of the country visits, which are anticipated to occur during the pilot stage. Additionally sub-regional and regional workshops will be organized to share developments and perspectives between participating countries as well as with all other CPACC countries.

As part of this effort a joint sub-regional workshop is scheduled for August 28th- September 1st, 2000 on Economic Tools for Decision-making. A sub-regional meeting of Component 7 countries is expected to be held during the general review process later this year.

Component 8: Formulation of Economic/Regulatory Proposals (Antigua and Barbuda and St. Kitts/Nevis)

Component 8 is expected to be completed in December 2000 ending with a regional workshop to discuss lessons learnt and to share the experiences of the two participating countries. Over the next six months implementation will be mainly focused on the execution of pilot study.

The following activities are expected to be carried out in this period under Task II: Implementation of Pilot Study:

- Finalization of pilot implementation strategies (June 2000)
- Follow-up country visits (July and October 2000)
- Implement pilot implementation studies (July – December 2000)
- Joint workshop with Component 7 (August 28th- September 1st 2000)
- Preparation of Pilot Implementation Technical Country Reports 1 (December 2000)
- Review of applicability of Economic instruments for the region (December 2000)
- Sub-regional meeting/workshop – preparation and development of technical report (January 2001)

Finalization of Pilot Implementation Strategies

Before further implementation can take place, efforts will be focuses on finalizing the project implementing strategy for the participation countries. Both countries will continue to encourage wide participation and to finalize decisions on which instrument or combination of policy instruments which be piloted over the next six months. This is expected to be finalized by the end of July 2000.

A workshop has been proposed to discuss and select desired instruments to model and implement. This also is scheduled for July 2000. The workshop will be used in mechanism for consensus-building and public awareness. A number of approaches comprising a combined approach are expected to result from this process.

The definitive strategy would detail innovative approaches to address the two issues of (i) sand management and (ii) beach conservation. Within the beach conservation theme, St. Kitts and Nevis intend to focus on sustainable development in the coastal zone, which will include significant attention to construction, and other developments in the immediate coastal strip.

Awareness and Capacity-Building (Ongoing)

A critical aspect of the Pilot Implementation Strategy is the organization of an educational workshop on sand as a resource and to identify roles in the sustainable management of sand resources. The workshop is aimed at raising awareness of personnel, particularly responsible for the enforcement of laws and regulations. This will be crucial in developing a long-term strategy and encouraging “buy-in” by decision-makers as well as technical personnel.

At a regional level, a sub-regional workshop will be held in St. Kitts and Nevis on **August 28th – September 1st, 2000**. The workshop will be an opportunity for the presentation of the pilot strategies, for in-depth discussions on the role of economic instruments in the policy development and implementation framework as well for an exchange between Component 7 and Component 8.

Ensuring Sustainability of the Project (Ongoing)

A meeting and a consultative session with Ministers on the proposed pilot instruments have also been identified as a critical step. This consultative process will be the basis of an effort to develop a core of support at the political level towards ensuring the sustainability by the efforts in the project to use economic instruments to achieve environmental goals.

Further a presentation to Cabinet will be prepared including the modeling of instruments and their long-term applicability to implementing environmental policy. This activity should be completed by August 2000.

Additionally, the pilot implementation strategy includes efforts to solicit the support of the Legal Department in preparing necessary legislative adjustment before Parliament and the relevant Minister.

Implementation of the Pilot Studies (July – December 2000)

After the identification of specific issues and instruments, countries will develop operating plans for implementation of specific aspects of the pilot strategy. This will include continued efforts in building public awareness and political support in terms of sustainability of project efforts.

Further, specific instruments will be tested during the next six months and both countries in a regional workshop will present the results of these efforts.

Other outputs expected from the Project are:

1. Pilot implementation technical report (for each country); and
2. Review of applicability of economic instruments for the region.

Through Component 3 remote sensing of designated areas which emulate the concerns which are the focus of the pilots, i.e. loss of sand and degradation of beaches and coastal areas. This is expected to provide a data set, which countries can build upon in terms of monitoring and evaluating the impact of policies on environmental management as well as the environmental efficiency of present and future environmental policies.

A continued and regular exchange between the two country teams is seen as being critical in building a sub-regional coordinated effort and support mechanism. As such, meetings and regular communications between the two countries will be supported by the RPIU. In addition, an e-group will be established to foster a forum for discussion between the two countries as well as between the other components and other interested parties.

Component 9: Greenhouse Gases Inventory and Agriculture and Water Resource Vulnerability Assessment (St. Vincent and the Grenadines)

This component has been completed. The final document will be edited and printed for presentation to UNFCCC Secretariat during COP6.

In collaboration with the Leo Club, St. Vincent and the Grenadines will conduct a two-week summer workshop for 50 students culminating in the production of a magazine featuring climate change issues in St. Vincent and the Grenadines, 1990 - 2000. The magazine will be distributed nationwide.

Annexes

Annex 1

New Disbursement Profile according to Technical Components: 2000 – 2001 (Estimate)

Component	Cumulative since inception	2000		2001		Subtotal 2000 – 2001	Total Project
		January – March	April – December	January – March	April – December		
1	\$651,668	\$11,700	\$128,480	\$6,000	\$13,700	\$159,880	\$811,548
2	\$161,000	---	\$143,850	\$25,000	\$52,050	\$220,900	\$381,900
3	\$159,585	---	\$521,550	\$32,850	\$6,000	\$560,400	\$719,985
4	\$20,700	\$21,000	\$104,450	\$52,200	\$77,750	\$255,400	\$276,100
5	\$135,959	\$7,600	\$118,730	\$51,600	\$84,800	\$262,730	\$398,689
6	\$100,483	\$21,200	\$196,200	\$14,800	\$85,400	\$317,600	\$418,083
7	\$58,100	\$10,000	\$135,500	\$24,000	\$81,500	\$251,000	\$309,100
8	\$9,400	\$23,900	\$77,500	\$41,500	\$39,500	\$182,400	\$191,800
9	\$74,559	---	\$26,500	---	\$13,680	\$40,180	\$114,739
Contingencies	\$63,767	\$2,500	\$91,500	\$2,500	\$82,500	\$179,000	\$242,767
OAS	\$409,000	\$28,500	\$119,300	\$18,900	\$106,900	\$273,600	\$682,600
RPIU	\$1,160,636	\$103,038	\$414,264	\$104,200	\$258,700	\$880,202	\$2,040,838
Total	\$3,004,856	\$229,438	\$2,077,824	\$373,550	\$902,480	\$3,583,292	\$6,588,148

**UPDATE to CPACC's OPERATING PLAN
INCLUDING ACTIVITIES SCHEDULED FOR JANUARY - JUNE, 2000**

(Based on Monitoring and Evaluation Plan, Annex 12 and Detailed Project Costs, Annex 14 of Project Document)