

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

SURINAME

INTEGRATED COASTAL ZONE MANAGEMENT PLAN

(SU-T1035)

PLAN OF OPERATIONS

This document was prepared by the project team consisting of: Nancy del Prado (CCB/CSU), Project Team Leader; Michele Lemay (INE/RND); William Grisley (CCB/CSU); Georgia Wallen (CCB/CCB); Carlos Elias (CCB/CCB); Maria Baptista (LEG/SGO); Rosario Gaggero (INE/RND); and Sherilee Ibisilio (CCB/CSU).

CONTENT

EXECUTIVE SUMMARY	1
I. BACKGROUND AND JUSTIFICATION	2
II. PROGRAM DESCRIPTION	4
A. Program objectives	4
B. Components	4
III. COST AND FINANCING.....	7
A. Summary cost table	7
B. Description and composition of financing	7
C. Sustainability	7
IV. EXECUTING AGENCY AND MECHANISM.....	8
A. Executing agency and mechanism.....	8
B. Program implementation readiness	8
C. Execution period and disbursement schedule.....	8
D. Procurement.....	9
V. MONITORING AND EVALUATION.....	9
A. Technical and basic responsibility.....	9
B. Progress and final reports	9
C. Auditing and financial management.....	9
VI. PROGRAM BENEFITS AND RISKS	9
A. Program benefits.....	9
B. Target beneficiaries	10
C. Risks	10
VII. ENVIRONMENTAL AND SOCIAL ASPECTS	10
VIII. CERTIFICATION	11

ANNEXES

ANNEX I	Logical Framework
ANNEX II	Detailed Program Budget
ANNEX III	Procurement Plan

BASIC SOCIOECONOMIC DATA

For basic socioeconomic data, including public debt information, please refer to the following address:

http://www.iadb.org/countries/home.cfm?id_country=SU&Language=English

INFORMATION AVAILABLE IN THE FILES OF INE/RND

1. Standard Terms of Reference for Program Coordinator
<http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=1194746>
2. Terms of Reference Development of ICZM Plan
<http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=1194748>

ABBREVIATIONS

ATM	Ministry of Labor, Technological Development and the Environment
GOS	Government of Suriname
ICZM	Integrated Coastal Zone Management
LVV	Ministry of Agriculture, Animal Husbandry and Fisheries
MUMA'S	Multiple Use Management Areas
NH	Ministry of Natural Resources
NIMOS	National Institute for Environment and Development in Suriname
OW	Ministry of Public Works
PLOS	Ministry of Planning and Development Cooperation
RGB	Ministry of Spatial Planning, Land and Forest Management

**INTEGRATED COASTAL ZONE MANAGEMENT PLAN
(SU-T1035)**

EXECUTIVE SUMMARY

Beneficiary:	Government of Suriname.	
Team leader and members:	Nancy del Prado (CCB/CSU), Project Team Leader; Michele Lemay (INE/RND); William Grisley (CCB/CSU); Georgia Wallen (CCB/CCB); Carlos Elias (CCB/CCB); Maria Baptista (LEG/SGO); Rosario Gaggero (INE/RND); and Sherilee Ibisilio (CCB/CSU).	
Executing agency:	Ministry of Planning and Development Cooperation (PLOS)	
Target Beneficiaries:	Surinamese population and in particular communities and inhabitants within the coastal zone.	
Objectives:	<p>The objective of the technical cooperation is to support the Government of Suriname (GOS) in establishing the foundation for Integrated Coastal Zone Management (ICZM) as a coordinated approach to managing economic activities occurring and planned for the coastal zone and promote sustainable use and conservation of the coastal zone's natural resources. Specific objectives are to: (i) formulate an ICZM Plan; (ii) propose legal and institutional reforms for ICZM; and (iii) raise awareness.</p> <p>This technical cooperation will fund the following four components: (i) Development of an ICZM Plan; (ii) Proposal for ICZM legal and institutional reforms; (iii) Implementation of a pilot project (North Paramaribo-Wanica); and (iv) Project administration and supervision.</p>	
Financing:	IDB: (FSO Net Income)	US\$600,000.00
	Local:	US\$ 40,000.00
	Total:	US\$640,000.00
Execution and disbursement timetable:	Execution:	24 months
	Disbursement:	30 months
Special contractual conditions:	There are no conditions prior to First Disbursement, or other special conditions.	
Exceptions to Bank policies and procedures:	Given that the GOS requests that the Bank undertake all procurement and disbursement activities, a final financial audit by an independent audit firm will not be required.	
Environmental	SDS/ENV reviewed the TC brief for this project. The observations made have been incorporated into this document. The	

and social review: recommendations included in this document are: consultative workshops, which will lead to the development of the integrated coastal zone plan and ensure interagency coordination.

Coordination with other donors: PLOS, the executing agency of this TC, is the institution that coordinates most of the development assistance to Suriname. In particular PLOS manages the relationship between Suriname and the Netherlands, the largest donor in the country. As such, PLOS is uniquely positioned to ensure that donors work together, avoiding unnecessary overlapping and duplication of efforts. This program builds on several previous activities and studies conducted with financial aid from different donors and under the supervision of different ministries including for example, the Coastal Management Plan for North Coronie on behalf of the nature conservation division of the Ministry of Special Planning, Land and Forest Management (RGB); Master plan Study Drainage of Greater Paramaribo on behalf of the Ministry of Public Works (OW); a position paper for the development of a framework policy and strategic plan for the sustainable management of the non urban environment sub sector in Suriname on behalf of the Ministry of PLOS; first national communication on climate change on behalf of the Ministry of Labor, Technological Development and the Environment (ATM); and rehabilitation of the seawall in New Nickerie. The Integrated Coastal Zone Management Plan will integrate the results of all previous work and help the Government of Suriname move ahead to achieve sustainable development of the coastal zone in a coordinated way.

I. BACKGROUND AND JUSTIFICATION

- 1.1 Suriname's coastal zone is the most pristine coastal ecosystem among the countries located within the Guiana Shield. Although subject to similar coastal dynamics, Suriname's coast of approximately 340 km has not experienced the same severe problems associated with erosion and flooding observed in the other countries such as in Guyana. This is due to the existence of a broad, mainly undeveloped mangrove belt stretching along Suriname's coast. While providing a buffer form coastal processes, this environment simultaneously provides an internationally recognized habitat for a wide diversity of coastal flora and fauna. However, urgent actions are required if Suriname's coast is to be protected from unsustainable resource use and environmental degradation. Immediate threats to the coastal zone include the encroachment of agricultural activities, commercial and housing developments, exploitation of building materials such as sand and shells, environmental pollution from the lack of sanitation facilities, over fishing, flooding, clearing of the mangrove system, and general loss of biodiversity. These

threats create the need to build in-country capacity to manage the coastal zone in an integrated manner, taking into consideration its physical, environmental and economic functions.

- 1.2 Experience worldwide has shown that mangrove systems can be an economically viable alternative to expensive artificial sea defenses for erosion and flooding control. There is growing demand in Suriname for the construction of artificial stone and concrete sea defenses-, especially in the areas of Coronie and north Paramaribo where economic activities are threatened. These structures require permanent and costly maintenance and are often subject to breakdown and collapse. In addition, once sea defenses are constructed, it can be almost impossible to reintroduce the mangrove system as a natural barrier. Thus it is critical that government and society at large in Suriname to carefully consider the full economic, environmental, and social implications of moving from mangroves to sea defenses as measures for the control of flooding and erosion.
- 1.3 The impact of rising global sea levels is a growing and uncertain element in coastal zone management. Rising sea levels will significantly impact all human populations and economic investments within the coastal plain. Through coastal zone management adaptive measures for dealing with these changes in a cost-effective manner could be introduced to minimize future risks for human safety, property and the economy.
- 1.4 The Government of Suriname (GOS) has undertaken a number of studies of its coastal zone over the past two decades, including some with Bank assistance, such as the preparation of terms of reference to undertake a Management Plan for Integrated Coastal Zone Management in 2005.¹ The GOS has also entered into a number of international agreements regarding the conservation and sustainable use of its coastal zone resources. These and other actions have resulted in Suriname designating about 75% of its coastal zone as either nature reserves or multi-use management areas (MUMAs) that are targeted for sustainable use. The remainder of the coastal zone remains unplanned and unregulated and areas located adjacent to urban centers are under severe threat of environmental degradation and unsustainable development. The coast of North Paramaribo and Wanica is of particular concern given recent trends towards urban expansion in that area and plans to design and construct a ring dike and associated road and drainage systems.
- 1.5 Management of the coastal zone rests with a number of government ministries. The Ministry of PLOS has responsibility for overall national development planning, the Ministry of RGB has responsibility for spatial planning, land allocation, nature conservation, management of protected areas and wildlife management, the Ministry of Agriculture has responsibilities for fisheries and agricultural activities, the Ministry of Natural Resources (NH) has responsibilities for exploration and exploitation of minerals, and the Ministry of OW has

¹ These terms of reference (ATN/NP-8928-SU) were used to prepare this technical cooperation.

responsibilities for construction of public infrastructure. Overall responsibility for environmental management in Suriname lies with the National Institute for Environment and Development in Suriname (NIMOS), the country's environmental management agency, and the Ministry of ATM. This wide diffusion and overlapping of authority and responsibility for various aspects of the coastal zone and environmental management, combined with a severe shortage of financial and human resources by all agencies concerned, hampers overall effective management.

- 1.6 The legislative regime for coastal zone management in Suriname consists mainly of fragmented pieces of legislation regulating the use various natural resources. Most of the laws are outdated and are inadequate to bring integrated coastal zone management into effect.
- 1.7 If Suriname is to benefit socially, economically, and environmentally from its largely intact coastal natural resources, and maintain the environmental and ecological integrity of its coastal zone, then appropriate plans must be put into place to manage this coastal zone as an integrated system. In addition the Government of Suriname also needs to build in-country capacity for coastal zone management in order to implement cost-effective solutions and adapt to changing conditions.

II. PROGRAM DESCRIPTION

A. Program objectives

- 2.1 The objective of the technical cooperation is to support the Government of Suriname (GOS) in establishing the foundation for Integrated Coastal Zone Management (ICZM) as a coordinated approach to managing economic activities occurring and planned for the coastal zone and promote sustainable use and conservation of the coastal zone's natural resources. Specific objectives are to: (i) formulate an ICZM Plan; (ii) propose legal and institutional reforms for ICZM; and (iii) raise awareness.

B. Components

1. Component I: Development of an ICZM Plan (US\$359,100)

- 2.2 This component will fund the development of an ICZM Plan that also includes an ICZM vision, policy, and strategy. The Plan will include a prioritization of the problems, including an analysis of coastal erosion and flooding threats, prioritized objectives, physical, legal and administrative measures, implementation plan, budget and sources of financing. A consulting firm with demonstrated experience in coastal management will be contracted with resources of the technical cooperation to develop the plan and carry out the following activities:

- a. Definition of the coastal zone for ICZM purposes based on physical, environmental, economic and administrative considerations.
 - b. Stakeholder analysis, in the public and private sectors and civil society.
 - c. Assessment of the existing situation, physical and biotic systems, and socioeconomic activities, including potential development plans for each of the most important sectors.
 - d. Development of baseline database consolidating the information collected for the assessment and compilation of GIS Base Map, using on existing digital maps, satellite imagery and aerial photographs.
 - e. Formulation of an ICZM Policy and strategic options, including recommendations for the first steps of implementation.
 - f. Formulation of the ICZM Plan.
- 2.3 These activities will be accompanied by a participatory process intended to inform key stakeholders, solicit opinions on priorities issues, and build consensus for the ICZM policy and strategic options. The technical cooperation will finance a minimum of three consultative workshops to be held in Paramaribo at the inception of plan formulation, to present findings from the assessment of the existing situation and strategic options and to promote discussion on a draft of the ICZM Plan.
- 2.4 In addition, an ICZM Working Group, composed of technical experts and relevant personnel from government agencies, the Anton de Kom University and private sector and civil society groups, will accompany the process to develop the ICZM Plan. This ICZM working group will provide technical guidance, comment and approve reports and overall recommendations. This working group is expected to provide the formal venue enabling public participation in integrated coastal zone management. Once created, this working group will have these responsibilities during the full course of the project. It is also foreseen that this working group would remain after project completion to serve as the participatory mechanism for periodic reviews and updates of the ICZM Plan.
- 2.5 Furthermore component I will also finance consultancy services to prepare and implement a public awareness plan. The public awareness plan will be designed as part of the development of the ICZM Plan. In recent years a growing general interest and public awareness of the coastal zone is observed in particular to issues related to climate change. Public awareness and effective participation of key stakeholders in the definition of the ICZM Plan is a key factor to success. The awareness plan will include the following elements among others: Website, curricula for elementary and high school levels, radio and television programs, brochures and workshops with the communities in the coastal zone.

2. Component II: Proposal for ICZM Legal and institutional reforms (US\$75,400)

2.6 This component will fund the formulation of a proposal for the legal and institutional reform process needed to implement the ICZM Plan, the development of draft legislation for an ICZM institution and the organization of two consultation workshops. Individual consultants will be contractec to carry out the following activities:

- a. Review and evaluation of all existing laws and bills relevant to ICZM and all Government plans for related legal reform. This will serve as the basis to identify gaps in the existing legislation and to make recommendations on the necessary adjustments to the legal framework.
- b. Determination of the need for, organizational setting, tasks and responsibilities of the ICZM institution and/or unit and assignment of functions and tasks of the various agencies involved in ICZM.
- c. Identification of the resources needed to create the ICZM institution and/or unit, existing financial resources and potential new sources of financing.
- d. Workshops to obtain opinions and gain consensus on the legal and institutional reforms and draft legislation recommended.

3. Component III: Implementation of Pilot Project (US\$136,000)

2.7 This component will fund a pilot project to be carried out with a view of building in-country capacity for resolving pressing ICZM issues. Although undertaken in parallel with the development of the ICZM Plan, the pilot project is expected to yield results that can be considered as a building block for the eventual implementation of the Plan. The pilot project will consist of a rapid assessment of the North Paramaribo-Wanica coast for the specific purpose of identifying solutions to problems related to coastal erosion and flooding. A consulting firm will be contracted to undertake the assessment which will consist of the following activities:

- a. Collection and review of available information on shoreline stability and threats.
- b. Identification of land use, property owners, titles or permits.
- c. Classification, prioritization and analysis of the problems related to the dynamic physical processes of the coastal zone such as erosion and accretion of the mangrove forest, flooding, drainage, saltwater intrusion etc.
- d. Identification and analysis of solutions for coastal erosion and flooding including a review of pending Government proposals.

- 2.8 This component will also finance stakeholders meetings and a workshop to discuss the results of the assessment.

4. Component IV: Project administration and supervision (US\$65,000)

- 2.9 This component will fund the administration, supervision and coordination of this project. This will include the hiring of a Project Coordinator and mobilization costs of the working group previously mentioned (see also Section IV).

III. COST AND FINANCING

A. Summary cost table

TABLE 1: Cost and Financing by Component (US\$ thousands)

Activity	Cost		
	IDB	Local	Total
1. Develop ICZM Plan and Conduct Public Awareness	354,100	5,000	359,100
2. Proposal for ICZM legal and Institutional reforms	72,900	2,500	75,400
3. Implementation of Pilot project	133,500	2,500	136,000
4. Project Administration	35,000	30,000	65,000
Contingency	4,500	0	4,500
Total	600,000	40,000	640,000

B. Description and composition of financing

- 3.1 The total cost of the program is US\$640,000. The Bank would finance up to US\$600,000 of the costs of the project from the net income of the Fund for Special Operations (FSO). The local counterpart of US\$40,000 includes financing for workshops, project administration and an in-kind contribution for office accommodation.

C. Sustainability

- 3.2 The project has three features designed to ensure its sustainability: (a) the creation of a working group as a first step towards the establishment of a permanent mechanism for inter-institutional coordination for ICZM; (b) the public participation process designed to build consensus on issues and solutions; and (c) the analysis of potential sources of future revenues to ensure the financial sustainability of ICZM.

IV. EXECUTING AGENCY AND MECHANISM

A. Executing agency and mechanism

- 4.1 The Ministry of PLOS, which is the Government agency responsible for development planning of the public sector, will be the Executing Agency responsible for the implementation of this TC. This Ministry's broad cross-sectoral and ministerial authority and its role as the major liaison with all donor agencies will facilitate coordination among stakeholders.
- 4.2 The issues that relate to ICZM fall under the responsibility of many institutional players. For this reason the following provisions have been made to ensure expeditious execution: appointment of a project coordinator; the constitution of an ICZM Working Group that will represent the interest of the many stakeholders throughout the process of developing the ICZM plan, and a commitment by the Ministry of PLOS to provide office accommodation and the necessary logistics.
- 4.3 The Ministry of PLOS will establish the ICZM Working Group that will be responsible to provide oversight and contribute to inter-institutional coordination during execution. Along with the Ministry of PLOS and the private sector, the Ministries of RGB, ATM, OW, Agriculture, NIMOS and the Anton de Kom University will have members on the ICZM Working Group. The project coordinator will liaise with all the various stakeholders, including the Working Group and the consultants hired to facilitate the necessary feedback and commentaries on the reports delivered and give general guidance to the process. The Ministry of PLOS will approve all consultant reports prior to the Bank making contract payment for consulting services.

B. Program implementation readiness

- 4.4 This project is fully supported by the Ministries of PLOS, RGB, Finance, OW and ATM and NIMOS. According to the Multi-Annual development Plan of the Government of Suriname, a number of projects related to coastal zone management have been set as priority such as, urban planning, sea defense systems against coastal and river erosion and improved drainage systems. The Terms of Reference of both the project coordinator and the Consultancy firm have been prepared, several candidates for project coordinator have been identified and the selection process is ongoing.

C. Execution period and disbursement schedule

- 4.5 The project has an execution period of twenty-four months and a disbursement period of thirty months.

D. Procurement

- 4.6 Procurement for this project will involve the contracting of individual consultants and a consulting firm for the undertaking of all project activities. Consultants will be selected through competitive bidding in accordance with Bank Policy GN-2350-7. The Government has requested that the Bank be responsible for the contracting of consulting services in order to ensure timely results for the preparation of the ICZM Plan and to maximize the visibility of the procurement process among international consulting firms with experience in integrated coastal zone management as those being sought for this operation. Therefore the Bank will be responsible for the selection, contracting and supervision of the consulting services, in accordance with Bank policies and in full consultation with the PLOS. The terms of reference for the procurement of consultancy services to undertake all program activities has been drafted in collaboration with the Ministries involved.

V. MONITORING AND EVALUATION

A. Technical and basic responsibility

- 5.1 Technical and administrative responsibility for the project will rest with the Country Office in Suriname (CCB/CSU), with technical support as required to be provided by INE/RND.

B. Progress and final reports

- 5.2 Progress on the execution of the project will be monitored through monthly progress reports and a draft and a final report (within one month of final disbursement) submitted by the contracted consulting firm. The progress reported in these documents will be evaluated against the indicators and objectives contained in the project's logical framework and the Bank's PPMR system.

C. Auditing and financial management

- 5.3 Given that the GOS requests that the Bank undertake all procurement and disbursement activities, a final financial audit by an independent audit firm will not be required.

VI. PROGRAM BENEFITS AND RISKS

A. Program benefits

- 6.1 The TC will develop a Plan for the integrated management of Suriname's coastal plain, including a vision, policy, and strategy. As such, the project will benefit the

sustainable development of the coastal plain and conservation of natural resources lying therein. The results will include improved cooperation and coordination among various government agencies and an increased public awareness and participation. The results will also include a broadly endorsed ICZM Plan that will identify priority issues taking into account the socio-economic characteristics of the coastal zone. Furthermore this plan should include adaptation and mitigation measures related to the impact of climate change. These priority issues will need many actions varying from implementation of technical solutions (construction of seawalls) to the implementation of non-structural technology (e.g. reforestation of mud banks and mudflats). Furthermore this program will inform the Surinamese authorities and inhabitants living within the coastal zone about the vulnerability of this area and the actions to be taken for protection and sustainable development of the coastal plain. This will create greater public support, which will ultimately support the implementation of the ICZM plan.

B. Target beneficiaries

- 6.2 The beneficiaries of this TC will be the GOS, as well as the entire population living within the coastal plain, which is estimated to be up to 80% of the country's population.

C. Risks

- 6.3 There is the risk that the technical cooperation will not be implemented within the time frame allocated for execution given the complexity of the issues to be assessed, the numerous institutions involved and the need to build consensus on policies and institutional reforms. This risk is mitigated by the formal establishment of the working group, the focus on priority issues and the built-in participatory process.

VII. ENVIRONMENTAL AND SOCIAL ASPECTS

- 7.1 The SDS/ENV reviewed the Plan of Operations for this project on June 1, 2007. The observations which have been incorporated into this document pertained to the following: (i) inclusion of consultative workshops as an important set of activities that will lead to the development of the Integrated Coastal Zone Management plan; and (ii) design of the institutional and legal framework to ensure interagency coordination.
- 7.2 This project entails the development of a Plan for the integrated management of the coastal zone in Suriname. Given the nature of the project which does not encompass implementation of investments, it is not expected to have direct negative or positive environmental impacts. However, eventual implementation of the ICZM Plan will have a major positive environmental impact on the entire coastal plain in Suriname.

VIII. CERTIFICATION

- 8.1 The Grants and Cofinancing Management Unit (VPC/GCM) certifies that US\$600,000 from the net income of the Fund for Special Operations is available for the financing of the project activities proposed in this Plan of Operations.²

(Original signed)

Marguerite S. Berger, Chief
VPC/GCM

11/26/07

Date

² Project proposal is included in the nonreimbursable technical cooperation program for 2007 (GN-2408-9; Annex II-4), approved by the Board of Executive Directors on October 10, 2007.