

FINAL REPORT

OPTIONS FOR INSTITUTIONAL RATIONALIZATION OF COASTAL ZONE MANAGEMENT IN BELIZE

Prepared for:



**Caribbean Regional Fisheries
Mechanism**



**Ministry of Agriculture and Fisheries
Government of Belize**

Submitted By:

TREVOR HAMILTON AND ASSOCIATES
International Consultants and Managers

Location: 17 Seaview Avenue, Kingston 6, Jamaica W.I.

Telephone: (876) 978 – 6518 or 978 - 5070

Fax: (876) 978 - 5796

E-mail: thamilton@mail.infochan.com

March 19, 2004

TABLE OF CONTENTS

		<i>Page #</i>
1.	SUMMARY AND RECOMMENDATIONS	
1.1	Introduction	1 - 1
1.2	Overview	1 - 1
1.3	Optional Institutional Arrangements	1 - 4
1.4	Services Propensity to Raise Funds	1 - 8
1.5	Recommendation	1 - 9
2.	INTRODUCTION	
2.1	The Scope of Work	2 - 1
2.2	Work Approach	2 - 1
2.3	Outline of the Report	2 - 2
2.4	Limitations	2 - 3
3.	OVERVIEW	
3.1	Character, Definitions, and History	3 - 1
3.2	The Economic Importance of Coastal Zone Management in Belize	3 - 2
3.3	The Public Sector Institutional Mandates and Legislative Authority	3 - 3
3.4	The Private Sector Involvement	3 - 6
3.5	Institutional Framework	3 - 8
3.6	Financing	3 - 9
4.	STRENGTHS AND WEAKNESSES	
4.1	Strengths	4 - 1
4.2	Weaknesses	4 - 3
5.	THE OPTIONAL INSTITUTIONAL ARRANGEMENTS	
5.1	The Guiding Principles	5 - 1
5.2	Extent of Current Fit with The Guiding Principles	5 - 1
5.3	The Optional Arrangements Ranked	5 - 3
5.4	Rationalization of Functions	5 - 5
5.5	Institutional Structure	5 - 8
5.6	Operational Framework and Performance Indicators	5 - 12
5.7	Organizational Structure, Staffing and Duties	5 - 15
5.8	Competency Requirements	5 - 15

TABLE OF CONTENTS (CONT'D)

6. INDICATIVE FINANCING OPTIONS

6.1	Services and Propensities to Raise Funding	6 - 1
6.2	Core Budgets	6 - 4
6.3	Threshold Program and Operating Budget for CZMI	6 - 4

Appendices:

1. Consultees
2. References

1. SUMMARY AND RECOMMENDATIONS

1.1 Introduction

This Report which is a revised edition of the Draft Report submitted almost a month ago, adequately addresses the scope of work provided by the Caribbean Regional Fisheries Mechanisms in consultation with the Government of Belize as well as the comments and suggestions arising from stakeholders' review of the Draft edition. The scope of work is primarily to recommend a rationalized institutional framework with organizational structure staffing and financing strategies for coastal zone management in Belize.

1.2 Overview

- 1. INTEGRATED COASTAL ZONE MANAGEMENT IS THE PROCESS OF HELPING TO LINK THE ECONOMIC POTENTIAL OF THE COASTAL ZONE WITH EQUITABLE ALLOCATION AND SUSTAINABLE USE OF ITS RESOURCES WHILE IMPROVING THE DECISION MAKING PROCESS OVER USE OF THESE RESOURCES.**

The 4-prong process comprises:

- ☐ Equitable allocation of resources for sustainable use and operating with effective mechanisms for decision making to enhance proper utilization.
- ☐ Promoting stakeholder awareness of the inter-dependence between coastal zone resources and the economy and social well-being.
- ☐ Promoting scientific work and standards in coastal zone management practices.
- ☐ Fostering partnerships between all the stakeholders.

- 2. SOUND COASTAL ZONE MANAGEMENT IS CRITICAL FOR BELIZE BECAUSE MARINE RESOURCES PLAY A LARGE AND GROWING LEVEL OF IMPORTANCE IN THE CREATION OF INCOME, AND ECONOMIC GROWTH AND STABILITY OF BELIZE.**

For example:

- ☐ Fisheries have more than doubled its contribution to GDP over the past 10 years.
- ☐ Tourism, primarily eco tourism, contributes almost 20% to the GDP and it has grown consistently to average over 7% annually over the past 7 years, while in the same period the general economy grew by 5.7% annually.

- Food export, which is mostly marine products account for 90% of commodity export earnings.
- The annual output of fisheries increased from 1.8 million tons in 1990 to 11.1 million tons by 2000.

3. THE PUBLIC SECTOR HAS A COMPREHENSIVE MANDATE AND OVER 20 INSTITUTIONAL ARRANGEMENTS, AND COMPREHENSIVE LEGISLATIVE PROVISIONS FOR EFFECTIVE POLICY AND REGULATORY MANAGEMENT OF THE COASTAL ZONE.

- The coverage of the mandates include: aquaculture, coastal construction, community development, agriculture, dredging and land creation, environmental protection and impact assessment, water management, waste management, tourism development and maintenance standards, land use, fisheries, establishment and management of protected areas and marine transportation.
- There are over 20 government departments and institutions carrying out various aspects of these mandates: Department of Fisheries, Coastal Zone Management Authority/Institute, Forestry Department, Land Utilization Authority, Customs Department, Police Department, Housing and Planning Department, Ministry of Works, Ministry of Agriculture, the Public Health Bureau, the Tourism Board, the Hydrology Unit and Town and Village Councils.
- These institutions and departments are empowered to perform through the introduction of a wide range of laws to protect them. These include more than 30 Acts such as: The Fisheries Act, National Lands Act, Environmental Protection Act, Merchant Shipping Act and Water and Sewage Act.

4. THE COASTAL ZONE MANAGEMENT AUTHORITY/INSTITUTE (CZMA/I) AND THE FISHERIES DEPARTMENT (WHICH IS THE FOUNDER OF THE FORMER) ARE MAJOR PLAYERS IN THE MANAGEMENT OF COASTAL ZONE, BUT THEY HAVE DISTINCTIVELY DIFFERENT RESPONSIBILITIES.

- The Coastal Zone Management Authority (CZMA) with its technical arm, the Coastal Zone Management Institute (CZMI) has been enacted to coordinate the process for integrated Coastal Zone Management in Belize.
 - The CZMA an autonomous statutory body is responsible for implementing and monitoring policies and regulation governing the use and development of the coastal zone in Belize.
 - The CZMI has the mandate to conduct marine research, maintain a data center, provide information as necessary, provide training services, and technical assistance to other relevant agencies.

- The Fisheries Department is responsible for the establishment of oversight and management of marine resource. This entails:

- Aquaculture management
- Fisheries enforcement
- Policy development and management pertaining to marine resources.
- Fisheries resource management
- Marine resource
- Administration of fisheries regulations pertaining to export licencing, licencing and registration of fishing boats and fishers.
- Research in marine resources
- Public education and awareness

5. THE PRIVATE SECTOR TOO, COMPRISING NGOS, (MOSTLY) COMMUNITY BASED ORGANIZATIONS, AND OTHER INTEREST GROUPS ARE SIGNIFICANTLY INVOLVED IN:

Advocacy

Tourism product enhancement

Public education

Financing

Co-management

Research

Training

Conservation and preservation

Some of the leading institutions include: fishers cooperatives, PACT, Toledo Institute for Development and Environment, Belize Fisheries Cooperative, and Belize Audubon Society.

6. THE PROCESS FOR POLICY FORMULATION AND REGULATION IS A "BOTTOM UP" ONE.

- It starts with stakeholders at the community level including: producers associations, NGOs, CBOs and individuals and end up at the Cabinet level.
- It has an Advisory Board.

7. INADEQUATE FINANCING SEEMS TO BE THE NUMBER –1 PROBLEM EVEN THOUGH MANY COMPETENT PERSONS BELIEVE THAT IT IS INSTITUTIONAL AND POLITICAL.

- Central Government despite funding the administration of the Coastal Zone Management Authority, allocates less than 0.1% of its annual recurrent budget to CZM.
- External financing, through the Global Environmental Facility, has been the main source of funding for the CZMI over the past 10 years.
- The CZMA/I has been operating with a project culture created by its external source of financing for its entire life.

- CZMI, the institutional mechanism for technical support to the role of CZMA, has significant potential for internal financing of a large percentage of its budget, from services; but it is only now initiating the provision of such services with government support.

8. COASTAL ZONE MANAGEMENT IN BELIZE HAS SOME MAJOR INSTITUTIONAL STRENGTHS WHICH COULD ENHANCE ITS SUCCESS IN THE FUTURE. IT ALSO HAS SOME MAJOR WEAKNESSES WHICH COULD IMPEDE ITS PROGRESS IF THEY ARE NOT CORRECTED IMMEDIATELY.

- The major institutional strengths revolve around: producers associations and NGOs significant capacities for advocacy, public education and training; and the public sector's significant competencies in policy formulation, the laws governing CZM, as well as the effective participatory policy formulation process. The University of Belize and the Coastal Zone Management Institute also have shared potential to become a regional Center of Excellence in coastal zone management.
- The major weaknesses revolve around: the excessive culture for reliance on external financing for strategic development initiatives such as the CZM, the underutilization of CZMI's advantageous capacity to perform certain services better than other institutions, the combined operation of CZMA/I, the lack of capacity at the Ministry of Economic Development to host the CZMA, inadequacy of initiative at University of Belize to become a major marine resource center, and the inadequacy of mechanisms at the Board level (CZMA/I) to secure timely decisions and implement them.

1.3 Optional Institutional Arrangements

1. THE ARRANGEMENTS FOR CZM SHOULD BE GUIDED BY THESE PRINCIPLES.

- Retention of existing and effective capacities at their host institutions.
- Separation of policy/regulatory functions from developmental ones.
- Commitment of central government to financing policy and regulatory functions.
- Allowances for private self-regulatory responsibilities.
- The private and NGO sectors should be substantial partners.
- The developmental aspects should be financed by broad based interest groups.
- The developmental aspect could be regionalized.
- Public financing should be part of local financing.
- Investment in CZM in Belize should always be treated as potentially viable given the importance of marine resources in the economy.
- CZMI being a multi-disciplinary technical institution could perform some common/generic services that it could do better than the wide range of agencies performing them now.

2. THE CURRENT INSTITUTIONAL ARRANGEMENTS HAS VERY LITTLE FIT WITH THE FOREGOING GUIDING PRINCIPLES

- ☐ The fit is with only two of the principles. Namely recognized importance of CZM and the retention of a range of effective organizational arrangements.
- ☐ A great deal of corrective work needs to be done in other areas.

3. THERE ARE FIVE (5) OPTIONAL INSTITUTIONAL ARRANGEMENTS: EACH IS NAMED AND RANKED BELOW:

(Rank- 1 is most favourable).

- | | |
|------------------------|--|
| <i>Rank- 1</i> | Operate the Coastal Zone Management Authority with the mandate for standards, regulation and policies and as an autonomous central government core service coordinating the involvement of the relevant specialized services in other ministries and government departments. |
| <i>Rank – 2</i> | Continue to operate as a regulatory/policy authority as well as a marine sector development institute. |
| <i>Rank – 3</i> | Operate as a body with all the conglomeration of all activities relating to coastal zone management policies regulatory and development mandates. |
| <i>Rank – 4</i> | Operate as an autonomous Coastal Zone Management Authority and Institute in legal partnership with NGOs and the business community. |
| <i>Rank – 5</i> | Operate as a coastal zone management body with the mandates for regulation and policies within the structure of a government ministry such as Agriculture and Fisheries. |

4. THE FUNCTIONS OF THE PROPOSED INTEGRATED COASTAL ZONE MANAGEMENT SYSTEM CAN ALSO BE RATIONALIZED TO COMPLETE THE INSTITUTIONAL RATIONALIZATION PROCESS.

The 16 critical functions which the system is expected to perform comprise:

- | | |
|--|--|
| <input type="checkbox"/> Policy/regulations | <input type="checkbox"/> International Relations |
| <input type="checkbox"/> Standards | <input type="checkbox"/> Resource Mobilization |
| <input type="checkbox"/> Quality Assurance Environmental | <input type="checkbox"/> Relations with the Business Community |
| <input type="checkbox"/> Public Education/Social Marketing | <input type="checkbox"/> Regionalization |

- | | |
|--|---|
| <input type="checkbox"/> Institutional Capacity Building | <input type="checkbox"/> Accreditation |
| <input type="checkbox"/> Information/Data Management | <input type="checkbox"/> Inter-ministerial Relations |
| <input type="checkbox"/> Research and Development | <input type="checkbox"/> Promotion of Self Regulation |
| <input type="checkbox"/> EIA/Certification | <input type="checkbox"/> Technical Assistance Interventions |

Eight individual /clusters of institutions are identified and ranked as candidates for performing each of these functions.

- ☐ CZMA could perform: policy/regulatory, standards environmental quality assurance, public education and social marketing, EIA certification, and accreditation.
- ☐ CZMI could perform: institutional capacity building, environmental impact assessment, information/data management, research and development, training, international relations, public awareness/education, resource mobilization, regionalization, and accreditation.
- ☐ Strategic private sector interest groups including NGOs and producers associations could perform: self managed environmental quality assurance, public education and social marketing, institutional capacity building, relations with the business community, promotion of self regulation.
- ☐ University of Belize could undertake: institutional capacity building, research and development, international relations, training, regionalization, accreditation and technical assistance interventions.
- ☐ PACT could undertake fundraising and funds management.
- ☐ Economic development ministries such as: the Ministry of Natural Resources, Ministry of Economic Development and the Ministry of Agriculture and Fisheries could undertake inter-ministerial relationships.

5. A HIGHLY INTERTWINED ORGANIZATIONAL ARRANGEMENT IS PROPOSED FOR INTERGRATED COASTAL ZONE MANAGEMENT IN BELIZE.

It has the following features:

- ☐ CZMA will function as an independent authority reporting to the Ministry of Natural Resources and the Environment.
- ☐ CZMI will report to a Board of Governors, which will be responsible for governance.

- Both CZMA and CZMI will have National Council on Integrated Coastal Zone Management since they have the same interest groups. The Council will provide leadership and policies.
- CZMI will operate as an independent institution under the auspices of the University of Belize.
- The CZMA and CZMI will operate with very small secretariats.

6. SINCE CZMA AND CZMI WILL HAVE DISTINCTIVE FUNCTIONS, THEIR PERFORMANCE INDICATORS COULD ALSO VARY.

- CZMA's performance should revolve around: A Strategic Plan in action, a revised Act for the Authority, effective policies, effective policy management, coastal zone laws in use, transparency in governance and participatory governance.
- CZMI's performance should revolve around: A Strategic Plan in action, an adequately staffed secretariat, a portfolio of adjunct specialists, significant positive attitude to Coastal Zone Management, formalized strategic partnerships, major training and research programs with University of Belize, regional and hemispheric programs in action, sustainable financing, broad based ownership, and regional accreditation status.

7. BOTH CZMA AND CZMI WILL OPERATE WITH VERY SMALL SECRETARIATS TO PERFORM CORE FUNCTIONS AT LOW FIXED COSTS, WITH VARIABLE COSTS TIED TO PROJECTS AS MUCH AS POSSIBLE.

- CZMA's core staff should comprise: A Director, a Policy Officer, a Regulations/Standard Officer, and an Administrative Assistant.
- CZMI's core staff should comprise: A Director, A Technical Officer, A Resource Mobilization Officer, An Institutional Development Officer, A Stakeholder Relations Officer and an Administrative Assistant.

8. THE CZMA AND CZMI WILL NEED VARIED COMPETENCIES AMONG THEIR STAFF.

- CZMA will require competencies and experience spanning: regulatory institutional management, institutional development, resource management, policy formulation and management, environment management, natural resource management, standards development/management, public education/communication, public sector administration, resource mobilization, program development and management computer applications.

- The CZMI will require competencies such as: leadership, scientific research and development, institutional development, resource management, negotiations, linguistics, social marketing, inter government relations, program development and management, computer applications, resource mobilization and information and data processing.

1.4 Services And Propensity to Raise Funds

1. CZMA'S SERVICES SHOULD COMPRISE: POLICY FORMULATION, REVIEW OF REGULATIONS, CLASSIFICATION, PERMITS AND LICENCES, PUBLIC AWARENESS, MONITORING OF COMPLIANCE, ADVICE, DEVELOPMENT OF GUIDELINES AND PREPARATION OF REVIEWS.

These services have their highest propensity to raise funds in the order listed below.

- Rank – 1: Government of Belize
- Rank – 2: PACT
- Rank – 3: International Grant Giving Agencies

2. CZMI'S SERVICES SHOULD COMPRISE: PUBLIC AWARENESS, INSTITUTIONAL STRENGTHENING, PROMOTION OF ALTERNATIVE LIVELIHOODS, NATIONAL EMERGENCY PLANS, RESEARCH, TRAINING, ANNUAL STATE OF COAST REPORTS, DATA MANAGEMENT, CAPACITY BUILDING, MANAGEMENT OF PROTECTED AREAS, AND PREPARATION OF TECHNICAL GUIDELINES.

These have the propensity to raise funds from a wide range of financiers ranked in the order listed below.

- Rank – 1** Stakeholder industry membership organizations.
- Rank – 2** User fees including fee for contract services.
- Rank – 3** PACT
- Rank – 4** Multi-lateral and bi-lateral donors.
- Rank – 5** International grants giving institutions.
- Rank – 6** Central Government of Belize
- Rank – 7** Surcharge on relevant industries

3. CZMA AND CZMI SHOULD OPERATE WITH CORE AND PROGRAM BUDGETS.

- ❑ The CZMA annual core budget is estimated at BZ\$198,000. The GOB has been funding much of this budget because it focuses on policy and regulatory management.
- ❑ CZMI core and annual threshold level program budget based on its present operation is estimated at around BZZ\$2.2 million.
- ❑ The Institute has a wide range of credible sources for funding its budget especially if:
 - It is positioned as a center of excellence for research, training and laboratory tests and environmental impact assessment in coastal zone management.
 - Institute already has the necessary support to provide management to some marine protected areas, from which it is projected to realize a net of over BZ\$800,000 or about 40% of its budget.

1.5 Recommendations

The Government of Belize should give serious consideration to implement the following to improve the cost-effectiveness of coastal zone management.

1. SEPARATE CZMA AND CZMI

- ❑ Make CZMA a statutory authority with the mandate to coordinate policies and regulation pertaining to CZM with reporting relationship with the Ministry of Natural Resources.
- ❑ Make CZMI an independent institution with its own Board, significant private/NGO sector involvement and alliance with, and hosting at the University of Belize.
- ❑ Carryout the necessary diplomatic and other work to give the Belizean CZMI CARICOM and Hemispheric status and accreditation as a Center of Excellence for coastal zone management.

2. RATIONALIZE SOME FUNCTIONS AMONG THE INSTITUTIONAL PLAYERS IN CZM TO OPTIMIZE COST-EFFECTIVENESS.

For example:

- ❑ CZMI should carryout all the research, EIA, Public and database, training and laboratory testing work. It has the potential to be much more effective than Fisheries Department, CZMA and others.

- ❑ The Departments with sectoral mandates should continue with sectoral policy formulation and management.
- ❑ PACT could undertake fundraising and funds management.
- ❑ University could undertake: training, research and development, regionalization, accreditation and technical assistance interventions.

3. INTRODUCE MECHANISMS TO ENHANCE EFFECTIVE AND IMPLEMENTATION OF DECISIONS.

- ❑ Allow for rotating chairmanship of the Board of Directors of CZMA and CZMI.
- ❑ Allow CZMA and CZMI to share the same National Council.
- ❑ Have the Chairman, the CEO (Permanent Secretary) meet with the relevant sector Minister to brief them on decisions that he/she will have to take to Cabinet from time to time.

4. FUNDING OF THE INSTITUTIONS SHOULD BE RATIONALIZED AS FOLLOWS:

- ❑ Central Government should continue to fund administration of the policy and regulatory work including the CZMA.
- ❑ CZMI should increasingly earn its income from fee for service such as: research, data management, EIA, laboratory tests, training, contracted social marketing and management of marine protected areas.
- ❑ Stakeholders spanning economic beneficiaries NGOs, University of Belize and Government should share the ownership as well as financing of CZMI.
- ❑ Continue to give the necessary support to CZMI to successfully launch its services to manager MPAs for user fees.
- ❑ Global Environmental Fund should be approached to co-finance the start-up of CZMI since it has been an investment partner with it for so long.
- ❑ Establish marketing capacities/competencies within the CZMI to enhance its ability to mobilize national, regional, hemispheric and global funding for programs.

5. OPERATE CZMA AND CZMI WITH SEPARATE SECRETARIATS.

- ❑ CZMA's core staff should comprise a Director, a Policy Officer, A Regulations/Standards Officer and An Administrative Assistance. It could start with less and grow to this number.

- ❑ CZMI's core staff should comprise: A Director, A Technical Officer, A Resource Mobilization Officer, An Institutional Development Officer, A Stakeholder Relations Officer and An Administrative Assistant. It could start with about three (3) persons and grow to this number as its programs expand.

6. CZMA AND CZMI SHOULD, AS A MATTER OF URGENCY, BUILD INTERNAL COMPETENCIES TO ENAHNCE THEIR CAPACITIES TO CARRYOUT THEIR MANDATES.

- ❑ CZMA's critical competencies should include: policy development and management, environmental management, natural resource management, computer applications and public administration.
- ❑ CZMI's critical competencies should include: scientific research and development, institutional management, social marketing, information and data processing, negotiations and international relations.

7. THE UNIVERSITY OF BELIZE MUST BE MANDATED AND SUPPORTED TO PLAY A CRITICAL PARTNERSHIP ROLE WITH CZMI.

Its role should span:

- ❑ Development and operation of a coastal zone/marine resource faculty.
- ❑ Provision of academic leadership in research in marine/coastal zone resource management.
- ❑ Accreditation of coastal zone management research and training programs.

2. INTRODUCTION

2.1 The Scope of Work

The Caribbean Regional Fisheries Mechanism (CRFM) in consultation with of the Government of Belize (GOB) commissioned the service of Trevor Hamilton and Associates to undertake a review of the institutional framework facilitating integrated coastal zone management with a view to rationalize the structures and functions of such institutions in order to realize optimum stakeholder benefits and financial sustainability. Specifically, the service should determine and recommend.

- Appropriate names for the institutions.
- Clearly defined roles and portfolio of functions for each entity/institution.
- The institutional and organizational structures, the organizational competency, and staffing requirements.
- Pragmatic results oriented options for sustained revenue generation.
- Provisions to ensure that the objectives of the Fisheries Department and the Coastal Zone Management Authority and Institute are safeguarded.

2.2 Work Approach

The team of consultants comprising: Dr. Trevor Hamilton, a Caribbean renowned management expert, and Mr. André Kong, the Director of Fisheries for Jamaica undertook a seven (7) task work program to produce the outputs set out in Section 2.1 above. The tasks are:

Task – 1 Briefing Meetings with representatives of the two (2) partners behind the project. Namely:

- The Management of the CRFM Secretariat led by its Executive Director, Mr. Hugh Saul.
- The GOB, through the Hon. Minister of Agriculture and Fisheries – The Hon. Servulo Baeza and his outgoing and designated Chief Executive Officer, Messrs. Sergio Garcia and Hugh O'Brien respectively.

These meetings focused on the scope of work, expected outputs, and critical issues to be addressed.

- Task - 2 Consultative Meetings with Senior Executives and Professional Officers in a wide range of public and private sector institutions and organizations to ascertain their expectations from the exercise as well as the critical issues that should be addressed.
- The detailed list of consultees is enclosed as Appendix-1.
- Task – 3 Review of all the available reports and secondary data that are relevant for the institutional and organizational analysis as well as the on-going issues. Appendix-2 provides the list.
- Task – 4 Holding various team meetings to brainstorm the problems and the workable solutions.
- Task – 5 Preparation of a Draft Report
- Task – 6 Facilitation of a stakeholders' consensus building session. The session reviewed the Draft Report and discussed and recommended solutions to a range of issues pertaining to institutional rationalization of coastal zone management in Belize. Appendices 3 and 4 set out the participants and the report of the session respectively.
- Task - 7 Preparation of this Final Report. This Report expands and improves on the Draft Report based on the outcomes from the stakeholders' consensus building session.

2.3 Outline of the Report

This Report is presented in six (6) chapters. Namely:

1. **The Summary** which presents a concise report on the findings, the challenges, the options, and the pragmatic and stakeholder driven solutions.
2. **The Introduction**, which outlines the scope of work the methodology, and the limitations of the Report.
3. **An Overview**, which focuses on: definitions, the importance of the marine sector in Belize, the institutional and legislative environment governing coastal zone management and the mandates.
4. **The Issues**, which focus on the ones that are institutional, organizational, and financial.
5. **The Strategic Options**, prefaced by a set of the guiding principles, these options revolve around the institution, the organization, functions, staffing, and financing.

6. **Indicative Strategic Financing Plan**, which provides GOB – CRFM with the recommended Strategic Optional Plans for the future of integrated coastal zone management in Belize. It focuses on: services, budget and financing.

2.4 Limitations

The scope of work for the project was very clear and the consultants were given all the requisite co-operation and qualitative information to perform the service. In addition, the individual consultative sessions and group review of the Draft Report with the stakeholders have been extremely helpful. However, the scope of work, short timetable for completion and restricted budget did not allow the consultants to carryout any form of institutional operations audits. Recommendations from this Report therefore require in-depth reviews of the organizations to be affected to modify them to match each specific operating environment.

3. OVERVIEW

3.1 Character, Definitions, and History

Belize' coastal zone contains a globally significant diversity of ecosystems and organisms of which the most striking is the largest barrier reef. This barrier reef is second in size only to the Australian Great Barrier Reef. Associated with the Belizean barrier reef complex are three (3) offshore atolls, over 1,060 sand and mangroves cays, sea grass beds, extensive mangroves, littoral forests, estuaries and wetlands. The many endangered species include the West Indian Manatee, American Crocodile, Sea turtles and several sea birds.

The sustainable development of the coastal zone of Belize is critical to the economic and social well-being of the country, and to its biological diversity. The future of two of the country's most important industries fisheries and tourism is ultimately tied to the health of the coastal zone.

Integrated coastal zone management is critical in ensuring that the critical habitats and ecological processes are maintained. Integrated coastal zone management is the process of helping to link the economic potential of the coastal zone with equitable allocation and sustainable use of its resources, while improving the decision – process over the use of these resources. This makes the overarching goal being to “support the allocation, sustainable use and planned development of Belize's coastal resources through increased knowledge and building of alliances for the benefit of all Belizeans and the global community. The 4-prong process comprises:

- ❑ Equitable allocation of resources for sustainable use and operating with mechanisms for decision-making to enhance proper utilization.
- ❑ Promoting stakeholder awareness of the inter-dependence between coastal zone resources and the economic and social well-being.
- ❑ Promoting scientific work and standards in coastal zone management practices.
- ❑ Fostering partnerships between all the stakeholders.

The coastal zone Act was passed in April 1998 and became operational almost immediately. It provides for the institutional arrangements for coastal zone management in Belize through the establishment of a Coastal Zone Management Authority (CZMA) and its technical arm, the Coastal Zone Management Institute (CZMI). The CZMA is an autonomous public statutory body charged with the responsibility for implementing and monitoring policies governing the use and development of coastal zone in Belize. The CZMI has the mandate to conduct marine research, maintain a data center to provide information as required by the Authority, organize training courses, support other agencies involved in coastal zone management, maintain coastal monitoring programs and assist with the preparation of a Coastal Zone Management Plan.

The Fisheries Department which spearheaded the establishment of Coastal Zone Management Authority / Institute is legally responsible for the establishment, oversight and management of marine resource. This entails:

- ❑ Aquaculture management
- ❑ Fisheries resource management
- ❑ Marine reserves
- ❑ Administration of Fisheries Regulations comprising:
 - Export licencing
 - Licencing and registration of fishing boats and fishers.
 - Issuance of marine research certificate.
- ❑ Aquaculture and fisheries policy development
- ❑ Technical advice pertaining to marine resources
- ❑ Research in marine resources
- ❑ Education and public awareness.

3.2 The Economic Importance of Coastal Zone Management in Belize

Coastal resources play an important role in creating livelihoods in rural communities, the quality and appeal and growth of the tourism sector, and in export earnings. It's contribution to the economy as measured through the trend in contribution to the GDP, the growth in tourism which is ecologically focused, the contribution of marine products (fish and aqua-culture) to domestic exports, and the annual growth rate in fisheries, is very significant. Tables 3 – 1 and 3-2 provide the details which are highlighted below.

- ❑ Fisheries' contribution to GDP has more than doubled from 2.2% to 5.3% between 1990 and 2000.
- ❑ Tourism has been growing consistently at an average of over 7% annually between 1990 and 2000. This growth rate compares with 5.7% for the general economy.
- ❑ Food export which comprises mostly marine products has increased its share of commodity export earnings from the already high of 82% in 1990 to 90% in 2000.
- ❑ The average annual growth rate of fisheries between 1990 and 2000 was 26.4%. This compares extremely favourably with the national economic growth of 5.7%.
- ❑ The output of fisheries has increased from 1.8 million tons in 1990 to 11.1 million tons in 2000.

TABLE 3-1: BELIZE: ASSESSMENT OF ECONOMIC IMPORTANCE OF THE COASTAL ZONE

INDICATORS	<i>Rate</i>		
	MEASURE	2000	1990
1. Fisheries' contribution to GDP.	As a percentage of GDP	5.3	2.2
2. Agriculture contribution to GDP.	As a percentage of GDP	14.4	13.8
3. Tourism and allied services (growth rate)	Average percentage annual growth rate 1990-2000	7.3	
4. Food export (mostly fish and aquaculture).	Export as a % of total domestic exports.	90%	82%
5. Average annual growth rate of fisheries.	Average annual growth rate 1990-2000	26.4	
6. Growth rate of the GDP	Average annual growth rate 1990-2000	5.7	

TABLE 3-2: BELIZE TREND IN MARINE PRODUCTION 1990 – 2002

YEAR	<i>In 000 tons</i>	
	OUTPUTS	
1990	1,792	
1995	2,663	
1999	8,446	
2000	9,368	
2001	11,149	
2002	11,064	

Source: *Department of Statistics*

3.3 The Public Sector Institutional Mandates and Legislative Authority

The public sector's mandate to monitor the coastal zone environment spans at least sixteen (16) areas. Namely:

Agriculture	Establishment and management of protected areas
Aquaculture	Fisheries management
Coastal construction	Land use planning

Community development	Marine transportation management and regulation
Dredging and land creation	Natural resources allocation
Emergency preparedness	Tourism development and maintenance standards
Environmental protection and impact assessment	Waste management
	Water management

The public sector has a wide range of departments and organizations responsible for carrying out these functions relating to coastal zone management. They include:

Ministry of Agriculture	Forestry Department
The Fisheries Department	Fisheries Department
Housing and Planning Department	Land Utilization Authority
Ministry of Works	Belize Port Authority
Ministry of Rural Development	Customs Department
Department of Human Development	Police Department
Geology and Petroleum Department	
Lands and Survey Department.	Belize Tourism Board
National Emergency Management Organization.	Water and Sewage Authority
Department of the Environment	City, Town and Village Councils
Public Health Bureau	Hydrology Unit

Table 3-3, which follows, sets out the key functional areas of coastal zone management and the network of public institutions performing such functions. It also sets out the legislation governing these functions. This large number of government ministries and departments with legislative and administrative jurisdiction over activities in coastal zone management is not unique to Belize. It is the usual situation in many countries where marine resources play such a significant role.

TABLE 3-3: BELIZE CRITICAL STATUTORY COASTAL ZONE FUNCTIONS AND LEGISLATIVE AND ENFORCEMENT AUTHORITIES.

FUNCTIONAL AREA	RESPONSIBLE PUBLIC OFFICER/ DEPARTMENT	LEGISLATION
1. Agriculture	Ministry of Agriculture – Chief Agriculture Office	Pesticides Control Act
2. Aquaculture	Fisheries Department /Fisheries Administrator	Fisheries Act
3. Coastal construction	<input type="checkbox"/> Lands and Survey Department <input type="checkbox"/> Housing/Planning Department <input type="checkbox"/> Ministry of Works	<input type="checkbox"/> National Lands Act <input type="checkbox"/> Housing and Town Planning Act <input type="checkbox"/> Public Roads Act <input type="checkbox"/> Dangerous Buildings Act
4. Community development	<input type="checkbox"/> Ministry of Rural Development <input type="checkbox"/> Department of Human Development	<input type="checkbox"/> Village Councils Act
5. Dredging and land creation	<input type="checkbox"/> Geology and Petroleum Department <input type="checkbox"/> Lands and Survey Department	<input type="checkbox"/> Mines and Minerals Act <input type="checkbox"/> National Lands Act
6. Emergency preparedness	<input type="checkbox"/> National Emergency Management Organization	
7. Environmental protection and impact assessment.	<input type="checkbox"/> Department of the Environment <input type="checkbox"/> Public Health Bureau	<input type="checkbox"/> Environmental Protection Act <input type="checkbox"/> Dumping at Sea Act <input type="checkbox"/> Public Health Act
8. Establishment and management of protected areas.	<input type="checkbox"/> Forestry Department <input type="checkbox"/> Fisheries Department	<input type="checkbox"/> National Park System Act <input type="checkbox"/> Antiques Act
9. Management fisheries	<input type="checkbox"/> Fisheries Department	<input type="checkbox"/> Fisheries Act
10. Land use planning	<input type="checkbox"/> Land Utilization Authority	<input type="checkbox"/> Land use ordinance <input type="checkbox"/> Housing and Town Planning Act
11. Marine transportation management and regulation.	<input type="checkbox"/> Belize Port Authority <input type="checkbox"/> Customs Department <input type="checkbox"/> Police Department	<input type="checkbox"/> Belize Port Authority Act <input type="checkbox"/> Merchant Shipping Act
12. Natural resource allocation	<input type="checkbox"/> Lands and Survey Department. <input type="checkbox"/> Forest Department. <input type="checkbox"/> Geology and Petroleum Department.	<input type="checkbox"/> National Lands Act <input type="checkbox"/> Forest Act <input type="checkbox"/> Petroleum Act <input type="checkbox"/> Mines and Minerals Act
13. Tourism development and maintenance of standards.	<input type="checkbox"/> Belize Tourism Board	<input type="checkbox"/> Belize Tourism Board Act

TABLE 3-3(CONT'D): BELIZE CRITICAL STATUTORY COASTAL ZONE FUNCTIONS AND LEGISLATIVE AND ENFORCEMENT AUTHORITIES.

FUNCTIONAL AREA	RESPONSIBLE PUBLIC OFFICER/ DEPARTMENT	LEGISLATION
14. Waste management	<input type="checkbox"/> Dept of the Environment <input type="checkbox"/> Water and Sewage Authority <input type="checkbox"/> Public Health Bureau <input type="checkbox"/> City Town, and Village Councils.	<input type="checkbox"/> Environment Protection Act <input type="checkbox"/> Water and Sewage Act <input type="checkbox"/> Solid Waste Management Authority Act <input type="checkbox"/> Others
15. Water management	<input type="checkbox"/> Water and Sewage Authority <input type="checkbox"/> Public Health Bureau <input type="checkbox"/> Department of the Environment <input type="checkbox"/> Hydrology Unit	<input type="checkbox"/> Water and Sewage Act <input type="checkbox"/> Public Health Act <input type="checkbox"/> Environmental Protection Act

Despite the existence of a great deal of legislation, there is still a recognized need for rationalization. The existing legislative framework does not always reflect a coordinated view of government agency responsibilities and powers in that these are for a variety of reasons. (mainly historical) considerable overlaps and discrepancies in jurisdictional and administrative powers. In the context of coastal zone issues, the most obvious overlaps exist between the Fisheries Legislation, which is currently under reviews; the 1992 Maritime Areas Act which follows a general Commonwealth model granting extensive regulatory powers in the marine environment to the Ministry of Foreign Affairs. The Environmental Protection Act 1992 gives extremely wide regulatory powers, some of which are already provided elsewhere, to the Ministry of Environment and Tourism.

The Draft 1995 State of the Coastal Zone Report records that more than 40 individual statutes as well as even more statutory instruments relate to matters of coastal zone governance and there have been a number of recent major reviews of legislation affecting natural resources and environmental issues with significant coastal dimensions. Such reviews include: Zisman (1992) for mangroves, Cerceli (1993) for fisheries, McCalla (1993 and 1994) for forestry and Harrison (1994) and Nanni (1994) for water resources. A common view emerging from these reports is that there is a need not necessarily for more primary innovative legislation but for the coordination of existing statutory powers to clarify the responsibilities of the various ministries and departments active in various aspects of coastal zone management. A further concern is that while new legislation will inevitably be necessary to reflect modern perspectives and emerging problems (see e.g. Cerceli 1993) it is important that such new sectoral legislation does not exacerbate the coordination problem.

3.4 The Private Sector Involvement

The Belizean private sector, comprising mostly Non-Government Organizations (NGOs), has significant involvement in coastal zone management. The national integrated Coastal Zone Management strategy for Belize lists some 41 NGOs involved in coastal zone management. Its activities span: tourism product enhancement, public education, co-management, advocacy, financing, research, training and conservation and preservation. Table 3-4 presents the number of organizations playing significant roles in these areas. It can be concluded from table that there

is a large NGO sector involved in all of the functional areas. The strengths and diversity of the NGO community in Belize, and moreover the supporting role which NGOs such as the Belize Audubon Society, have played a major role in furthering environmental issues in general and coastal zone management issues in particular is unique within the hemisphere. This helps to position Belize as potentially a major reference center for demonstrating effective partnerships in coastal zone and general environmental management.

TABLE 3-4: BELIZE: PRIVATE SECTOR INTEREST GROUPS AND NGOS INVOLVED IN COASTAL MANAGEMENT

FUNCTIONAL AREAS	NUMBER INVOLVED	BUSINESS COMMUNITY INTEREST GROUPS	REGIONAL/ COMMUNITY BASED NGOS	NATIONAL NGOS
1. Tourism product enhancement	5	2	1	2
2. Public education	9	1	3	5
3. Co-management	9	3	2	4
4. Advocacy Campaign	8	3	2	3
5. Financing	4	2	0	2
6. Research/data gathering	9	3	2	4
7. Training	8	4	2	2
8. Conservation/preservation	11	4	5	2

Some of the leading interest groups/NGOs involved in the above include:

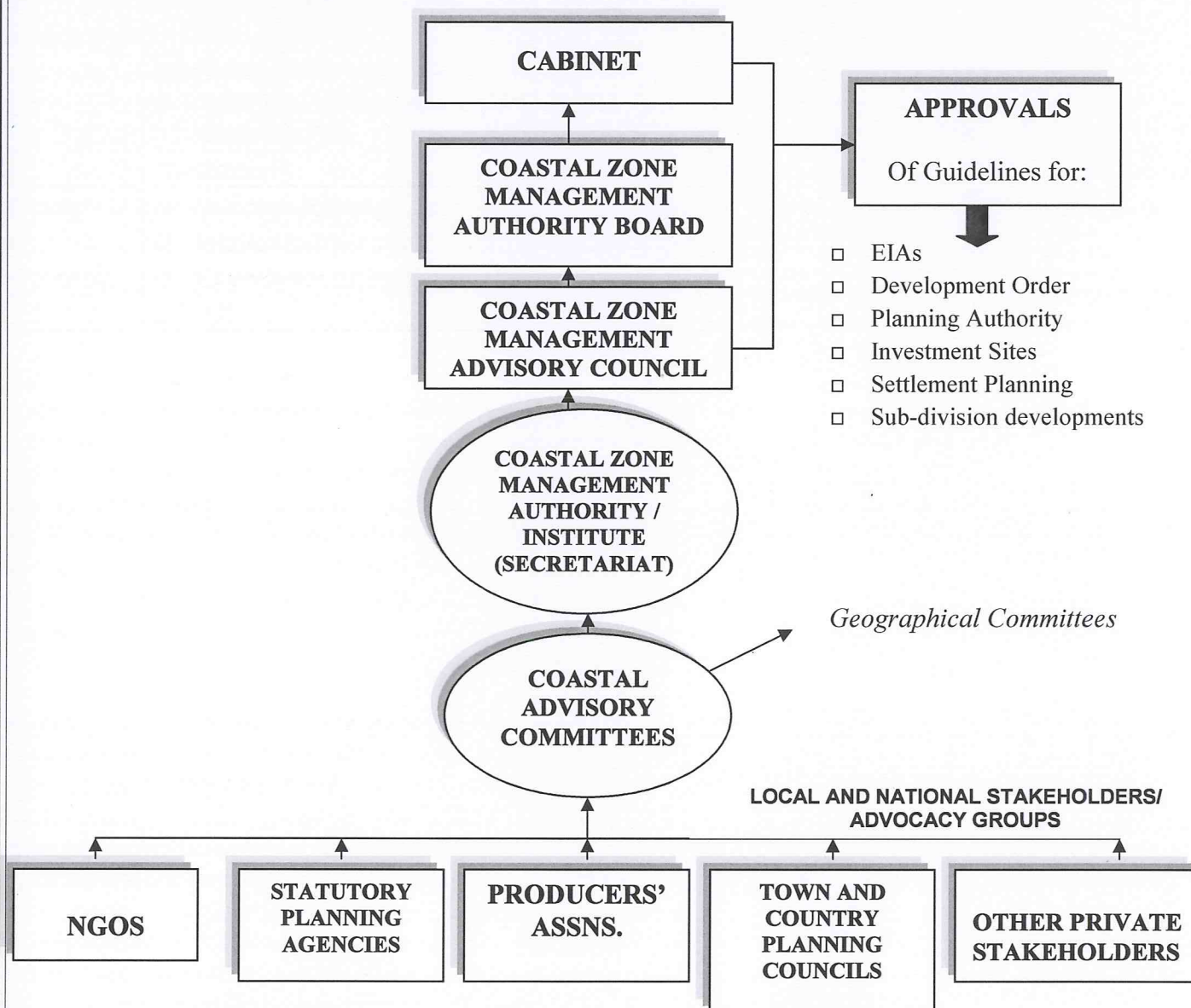
National Development Foundation Bank of Belize	Toledo Associations For Sustainable Tourism and Environment (TASTE)
Fisheries Cooperatives	Belize Chambers of Commerce and Industry
The Belize Tourism Industry Association	Belize Enterprise for Sustainable Technology
Protected Areas Conservation Trust	Belize Fisherman Cooperative Society
Toledo Institute for Development and Environment	Association of National Development Agencies (ANDA)
National Land Alliance for Development	Belize Alliance of Conservation Non-Government Agencies (BACONGO)
Help for Progress	Belize Audubon Society

3.5 Institutional Framework

Coastal Zone Management in Belize has an adequate institutional framework for participation of stakeholders. The advisory process is a “bottom up” structure as illustrated in Exhibit 3-1. The five (5) tiered structure for the “bottom up” advisory process, comprises:

- Local and national Stakeholders/Advisory Groups comprising: NGOs, statutory planning agencies, producers associations, Town and Country Planning Councils, and other private stakeholders. These comprise the Coastal Zone Advisory Committees which have specific geographical jurisdictions.
- The Coastal Zone Management Authority/ Institute Secretariat which drives the process.
- The Coastal Zone Management Advisory Council which provides technical advice for Board and Cabinet consideration.
- The Coastal Zone Management Authority Board which provides leadership and policy direction to the Authority and the Government.
- The Cabinet which is the final authority for government’s decision is very involved in the process.

EXHIBIT 3-1: SCHEMATIC OUTLINE OF THE COASTAL ZONE MANAGEMENT ADVISORY PROCESS



3.6 Financing

There are three (3) categories of players with different sources of financing as follows:

- The Coastal Zone Management Authority/Institution is the hub and facilitatory player for the integrated coastal zone management process in Belize. It expends approximately BZ\$2.2 million annually funded by central government and international funding agencies. The international funding is mainly through the Global Environment Facility. The funding from this facility has been provided on a programming basis for almost 10 years. Governments BZ\$0.12 M or 5% is expended

on the administration of the CZMA. It can therefore be concluded that the CZMA is central government funded and the technical arm, the CZMI is externally funded.

- Central Government, through its network of ministries provide about BZ \$329,000 annual support to all the sectoral policy management work for coastal zone management including the CZMA. This accounts for less than 0.1% of the BZ \$417 Million budget (2003/04) Table 3-5 provides the details.
- The Protected Areas Conservation Trust (PACT) was established in 1996 to operate a national trust fund for financing conservation. Its principal source of funding include a share of cruise ship passenger fees, recreation related licencing fee, and grants for specific programs. The institution is like a bank; it invites proposals for funding and award funding based on the assessed impact the proposed project is likely to make. In fiscal year 2002/2003, it expended \$250,000 on projects with coastal zone initiatives accounting for BZ \$85,000 or 34% as illustrated in Table 3-6.

Recently, the CZMI with support from government has decided to provide management services in exchange for attractions fees, at Marine Protected Areas. The first phase of this initiative is estimated to generate net revenue of over BZ \$800,000 which could be enough to underwrite about 40% of its budgeted operating and program costs. This initiative is entrepreneurial and therefore comes with some associated risks, which means that the level of expected net income is not guaranteed. It is however, a step in the right direction and it should be encourage to introduce more fee based services. Some opportunities for the based services include:

Research projects
Training

Technical assistance services
Certification of standards

Management of Marine Protected Areas

Performance of environmental impact
assessment

Laboratory testing services

Development and monitoring of quality
assurance systems

Management of public education/awareness
contracts pertaining to coastal zone/marine
resources

TABLE 3 – 5: BELIZE: GOB CURRENT ACCOUNT EXPENDITURE ON COASTAL MANAGEMENT*GOB Recurrent Budget for Coastal Zone Related 2003/04 in BZ\$*

MINISTRY	PERSONNEL AMOUNT \$	OTHER	REMARKS
1. Coastal Zone Management Authority	120,000	0	Mainly for administration
2. Agriculture Fisheries and Cooperatives	105,000	0	Allocated 50% of the fisheries professionals and the operating cost.
3. Ministry of Natural Resource and the Environment	68,000	0	Allocated estimated part of salary from Lands, and Forestry personnel.
4. Ministry of Tourism	12,000	0	Allocated estimated part of salary and support budget for conservation personnel.
5. Ministry of Development	0		
6. Ministry of Housing and Urban Renewal.	14,000		Allocated part of salary and related cost for Planning Officer.
Total Coastal Zone Related Budget	329,000		
National Recurrent Budget	BZ417M		
Coastal Zone Budget as a percentage of the National Recurrent Budget (2003/04)	0.07%		

TABLE 3-6: BELIZE PROTECTED AREAS CONSERVATION TRUST: PROJECT FUNDING 2002/2003

PROJECT FOCUS	AMOUNT BZ\$000	COASTAL ZONE RELATED AMOUNT BZ\$
1. Environmental awareness program in Baboon Sanctuary Community	49	0
2. Development of base line data for assessing impact on national park.	37	0
3. Capacity strengthening for bio-diversity awareness	49	25
4. Management plan for Payne's Creek National Park.	20	0
5. Public awareness of Manatee conservation needs	60	60
6. Ecological assessment of Spanish Creek Wildlife Sanctuary	35	0
TOTAL	250	85
PERCENTAGES	100	34

4. STRENGTHS AND WEAKNESSES

4.1 Strengths

Coastal zone management has a range of institutional strengths. The main ones comprise:

- Government fully funds administration of the Coastal Zone Management Authority. This means that it is very committed to funding policies and regulation.
- There is a large NGO sector involved in meaningful interventions to improve the quality and sustainability of the environment.
- Several producer associations such as the Fisheries' Cooperatives and Hotel Industry Association have been supporting activities relating to coastal zone management especially in advocacy.
- There are many public sector departments with mandates to carry out the various specific sectoral type functions in coastal zone management.
- There is a national tertiary education institution, the University of Belize, which has the potential to become a major source of institutional support to the work of the Coastal Zone Management Institute.
- The UNDP in Belize is still very active in supporting coastal zone management initiatives and has assured its continued support.
- There are many laws governing the wide range of institutional functions in coastal zone managements.
- Stakeholders generally strongly believe that the coastal zone management authority is an indispensable institution provided that it maintains independence.
- The Belizean Coastal Zone Management Institute has an excellent opportunity to become a regional institution since there are no comparable institutions in the Caribbean and Central America where marine resources play a critical role in economic growth and development.
- The existing institutional framework adequately allows for participation in the process of coastal zone policy formulation.
- Coastal zone/marine resources play a pivotal role in the Belizean economy. Therefore investment in coastal zone management will yield high economic returns.

- There are highly qualified and competent personnel especially in the Coastal Zone Management Authority/Institute, the Fisheries Department, and the Producers Associations to carryout the core functions of the CZMA/I.

Table 4-1 highlights these strengths, and the opportunities they present.

TABLE 4-1: BELIZE INTEGRATED COASTAL ZONE MANAGEMENT: MAJOR INSTITUTIONAL STRENGTHS AND OPPORTUNITIES

STRENGTHS	OPPORTUNITIES
1. The Government of Belize has been very committed to funding the policy/regulatory functions of CZM. It however, believes that the institute should be funded through services and sectoral beneficiaries.	□ Private funding should be mobilized for the Institute.
2. There is a large NGO sector involved in interventions to preserve marine resources.	□ The institutional mechanism for the Coastal Zone Management Authority and Institute should involve them.
3. Several producer associations have significant capacities for advocacy.	□ They could be the main partners for managing advocacy programs in CZM.
4. PACT has significant institutional capacity for funds management.	□ It could be the strategic partner for CZMA/I.
5. There are many public sector institutions carrying out specialised functions in integrated CZM.	□ CZMA could become an effective coordinator facilitator of coastal zone policies and regulation, using these institutions and departments and support institutions.
6. University of Belize has the potential to become a major source of institutional support to the CZMI.	□ University of Belize could be an effective partner in making CZMI a regional center for excellence.
7. UNDP has assured continued support.	□ They could assist GOB to mobilize funding for the CZMI.
8. There are many laws governing CZM initiatives.	□ Some may have to be revised/rationalized especially if the CZMI is separated from CZMAI.
9. Most stakeholders believe that CZMA should be independent.	□ It could be separated from the Institute. □ It could become independent by reporting to Parliament.
10. The CZM Institute has the potential to be regional.	□ A strategic action program could be pursued to regionalize it.
11. The existing institutional framework allows for adequate participation in the coastal zone policy process.	□ The network could be reviewed to ascertain its effectiveness and ensuring that it is effective.
12. Marine resources play a significant role in the Belizean economy.	□ There is significant justification for private – public sector financing of CZMA and CZMI.

4.2 Weaknesses

Eleven (11) weaknesses have been identified. They are as follows:

- The most significant problem in CZM in Belize is lack of established mechanisms for financial sustainability, but much more concern is being placed on institutional rationalization.
- There is excessive reliance on external financing.
- The policy/regulatory and the development functions of coastal zone management need to be separated.
- There are activities such as research, public education and awareness and environmental impact assessment which could be carried out more cost effectively by a multi-disciplinary technical institution such as CZMI, but listed as part of the core functions of other institutions.
- There is inadequate coordination of existing statutory powers to enhance the effectiveness of the various ministries and departments with responsibilities for various aspects of coastal zone management.
- NGO resources have not been partnered with CZMI enough to realize institutional sustainability.
- Private and public involvement in Coastal Zone Management but initiatives need to be twinned to formalize effective partnership and shared ownership of CMI.
- The University of Belize has not been pursuing its potential for becoming a major marine resource center in this hemisphere.
- The development support potential of the CZMI has been underutilised.
- CZM opportunities are not promoted as private sector investment opportunities.
- The Economic Development Ministry which many perceive to be an appropriate place for CZMA does not appear to have the institutional capacity or portfolio mandate to accommodate it. Besides, the focus of this Ministry is on international economic co-operation.

Table 4 – 2 outlines the weaknesses and the required strategies to address them.

TABLE 4 – 2: BELIZE – INTEGRATED COASTAL ZONE MANAGEMENT: MAJOR WEAKNESSES AND REQUIRED INTERVENTIONS.

WEAKNESS	REQUIRED STRATEGIC INTERVENTIONS
1. The most significant problem is lack of committed financing but much concern is on institutional rationalization.	<ul style="list-style-type: none"> □ All the stakeholders need to meet and reach a consensus on the hierarchy of issues. This could be achieved at the next meeting with the consultants.
2. There is excessive reliance on external financing.	<ul style="list-style-type: none"> □ There is need for a stakeholder commitment to have more contributory partnership in CZM especially since it is so crucial to the economy.
3. The Policy and regulatory functions need to be separate from developmental ones.	<ul style="list-style-type: none"> □ CZMA should operate as an independent authority reporting to Parliament. □ CZMI should be a public – private sector initiative which can be later regionalized.
4. NGO resources have not been leveraged/partnered with CZMA/I enough to realize the best results.	<ul style="list-style-type: none"> □ All stakeholders should seek to invest their technical institutional capacities in the CZMI.
5. Inadequate coordination of statutory powers for CZM, to enhance the effectiveness of ministries and departments holding them.	<ul style="list-style-type: none"> □ Make this a major mandate for the Coastal Zone Management Authority.
6. There are some areas of duplicated or ineffective efforts which could be rationalized for better results, but there are no initiatives to do so.	<ul style="list-style-type: none"> □ All activities in research, public education and awareness and environmental assessment could be more cost-effectively performed by CZMI rather than through a diversity of institutions.
7. The public-private initiatives on CZM need to be twinned to formalize effective partnerships and shared ownership of CMI.	<ul style="list-style-type: none"> □ A re-structuring is necessary. □ A Business Plan should be developed and presented to the private sector for them to buy into it.
8. The University of Belize has not been pursuing its potential for becoming a major marine resource center.	<ul style="list-style-type: none"> □ Review this aspect of the operations at University of Belize (U.B) □ Explore U.B.'s partnership with CZMI as a Regional Center of Excellence for marine resource management.
9. The development support potential of CZMI has been under-utilised.	<ul style="list-style-type: none"> □ The strategies in #5 above should suffice.
10. The investment opportunities in CZM are not promoted in the private sector.	<ul style="list-style-type: none"> □ Identify all the opportunities and assign them to the investment promotion center for mobilizing private investment.
11. The Economic Development Ministry does not have the requisite institutional capacity and portfolio mandate for hosting CZMI. Besides its focus is on international economic cooperation	<ul style="list-style-type: none"> □ Consider the ministry of natural resources as an alternative.

5. THE OPTIONAL INSTITUTIONAL ARRANGEMENTS

5.1 The Guiding Principles

The following should be used to guide the institutional choices.

1. The existing and potentially effective institutional capacities should be retained by their host institutions.
2. The policy and regulatory functions should be separated from the development and technical interventions functions.
3. The policy and regulatory functions should be financed primarily through Central Government through mechanisms which guarantee the inflow of funds.
4. There should be institutional mechanisms for private sector self-regulatory responsibilities.
5. The private sector should be a significant stakeholder in the development institutional mechanisms.
6. The developmental aspects of Coastal Zone Management should be financed by broad based interest groups with significant local inputs.
7. The institutional framework for the development aspect should be hemispheric to position Belize as a Center of Excellence in Integrated Coastal Zone Management.
8. The institutional framework should be designed to optimise opportunities for accessing finance from a wide range of sources.
9. The institutional structure should restrict the level of public financing.
10. The assignment of functions such as research, public /education awareness and environmental impact assessment should be rationalized to be most cost-effective.
11. The institutional framework must recognize the importance of an integrated approach to coastal zone management.

5.2 Extent of Current Fit With the Guiding Principles

The present operating situation has very significant compatibility with only two of the guiding principles and very little work with 8 of them as illustrated in Table 5 –1.

- The only two principles that have been met are: the existence of other effective organizations, and the general recognition of the importance of an integrated approach to coastal zone management.

- The eight (8) that have not been recognized or met are:
- Government's full commitment to finance the policy/regulatory functions.
 - Mechanisms for promoting self regulatory responsibilities.
 - Having a significant level of private sector participation in the developmental functions of ICZM.
 - The need to broadly fund the developmental functions.
 - Transformation of the institute into a regional institution - A Center for Excellence.
 - Re-structuring to maximize the mobilization of financial resources.
 - Having a funding partnership with Government.
 - The private sector having significant stakeholding in the Institute.

TABLE 5-1: BELIZE: ASSESSMENT OF THE EXTENT TO WHICH THE PRESENT COASTAL ZONE MANAGEMENT ARRANGEMENTS FIT THE GUIDING PRINCIPLES FOR RATIONALIZATION.

GUIDING PRINCIPLE	FIT	REMARKS
1. Existing capacities in effective organizations should be retained.	4	There are several effective/specialised organizations. E.g. Fisheries Dept. and PACT, Fishers Cooperatives and CZMA/I and NGOS.
2. Policy and regulatory functions separate from developmental ones.	0	The Coastal Zone Management Authority/Institute has the mandate for all the functions.
3. The policy and regulatory functions principally funded by Central Government.	1	Projectized and funded by external funding agency for over 10 year.
4. Mechanism for private sector self-regulatory responsibilities.	2	The fisheries sector has practiced a little of this.
5. The private sector should be significant stakeholder in the developmental institution.	0	The developmental role is not separated
6. The development aspects should broadly funded with significant local inputs.	0	Funded as a project through overseas institutions.
7. The development institute should be hemispheric and positioned as a Center for Excellence.	0	CZMA/I is a nationally focused body.
8. The institutional framework should be appropriate for optimising opportunities for accessing funds.	1	It is centered around Government.
9. The level of public funding in it should contained.	1	Government is the only source of funding as the project funds come to an end.

TABLE 5-1: BELIZE: ASSESSMENT OF THE EXTENT TO WHICH THE PRESENT COASTAL ZONE MANAGEMENT ARRANGEMENTS FIT THE GUIDING PRINCIPLES FOR RATIONALIZATION.

GUIDING PRINCIPLE	FIT	REMARKS
10. The assignment of functions such as research, public/education awareness and environmental impact assessment should be rationalized for cost-effectiveness.	1	Almost all the institutions have some aspects of these functions as core responsibilities even though they don't have the capacities to perform them.
11. The institutional framework must recognize the importance of an integrated approach to CZM.	3	Many institutional bodies are working collaboratively.

LEGEND ON LEVEL OF FIT

0 – No compatibility

4 – most significant fit

5.3 The Optional Arrangements Ranked

There are at least five (5) optional arrangements. Namely:

- Option – 1:** Continue to operate as a regulatory/policy authority as well as a coastal zone sector development institute.
- Option – 2** Operate as a body with all the conglomeration of all activities relating to coastal zone management policies regulatory and development mandates.
- Option – 3** Operate the Coastal Zone Management Authority with the mandate for standards, regulation and policies and as an autonomous central government core service coordinating the involvement of the relevant specialized services in other ministries and government departments.
- Option – 4** Operate as a coastal zone management body with the mandates for regulation and policies within the structure of a government ministry such as Agriculture and Fisheries.
- Option – 5** Operate as an autonomous Coastal Zone Management Authority and Institute in legal partnership with NGOs and the business community.

Table 5 –2, which follows summarizes the strengths and weaknesses of the 5 options on their relative ranking on a scale of 1 to 10.

TABLE 5 –2: BELIZE: ASSESSMENT OF OPTIONAL INSTITUTIONAL FRAMEWORK FOR COASTAL ZONE MANAGEMENT.

OPTION	STRENGTHS	MAJOR WEAKNESSES	RATING ON SCALE OF 1 - 10
1. Continue to operate as a regulatory/policy authority as well as a marine sector development institute.	<ul style="list-style-type: none"> <input type="checkbox"/> Opportunity for cost containment. <input type="checkbox"/> Opportunity to optimise the use of limited expertise. 	<ul style="list-style-type: none"> <input type="checkbox"/> Regulatory work and development support services are in conflict. <input type="checkbox"/> The potential for broad based ownership of the development support services is extremely restricted. <input type="checkbox"/> The options for securing financing are narrowed. 	4
2. Operate as a body with all the conglomeration of all activities relating to coastal zone management policies regulatory and development mandates.	<ul style="list-style-type: none"> <input type="checkbox"/> Opportunity for cost containment. <input type="checkbox"/> GOB has a one stop institution for coastal zone affairs. 	<ul style="list-style-type: none"> <input type="checkbox"/> Other Government ministries and departments will resent. <input type="checkbox"/> It will be extremely difficult to get the desired access to other government agencies. <input type="checkbox"/> It will not have any appeal to the business sector, NGO sector or community. <input type="checkbox"/> Government will not be able to fund it adequately. 	3
3. Operate the Coastal Zone Management Authority with the mandate for standards, regulation and policies and as an autonomous central government core service coordinating the involvement of the relevant specialized services in other ministries and government departments.	<ul style="list-style-type: none"> <input type="checkbox"/> This will be very cost-effective <input type="checkbox"/> The bureaucratic process will be minimal. <input type="checkbox"/> The credibility of coastal zone policies will be sound. <input type="checkbox"/> It will be assured of central government budgetary allocations. 	<ul style="list-style-type: none"> <input type="checkbox"/> It is not likely to attract private funding. 	9
4. Operate as a coastal zone management body with the mandates for regulation and policies	<ul style="list-style-type: none"> <input type="checkbox"/> It will be assured of central government funding. 	<ul style="list-style-type: none"> <input type="checkbox"/> Its credibility as a regulatory organization would have been devalued. <input type="checkbox"/> It would have lost the 	2

TABLE 5 –2CONT'D: BELIZE ASSESSMENT OF OPTIONAL INSTITUTIONAL FRAMEWORK FOR COASTAL ZONE MANAGEMENT.

OPTION	STRENGTHS	MAJOR WEAKNESSES	RATING ON SCALE OF 1 - 10
within the structure of a government ministry such as Agriculture and Fisheries.		independence required to be a regulator. <input type="checkbox"/> It would not be able to coordinate effectively.	
5. Operate as an autonomous coastal zone management authority and institute in legal partnership with NGOs and the business community.	<input type="checkbox"/> Increases access to funding <input type="checkbox"/> Opportunity for improved public perception.	<input type="checkbox"/> The regulatory work would not enjoy high credibility. <input type="checkbox"/> The role of government to lead in policy formulation would be undermined.	3

It can be concluded from the analysis in Table 5-2 that “Option - 3” is the best. Namely:

“Operate the Coastal Zone Management Authority with mandate for standards, regulation and policies and as an autonomous central government core service coordinating the involvement of the relevant specialized services in other ministries and government departments.”

Based on the foregoing, the coastal zone management could comprise an independent policy and regulatory body called Coastal Zone Management Authority (CZMA) and a development institution called Coastal Zone Management Institute (CZMI).

5.4 Rationalization of Functions

It is envisaged that coastal zone management will entail at least sixteen (16) critical functions as highlighted below and in Table 5-3:

- | | |
|--|--|
| <input type="checkbox"/> Policy/regulations | <input type="checkbox"/> International Relations |
| <input type="checkbox"/> Standards | <input type="checkbox"/> Resource Mobilization |
| <input type="checkbox"/> Quality Assurance Environmental | <input type="checkbox"/> Relations with the Business Community |
| <input type="checkbox"/> Public Education/Social Marketing | <input type="checkbox"/> Regionalization |
| <input type="checkbox"/> Institutional Capacity Building | <input type="checkbox"/> Accreditation |
| <input type="checkbox"/> Information/Data Management | <input type="checkbox"/> Inter-ministerial Relations |
| <input type="checkbox"/> Research and Development | <input type="checkbox"/> Promotion of Self Regulation |

□ EIA/Certification

□ Technical Assistance Interventions

There are at least eight (8) individual/clusters of institutions that are performing important functions in coastal zone management. They are:

CZMA	Environmental NGOS
CZMI	Community bodies/development organizations
Economic Development Ministries	PACT
Strategic Private Sector	University of Belize
Investment Groups	

The institutions best suited to perform these functions are ranked 1 and 2 below based on the data provided in Table 5-3.

FUNCTIONAL AREAS	RANK AND INSTITUTION RANK – 1	RANK - 2
1. Policy/regulation	CZMA	-
2. Standards	CZMA	NGOs, Strategic private sector interest group
3. Environmental quality assurance	CZMA – Strategic private sector interest groups	-
4. Public education social marketing	CZMI – strategic private sector interest group community bodies or organizations	
5. Institution capacity building.	CZMI, strategic sector interest group, ENGOS, University of Belize.	
6. Information/data management	CZMI	University of Belize, ENGOS Community Development Organization
7. Research and development	CZMI University of Belize	
8. EIA/Certification	CZMA (Certification) CZMI (EIA)	CZMI
9. International relations	CZMI University of Belize	Economic Development Ministries
10. Resource mobilization	CZMI PACT	Economic Development Ministries ENGOS University of Belize
11. Relations with the business community.	Strategic Private Sector Interest Group	CZMI
12. Regionalization	CZMI University of Belize	ENGOS
13. Accreditation	CZMA University of Belize CZMI	

FUNCTIONAL AREAS	RANK AND INSTITUTION RANK – 1	RANK - 2
14. Inter-Ministerial relationship	Economic Development Ministries	University of Belize
15. Promotion of self regulation	Strategic Private Sector Interest Group	
16. Technical Assistance interventions	CZMI University of Belize	ENGO Strategic Private Sector Interest Group

TABLE 5- 3: BELIZE’S POTENTIAL FOR RATIONALIZATION OF FUNCTIONS IN INTEGRATED COASTAL ZONE MANAGEMENT

Candidate – Functional Players

CRITICAL FUNCTIONS	CZMA	CZMI	ECONOMIC DEV. MINISTRIES	STRATEGIC PVT. SECTOR INTEREST GROUPS	ENVIRONMENTAL NGOS	COMMUNITY BODIES / DEV. ORGANIZATIONS	PACT	UNIVERSITY OF BELIZE
1. Policy/regulations	xxx	x	x	x	x	x	x	x
2. Standards	xxx	x	x	xx	xx	xx		
3. Quality Assurance Environmental	xxx			xxx	x	x		
4. Public Education/Social Marketing		xxx	x	xxx	xxx	xxx		
5. Institutional Capacity Building		xxx		xxx	xxx	xx		xxx
6. Information/Data Management		xxx	x	xx	xx	x		xxx
7. Research and Development		xxx		x	x	x		xxx
8. EIA/Certification	xxx	xxx						x
9. International Relations	xxx	xxx	xx	x	x	x		xxx
10. Resource Mobilization		xxx	x	xx	xx	x	xxx	xx
11. Relations with the Business Community		xx	x	xxx	x	x	x	x
12. Regionalization		xxx		x	xx		x	xx
13. Accreditation	xxx	xxx	x	x	x			xx
14. Inter-ministerial Relations	x	x	xxx					xx
15. Promotion of Self Regulation	x	x	x	xxx	xx	xx		
16. Technical Assistance Interventions	x	xxx	x	xx	xx	x	x	xxx

LEGEND ON LEVEL OF PARTICIPATION

xxx – Leadership /co-leadership
xx – Significant support or facilitation
x – Standard support or facilitation

5.5 Institutional Structure

The integrated coastal zone management structure should comprise public sector and private sector players.

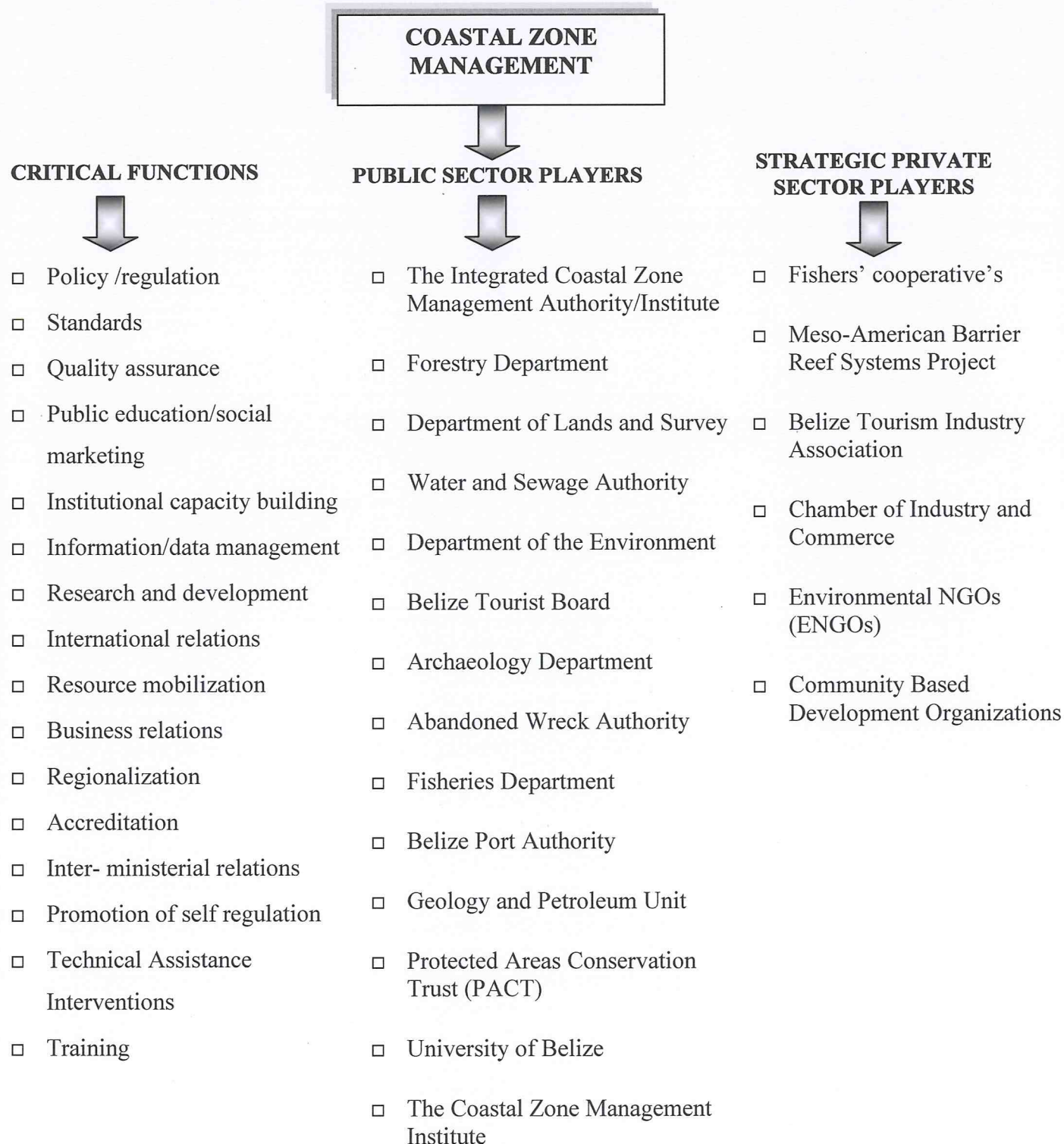
- There are at least 14 important public sector players CZMA, CZMI, Forestry Department, Department of Lands and Survey, Water and Sewage Authority, Department of the Environment, Belize Tourist Board, Archaeology Department, Abandoned Wreck Authority, Fisheries Department, Belize Port Authority, Geological and Petroleum Conservation Trust, PACT and University of Belize.
- There are seven (7) important private sector players. Namely: Fishers Cooperatives, MESO, Audubon Society, American Barrier Reef Systems Project, Belize Tourism Industry Association, Chamber of Industry and Commerce, other ENGOS and Community Based Development Organizations.

These institutions are expected to work in close partnerships to execute the following functions.

Policy and regulation	Business relations
Standards	Resource mobilization
Quality assurance	Accreditations
Public educational social marketing	Inter-ministerial relations
Information and data management	Promotion of self regulation
Institutional capacity building	Technical assistance interventions
Research and development	Training
International relations	Regionalization

Exhibit 5-1 schematically sets out the partnership framework

EXHIBIT 5-1 BELIZE: FRAMEWORK FOR PARTNERSHIP ORIENTED INTEGRATED COASTAL ZONE MANAGEMENT

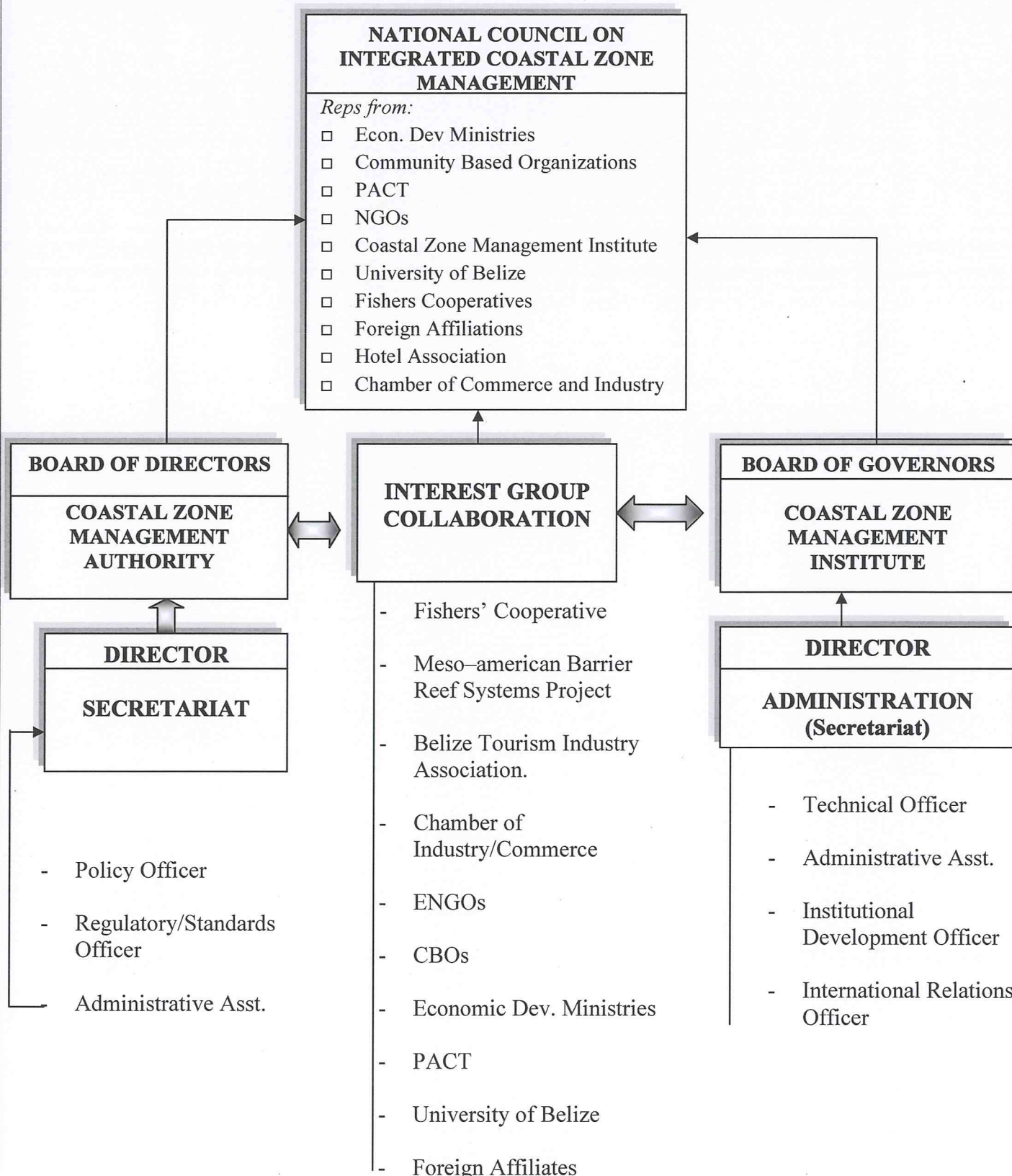


It is possible in the institutional arrangements for the CZMA and CZMI to have their own Board of Directors, Board of Governors respectively drawn from representative interest groups. They could also share a common national council in order to utilize manpower efficiently especially since they have intertwining functions, clientele and leadership. Each institution will have a separate and small secretariat generally managed by a Director.

- The CZMA Secretariat should have a Director, A Policy Officer, and A Regulator/Standards Officer.
- The CZMI Secretariat should be staffed with a Director, a Technical Officer, an Administrative Assistant, an Institutional Development Officer and an International Relations Officer.

Both secretariats will work in close collaboration with interest groups. The staffing set out above should carryout the core functions of the organization. The organization especially the CZMI should projectize all of its activities and mobilize the necessary resources to support them. Exhibit 5-2 schematically sets out the workable institutional framework.

EXHIBIT 5-2 BELIZE: INSTITUTIONAL FRAMEWORK FOR INTEGRATED COASTAL ZONE MANAGEMENT



5.6 Operational Framework and Performance Indicators

The operational structure and critical performance indicators for the CZMA are outlined in Exhibit 5-3. The possible sources of funding should comprise: central government (the main source) PACT, licensing and certification fees, and grants from international donors. The institution should have the following as its key performance indicators:

Completion of A Strategic Plan	Coastal zone management laws
Revision of the Act for the Authority	Effective use of coastal zone management laws
Appropriate policies	Adequate and sustainable funding
Effective policy management	Transparent governance
Adapted coastal zone management standards	Participatory governance

The CZMI, operating as a Regional Center of Excellence should have formalized partnerships and program and core functions with funding from: fees for service, contracted research projects, international funding agencies, relevant producers associations, international institutions in coastal zone management, partner universities in marine resource research, University of Belize, University of the West Indies, International ENGOs, Local Fishers Cooperatives, PACT, CARICOM Regional Fisheries Mechanisms Government of Belize and CARICOM Governments.

The critical performance indicators could include:

Completion of a strategic plan	Regional and hemispheric programs in action
An adequately staffed secretariat	Sustainable financing
A Portfolio of adjunct specialists	Broad based ownership
Formalized strategic partnership	Regional accreditation status
Major training and research programs with University of Belize	

Exhibit 5-3 illustrates.

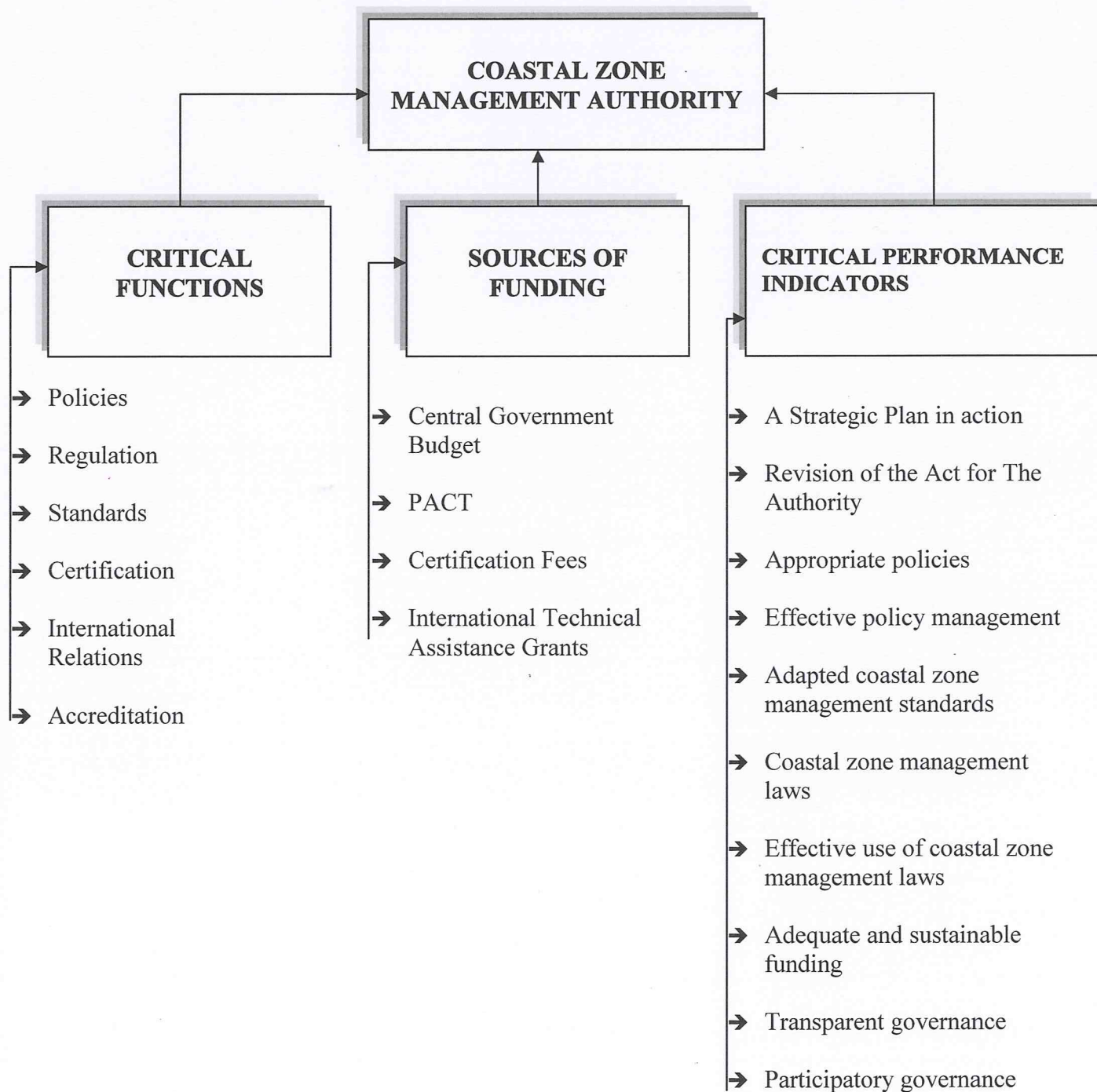
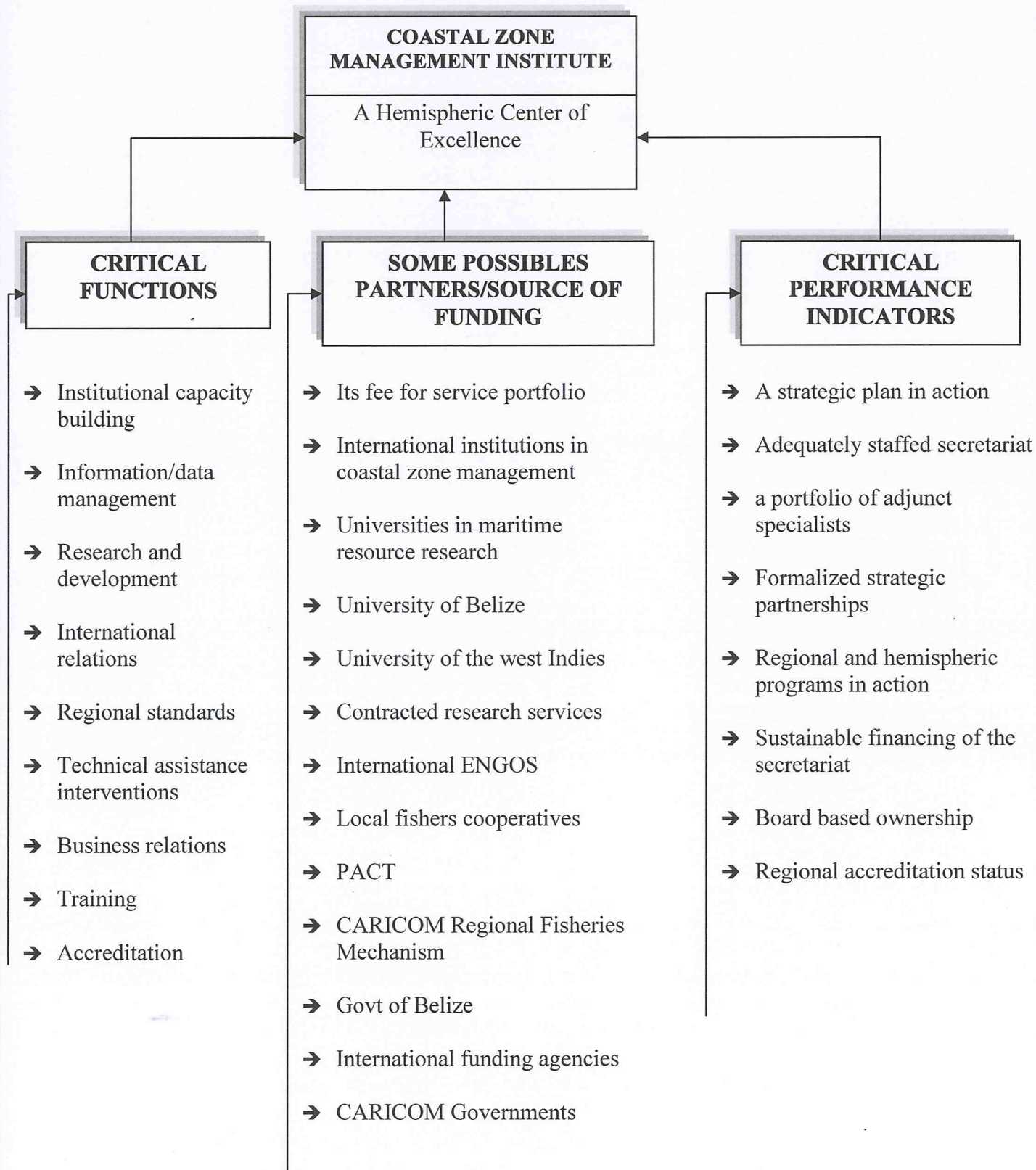


EXHIBIT 5-4: BELIZE: FRAMEWORK FOR OPERATING THE COASTAL ZONE MANAGEMENT INSTITUTE



5.7 Organizational Structure, Staffing, and Duties

The CZMA should have an operational structure as outlined in Exhibit 5-. It set out the core jobs and their respective functions as follows:

- ☐ The Director should have final executive responsibility for performance, planning sound and credible practices and general accountability.
- ☐ The Policy Officer should have professional responsibility for policy formulation, policy management inter-ministerial/inter agency collaboration and policy research.
- ☐ The Regulations and Standards Officer will provide professional leadership and development of standards, certification, technical research, compliance and inter-agency/inter ministerial collaboration.
- ☐ The Administrative Assistant will provide general administrative functions which spans: project administration, office management, report production and documentation.

The CZMI: structure and staffing are outlined in Exhibit 5-6. The personnel are: the Director, a Technical Officer, a Resource Mobilization Officer, and Institutional Development Officer, a Stakeholder Relations Officer and an Administrative Assistant. Their respectful duties are summarised in the exhibit.

5.8 Competency Requirements

The CZMA and CZMI will require a prescribed body of competencies to ensure that they can perform their functions effectively. Tables 5-4 and 5-5 list the competencies required by each organization and the level to which they are required by each position in the organization. The competencies by organization are highlighted below.

CZMA REQUIRED COMPETENCIES

- ☐ Regulatory institutional management
- ☐ Institutional development
- ☐ Policy formulation and management
- ☐ Resource management
- ☐ Environmental management
- ☐ Natural resource management
- ☐ Standards development/ management
- ☐ Public education/communication
- ☐ Public sector administration
- ☐ Resource mobilization
- ☐ Program development /management
- ☐ Computer applications

CZMI REQUIRED COMPETENCIES

- ☐ Leadership
- ☐ Scientific research and development
- ☐ Institutional development
- ☐ Resource management
- ☐ Environmental management
- ☐ Negotiation
- ☐ Linguistics
- ☐ Social marketing
- ☐ Inter-Government relations
- ☐ Program development and management
- ☐ Computer applications
- ☐ Operations management
- ☐ Resource mobilization
- ☐ Information/data processing

EXHIBIT 5-5: BELIZE: ORGANIZATIONAL STRUCTURE FOR THE COASTAL ZONE MANAGEMENT AUTHORITY

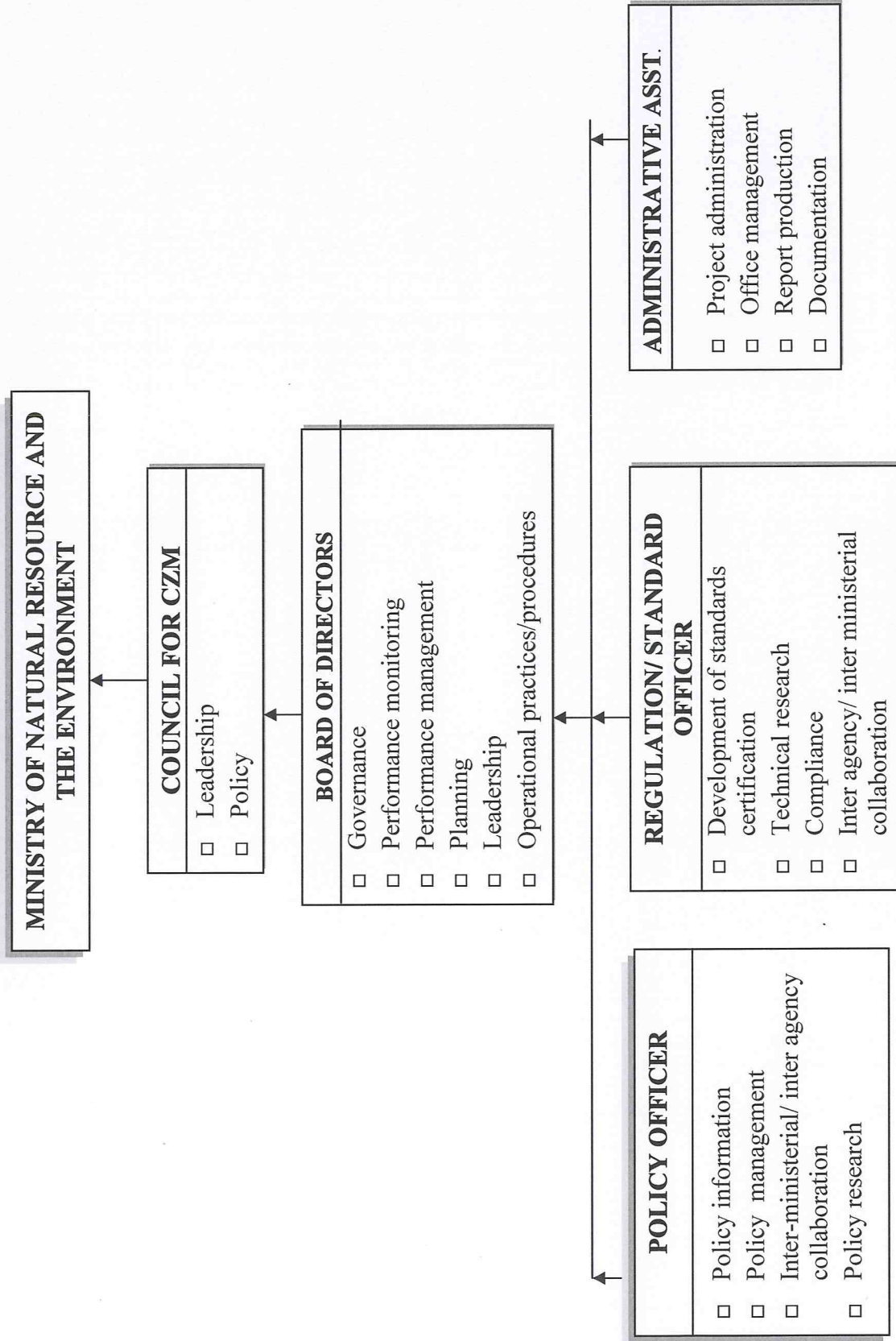
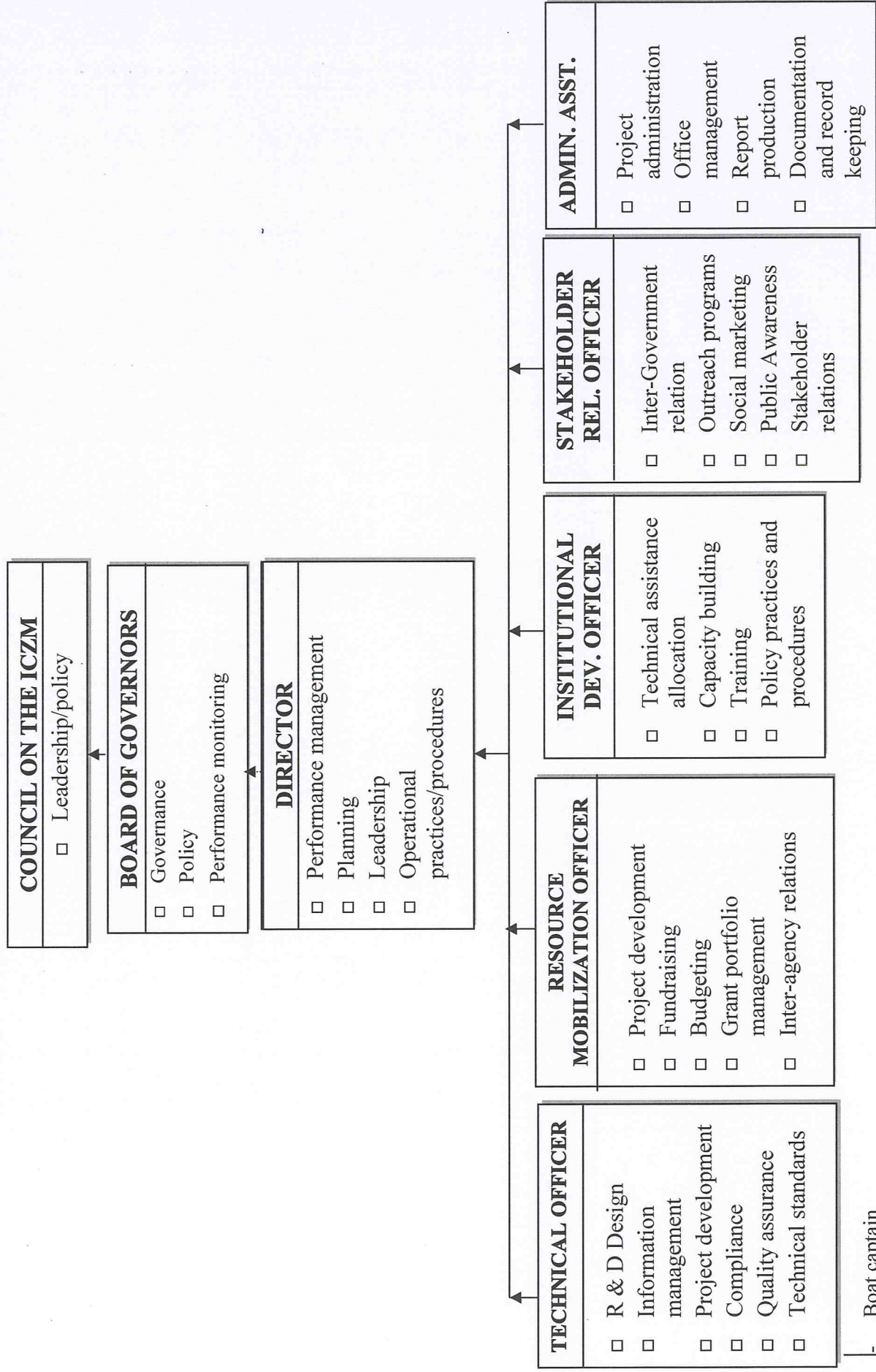


EXHIBIT 5-6:

BELIZE: ORGANIZATIONAL STRUCTURE FOR THE COASTAL ZONE MANAGEMENT INSTITUTE



- Boat captain
Library Asst.

EXHIBIT 5-4:**BELIZE COASTAL ZONE MANAGEMENT AUTHORITY: REQUIRED COMPETENCIES AND QUALIFICATION FOR CORE JOBS.***Core Jobs and Level of Required Competencies and Qualification*

TYPES OF REQUIRED COMPETENCIES	DIRECTOR	POLICY OFFICER	REGULATORY STANDARDS OFFICER	ADMINISTRATIVE ASSISTANT
1. Operations management	XXXX	X	XX	XX
2. Institutional development	XXX	X	XX	X
3. Policy formulation and management	XXXX	XXXX	XXX	
4. Resource management	XXXX	XX	XX	
5. Environmental management	XXX	XXXX	XXXX	
6. Natural resource management	XXXX	XXX	XXX	
7. Standards development/management	XX	XXX	XXXX	
8. Public education/communication	XXX	X	X	X
9. Public sector administration	XXXX	XX	X	XX
10. Resource mobilization	XXXX	XX	X	
11. Program development /management	XXX	XXX	XXX	X
12. Computing	XXX	X	XX	XX

LEGEND

- xxxx *Required with over 5 years experience at the senior management level and post graduate education.*
- xxx *Required at professional level, with professional degree and at least 3 years experience.*
- xx *Required Associates professional experience and university degree education.*
- x *Pre-professional level experience and training.*

TABLE 5-5: BELIZE COASTAL ZONE MANAGEMENT INSTITUTE: REQUIRED COMPETENCIES AND QUALIFICATIONS FOR CORE JOBS

Core Jobs and Levels of Required Competencies and Qualifications

TYPES OF REQUIRED COMPETENCIES	DIRECTOR	TECHNICAL OFFICER	INSTITUTIONAL DEVELOPMENT OFFICER	RESOURCE MOBILIZATION OFFICER	PUBLIC RELATIONS OFFICER	ADMINISTRATIVE ASSISTANT.	ASST. LIBRARIAN
1. Leadership	xxxx	xx	xxx	xx	xx		
2. Scientific research and development	xxx	xxxx	xx	x	x		xx
3. Institutional development	xxxx	xxx	xxxx	xxx	x	x	
4. Resource management	xxxx	xxx	xxx	xxx	xxx	xx	
5. Environmental management	xxxx	xxxx	xxx	x	xx		xx
6. Negotiation	xxxx	x	x	xxx	xxx		
7. Linguistics	x	xxx	x	x	xxx	xx	
8. Social marketing	xx	x	xx	xxxx	xx		
9. Inter-Government relation	xxxx	xx	xx	xxx	xxxx	xx	
10. Program development and management	xxx	xxx	xxx	xx	xxx		
11. Computing	xx	xx	xx	xx	xx	x	xx
12. Operations management	xxxx	xxx	xxx	xx	xx	x	
13. Resource mobilization	xxx			xxxx	xxx		
14. Information/data processing	x	xxx	x	x	xx	x	xx

LEGEND:

- xxxx Required with over 5 years experience at the senior management level and post graduate education.
- xxx Required at professional level, with professional degree and at least 3 years experience.
- xx Required Associates/ professional experience and university education.
- x Pre-professional level experience and training.

6.INDICATIVE FINANCING OPTIONS

6.1 Services and Propensities to Raise Funding

The CZMA will provide 10 key services. Namely:

Policy formulation	Monitoring compliance
Development and revision of regulations	Coordination of the integrated coastal zone management process
Classification of beaches	Advising G.O.B. on the development and utilization of coastal resources
Issuance of permits/licences	Review of coastal zone management plans
Promotion of awareness of the characteristics of coastal zones and resources	Assistance with in the preparation of guidelines for development of coastal zone sites

Table 6-1 assesses the propensity for CZMA services to raise financing from: PACT, central government, surcharge on relevant industries, international grant giving agencies, and bilateral and multi-lateral donors. The assessment results as presented in the table indicate that the central government of Belize, PACT, and international grant giving agencies are likely to be the main finances ranked as follows:

- Rank – 1** Government of Belize
- Rank – 2** PACT
- Rank – 3** International grant giving agencies

Table 6-2 assesses the propensities for the CZMI to raise funds for the 12 key services that it is expected to perform. The 12 services as set out in Table 6-2 are:

Public awareness	National water quality problem
Strengthening advisory committees	Research
Promotion and facilitation of interventions into alternative livelihoods	Management of protected areas
Preparation of national emergency plans	Training

Guidelines for development for construction or beaches

Preparation of annual state of coast reports

Institutional strengthening and capacity building

Data management

Laboratory/testing service

It can be concluded from the Table that the CZMI has an excellent potential to raise funds from 6 of the 7 possible sources. The sources are listed below in the order of most significant potential source to the least likely.

- Rank – 1** Stakeholder industry membership organizations
- Rank – 2** User Fees including contracted service
- Rank – 3** PACT
- Rank – 4** Multi-lateral and bi-lateral donors
- Rank – 5** International grants giving institutions
- Rank – 6** Central government (Belize)
- Rank – 7** Surcharge on relevant industries in Belize.

TABLE 6 –1: BELIZE ASSESSMENT OF OPTIONS FOR FINANCING THE COASTAL ZONE MANAGEMENT AUTHORITY

Propensity to Raise Funding From these Sources

KEY SERVICES	PACT	CENTRAL GOVT.	SURCHARGE ON RELEVANT INDUSTRIES	INTERNATIONAL GRANT GIVING AGENCIES	USER FEES	BILATERAL AND MULTILATERAL DONORS
1. Policy Formulation	L	M	L	M	L	L
2. Development and Revision of Regulations	M	M	L	H	L	L
3. Classification of Beaches	M	L	L	H	L	L
4. Issuance of Permits/Licences	L	H	L	L	L	L
5. Promotion of Awareness of the Characteristics Of Coastal Zones and Resources	H	L	L	H	L	L
6. Monitoring Compliance	L	H	M	L	L	L
7. Coordination of the Integrated Coastal Zone management Process	M	H	L	H	L	L
8. Advising G.O.B. on the Development and Utilization of Coastal Resources	M	H	L	M	L	M
9. Review of Coastal Zone Management Plans	H	H	L	M	L	L
10. Assistance with the Preparation of Guidelines for Development of Coastal Zone Sites	H	H	M	H	L	M

LEGEND

H – High, M- Moderate, L – Low ,

TABLE 6 – 2: BELIZE: ASSESSMENT OF OPTIONS FOR FINANCING THE COASTAL ZONE MANAGEMENT INSTITUTE

Propensity to Raise Funding From these Sources

KEY SERVICES	PACT	CENTRAL GOVT.	STAKEHOLDER INDUSTRY MEMBERSHIP ORGANIZATIONS	SURCHARGE ON RELEVANT INDUSTRIES	INTERNATIONAL GRANT GIVING AGENCIES	BILATERAL AND MULTILATERAL DONORS	USER FEES
1. Public Awareness	H	M	H	M	H	H	H
2. Strengthening Advisory Committees	H	M	H	H	M	M	L
3. Promotion and Facilitation of Interventions into Alternative Livelihoods.	M	L	H	H	H	H	M
4. Preparation of National Emergency Plans	M	H	L	M	M	M	H
5. Guidelines for Development for Construction or Beaches	H	L	H	M	M	L	L
6. Institutional Strengthening and Capacity Building	M	M	H	L	H	L	L
7. National Water Quality Problem	L	H	H	L	M	M	H
8. Research	H	M	H	L	H	H	L
9. Management of Protected Areas	H	H	L	L	M	M	M
10. Training	H	L	H	H	H	M	H
11. Prepare Annual State of the Coast Reports	M	H	M	M	H	H	L
12. Data management	M	H	H	M	M	H	H
13. Laboratory/testing services	L	L	H	L	L	L	H
14. Contracted research	L	L	H	L	L	L	H

TABLE 6-3: BELIZE: INDICATIVE OPERATIONAL BUDGET FOR THE COASTAL ZONE MANAGEMENT AUTHORITY (CZMA) AND THE COASTAL ZONE MANAGEMENT INSTITUTE (CZMI)

In BZ \$000

ITEM	DESCRIPTION	CZMA	CZMI
1. Director	The overall administrator for the institution	50	50
2. Technical and professional officers	Policy officer, Regulator/Standards Officer, Technical Officer, International Relations Officer and Institutional Development Officer. (The first two are for CZMA and the last three are for (CZMI).	80	120
3. Administrative Assistants	One person each to provide the administrative support functions.	28	28
4. Operating supplies and services	Office supplies, telephones, travel etc.	40	70
Total		198	268

6.2 Core Budgets

The core budget for each institution represents the unavoidable expenses which it must incur to operate at the threshold operating level. It is estimated to cost BZ\$198,000 and BZ\$268,000 for the CZMA and CZMI respectively. The details are provided in Table 6-3.

6.3 Threshold Program and Operating Budget for CZMI

The consultants reviewed the current operating project of the CZMA/I and used it as a basis for computing the required minimum annual operating budget. The required budget is BZ\$1.8 million. Based on the assessed propensity to raise funds for the required services, this BZ\$1.8 million budget can be successfully funded. In fact the institute has already has an initiative approved. Namely: management of Marine Protected Areas, which is projected to give it a net income of about BZ \$800,000 or almost half of its core budget.

TABLE 6-4: BELIZE: COASTAL ZONE MANAGEMENT INSTITUTE REQUIRED ANNUAL OPERATING BUDGET.

<i>In BZ\$000</i>				
CLUSTER OF SERVICE	INPUT	PROGRAM COST	OVERHEAD COST	TOTAL
1. General leadership and management	Director	100	50	150
2. Technical operations research, data management, project development, compliance, quality assurance, technical standards and coastal planning and MPA management and evaluation.	Technical officer Boat Captain Library Asst.	800	90	890
3. Resource mobilization, project development, fund raising, grants portfolio management and inter-agency relations.	Resource Mobilization Officer	120	35	155
4. Institutional development, technical assistance, capacity building, training, policy/practices and procedures and technical assistance	Institutional Development Officer	200	40	240
5. Educational awareness and training	Stakeholder Relations Officer	200	40	240
6. General administration, Report Production, financial administration, project management and client relations.	Administrative Assistant.	75	25	100
Total		1,495	280	1,775

APPENDIX – 1: CONSULTEES

1. Mr. Hugh Saul, Executive Director, Caribbean Regional Fisheries Mechanism (CRFM) Secretariat.
2. Mr. Milton Haughton, Deputy Executive Director, Caribbean Regional Fisheries Mechanism (CRFM) Secretariat.
3. Hon. Servulo Baeza, Minister of Agriculture and Fisheries
4. Mr. Hugh O'Brien, Chief Executive Officer (Ag.), Ministry of Agriculture and Fisheries.
5. Mr. Noel Jacobs, Director, Meso-American Barrier Reef Systems Project
6. Ms. Beverly Wade, Fisheries Administrator, Fisheries Department
7. Mr. George Myvett, Senior Fisheries Officer, Fisheries Department
8. Mr. James Azueta, Fisheries Officer, Fisheries Department
9. Mrs. Imani Fairweather-Morrison, Chief Executive Officer, Coastal Zone Management Authority and Institute
10. Dr. Leandra Cho-Ricketts, Director, Coastal Zone Management Authority and Institute
11. Dr. Vincent Gillett, Chief Programme Officer, Belize Fishermen Cooperative association
12. Mr. Robert Usher, Executive Secretary/Manager, Northern Fishermen Cooperative Society
13. Mr. Alan Burns, Chairman, National Fishermen Cooperative Society
14. Mr. Valdemar Andrade, Executive Director, Belize Audubon Society
15. Mr. Anthony Mahler, Director, Project Development, Belize Tourist Board
16. Ms. Valerie Woods, Director, Protected Areas Conservation Trust (PACT)
17. Mrs. Patricia Mendoza, Chief Executive Officer, Ministry of Natural Resources
18. Mr. Oswaldo Sadido, Chief Forest Officer, Forest Department, Ministry of Natural Resources

APPENDIX –1: CONSULTEES (CONT'D)

19. Mrs. Malika Cardona, Planning Officer, Lands Department, Ministry of Natural Resources
20. Mr. Ismael Fabro, Chief Environmental Officer, Ministry of Natural Resources
21. Mr. Martin Alegria, Department of Environment, Ministry of Natural Resources
22. Mr. Craig Moore, Department of Petroleum and Geology, Ministry of Natural Resources
23. Mrs. Melonie McField, World Wildlife Fund
24. Mrs. Janet Gibson, Wildlife Conservation Society
25. Mr. K. Mustafa Touré, Belize Fishermen Cooperative Society
26. Mrs. Maria Vega, Belize Tourism Industry Association
27. Mr. Dylan Vernon, United Nations Development Programme (UNDP)
28. Mr. Wil Maheia, Executive Director, Toledo Institute for Development and Environment (TIDE)

APPENDIX – 2: REFERENCES

1. Coastal Zone Management Authority and Institute (2003). State of the Coast Report 2001 – 2002 (Belize) pp. 67.
2. Ministry of Agriculture and Fisheries (2003). The National Food and Agriculture Policy (2002 – 2020) pp. 63
3. United Nations Development Programme/Global Environment Facility Project of the Government of Belize Project Document (1998). Conservation and Sustainable Use of the Belize Barrier Reef Complex (BZE/98/G32/A/1G/99). Pp.
4. Coastal Zone Management Authority and Institute (2003). The National Integrated Coastal Zone Strategy for Belize.
5. UNDP/GEF/GOB (1998). Project Document. Conservation and Sustainable Use of the Belize Barrier Reef Complex.
6. Coastal Zone Management Authority and Institute (2003). Operationalizing a Financing System for Coastal and Marine Resource Management in Belize. Strategy Paper.
7. Coastal Zone Management Authority and Institute (2000). State of the Coast Report Belize. 76pp.
8. Belize Coastal Zone Management Act Chapter 329 (Revised Edition 2000)
9. Gibson J., McField, M. Wells S. (1998). Coral reef management in Belize: an approach through Integrated Coastal Zone Management. Ocean and Coastal Management 39 (1998) 229 – 244.
10. Cambers, G. (1992) Coastal Zone Management: Case Studies from the Caribbean. Latin America and the Caribbean Technical Department, Regional Studies Program, Report No. 26.
11. CAMPNET (1989) The Status of Integrated Coastal Zone Management: A Global Assessment. Summary Report of the Workshop convened at Charleston, South Carolina, July 4-9. Coastal Area Management and Planning Network, Rosenstiel School of Marine Science, University of Miami.

Appendix -3

**LIST OF PARTICIPANTS
STAKEHOLDERS CONSULTATION:
OPTIONS FOR INSTITUTIONAL RATIONALIZATION OF COASTAL
ZONE MANAGEMENT IN BELIZE
BELIZE CITY, BELIZE
MARCH 11th, 2004**

Mr. Servulo Baeza

Minister
Ministry of Agriculture and Fisheries
West Block Building
Belmopan City
Cayo District
BELIZE
Tel: 501-822-2330
Fax: 501-822-2409

Mr. Hugh O'Brien

Chief Executive Officer (Ag.)
Ministry of Agriculture and Fisheries
West Block Building
Belmopan City
Cayo District
BELIZE
Tel: 501-822-2330
Fax: 501-822-2409
E-mail: hugh@btl.net

Mrs. Patricia Mendoza

Chief Executive Officer
Ministry of Natural Resources and the Environment
Market Square
Belmopan City
Cayo District
BELIZE
Tel: 501-822-2630
Fax: 501-822-2333
E-mail: ceo@mnrei.gov.bz

Mr. Ed Boles

Aquatic Ecologist
Faculty Member
Natural Resource Management Program
University of Belize
P.O. Box 333
Belmopan City
Cayo District
BELIZE
Tel: 501-602-5823
501-822-3733
Email: ubboles@yahoo.com

Mr. George Myvett

Senior Fisheries Officer
Fisheries Department
Princess Margaret Drive
P.O. Box 148
Belize City
BELIZE
Tel: 501-224-4552
Fax: 501-223-2983
Email: georgemyvett@hotmail.com

Mr. James Azueta

Fisheries Officer
Fisheries Department
Princess Margaret Drive
P.O. Box 148
Belize City
BELIZE
Tel: 501-224-4552
Fax: 501-223-2983
Email: jamesazueta_bz@yahoo.com

Ms. Janet Gibson

Marine Coordinator
Wildlife Conservation Society
3 St. Edward Street
P.O. Box 2038
Belize City
BELIZE
Tel: 501-223-3271
501-223-3271
Fax: 501-223-2983
Email: jgibson@btl.net

Mr. Vincent Gillett

Executive Director
Belize Fishermen Cooperative Association Ltd.
45 Consuelo Street
Belize City
BELIZE
Tel: 501-223-4650
Fax: 501-223-3982
Email: BFCA@btl.net

Mr. Valdemar Andrade

Planning Coordinator
Ministry of Natural Resources, Environment and Industry
Market Square
Belmopan City
Cayo District
BELIZE
Tel: 501-822-2249
Fax: 501-822-2333
Email: Industry@btl.net

Mr. K. Mustafa Touré

Development Officer
Belize Fisheries Cooperative Association
45 Consuelo Street
Belize City
BELIZE
Tel: 501-223-4650
Fax: 501-223-3982
Email: mustafa@belizeiit.bz

Mr. Godsman Ellis

President
Belize Institute of Environmental Land and Policy
San Ignacio Town
Cayo District
BELIZE
Tel: 501-804-2032
501-804-3264
Fax: 501-824-2685
E-mail: godsman1@btl.net

Mr. Noel D. Jacobs

Regional Director
Mesoamerican Barrier Reef Systems Project
Fisheries Compound
Princess Margaret Drive
Belize City
BELIZE
Tel: **501-223-3895**
Fax: **501-223-4513**
E-mail: mbrs@btl.net

Ms. Lisel Alamilla

Consultant
5979 Campus Avenue
Belize City
BELIZE
Tel: **501-223-0454**
501-610-2976
E-mail: liselbz@btl.net

Ms. Valerie Woods

Executive Director
Protected Areas Conservation Trust
2 Mango Street
Belmopan City
Cayo District
BELIZE
Tel: 501-822-3637
Fax: 501-822-3759
E-mail: valerie@pactbelize.org

Mrs. Imani Fairweather-Morrison

Chief Executive Officer
Coastal Zone Management Authority and Institute
Fisheries Compound
Princess Margaret Drive
Belize City
BELIZE
Tel: 501-223-2616
Fax: 501-223-5738
Email: ifmorrison@btl.net
imani-morrison@yahoo.co.uk

Mrs. Leandra Cho-Ricketts

Director
Coastal Zone Management Institute
Fisheries Compound
Princess Margaret Drive
Belize City
BELIZE
Tel: 501-223-2616
Fax: 501-223-5738
Email: lcrocketts@btl.net

Mr. Ramon Carcamo

Research Officer
Fisheries Department
Princess Margaret Drive
P.O. Box 148
Belize City
BELIZE
Tel: 501-224-4552
Fax: 501-223-2983
E-mail: species@btl.net
romalive@yahoo.com

Mr. Martin Alegria

Senior Environmental Officer
Department of the Environment
10/12 Ambergris Avenue
Belmopan City
Cayo District
BELIZE
Tel: 501-822-2816
Fax: 501-822-2862
E-mail: envirodept@btl.net

Ms. Icilda Humes

Environmental Officer
Department of the Environment
10/12 Ambergris Avenue
Belmopan City
Cayo District
BELIZE
Tel: 501-822-2816
Fax: 501-822-2862
E-mail: envirodept@btl.net

Ms. Patricia Mendoza

Chief Executive Officer
Ministry of Natural Resources and the Environment
Market Square
Belmopan City
Cayo District
BELIZE
Tel: **501-822-2630**
Fax: 501-822-2333
E-mail: ceo@mnrei.gov.bz

Mrs. Malika Cardona

Principal Planner
Lands Department
Ministry of Natural Resources and the Environment
Market Square
Belmopan City
Cayo District
BELIZE
Tel: **501-822-2598**
Fax: 501-822-1526
E-mail: peachnc@hotmail.com

Mr. Raymond Mossiah

Statistician
Belize Tourism Board
P.O. Box 325
3rd Floor, Central Bank Building
Belize City
BELIZE
Tel: **501-223-1913**
Fax: 501-223-1943
Email: raymond@travelbelize.org

CARIBBEAN REGIONAL FISHERIES MECHANISM (CRFM) SECRETARIAT

Mr. Hugh Saul

Executive Director
CRFM Secretariat
P.O. Box 642
Princess Margaret Drive
Belize City
BELIZE

Tel: 501-223-4443

501-223-4444

501-223-4445

Fax: 501-223-4446

Email: saul@caricom-fisheries.com

Mr. Anthony Luis Mills

Corporate Services Manager
CRFM Secretariat
P.O. Box 642
Princess Margaret Drive
Belize City
BELIZE

Tel: 501-223-4443

501-223-4444

501-223-4445

Fax: 501-223-4446

Email: cframp@btl.net
mills@caricom-fisheries.com

Dr. David Brown

Coordinator Advocacy, Policy and Planning
CRFM Secretariat
P.O. Box 642
Princess Margaret Drive
Belize City
BELIZE

Tel: 501-223-4443

501-223-4444

501-223-4445

Fax: 501-223-4446

Email: dbrown@caricom-fisheries.com

Mrs. Rhoda Morris

Senior Finance Officer
CRFM Secretariat
P.O. Box 642
Princess Margaret Drive
Belize City
BELIZE

Tel: 501-223-4443

501-223-4444

501-223-4445

Fax: 501-223-4446

Email: morris@caricom-fisheries.com

TREVOR HAMILTON AND ASSOCIATES

Dr. Trevor Hamilton

International Consultant
17 Seaview Avenue
Kingston 6
JAMAICA

Tel: 876-978-6518

876-978-5070

Fax: 876-978-5796

E-mail: thamilton@mail.infochan.com



Ministry of Agriculture and Fisheries
Government of Belize

Appendix - 4



Caribbean Regional
Fisheries Mechanism

NOTES

ON

STAKEHOLDER CONSULTATION

OPTIONS FOR INSTITUTIONAL RATIONALIZATION

OF

COASTAL ZONE MANAGEMENT IN BELIZE

11th March, 2004

**Training Room
Coastal Zone Management
Authority Institute
Belize City, Belize**

STAKEHOLDER CONSULTATION

Options for Institutional Rationalization of Coastal Zone Management in Belize

1. Introduction

The Consultation was opened by Mr. Hugh Saul, Executive Director, CRFM Secretariat who also chaired the proceedings. Participants are listed in **Appendix I** and the programme of events at **Appendix II**.

2. Issues / Matters discussed

The Issues/Matters raised and discussed at the Consultation were:

- (i) To what extent was the Ministry of Economic Development consulted with regards to that Ministry being proposed as the “home” of the proposed Coastal Zone Management Authority (CZMA).
- (ii) The Ministry of Economic Development is now emphasizing international cooperation as its major remit and it is a facilitating Ministry. Therefore, its mission/objective may not be consistent with that of the CZMA.
- (iii) In respect of sources of funding for the proposed Coastal Zone Management Institute (CZMI), whilst these sources are varied, there is little emphasis on the “promotion” of the CZMI as a service provider, offering services such as lab analysis, technical studies, and proposal writing.
- (iv) Support was expressed for the research results of the CZMI to be lodged at the University of Belize and for the University as the “natural home” of the CZMI. Indeed, at the outset of the CZMAI’s existence, the University was originally earmarked as the most logical place for the CZMI to reside. Further, whilst the CZMA was answerable to Parliament, as an Authority (regulatory body), there was some discussion on whether the CZMAI should report directly to Parliament or through another body (Ministry). Some felt that since the CZMI, by virtue of its functions, cuts across several sectors (multi-sectoral) a direct reporting relationship with Parliament was desirable. Others argued for a reporting relationship through a Ministry to Parliament, for example, The Protected Area Conservation Trust (PACT) reports through the Ministry of Natural Resources to Parliament, and its reporting channel has been efficient and effective, to date. Further, to report directly to Parliament may require reform of the political system of governance and would set a precedence for an Authority. It was also pointed out that the placement/location of the Authority was not critical, as long as there is an effective Board of Directors, and checks and balances are in place.

- (v) It was suggested that the Ministry of National Development would be a good fit for the CZMI and that the CZMI should be:
 - (a) a stand-alone organization
 - (b) autonomous
 - (c) independent
- (vi) The view was expressed that there was no need to change the present reporting arrangement of the CZMI, since it was working well, i.e., through the Ministry of Agriculture.
- (vii) With reference to page 5-7, Table 5-3: *Belize's Potential for Rationalization of Functions in Integrated Coastal Zone Management*, as per the consultants' draft Report: Options for Institutional Rationalization of Coastal Zone Management in Belize; it was suggested that the sixteen (16) critical functions mentioned should be related to capacity, and that these functions be carefully examined to avoid duplicity/overlap. With regard to the function EIA/Certification, for example, the Department of the Environment performs this role, and is the regulatory body in this respect. It was suggested that Natural Resource Management as an overarching function, be placed on the top of the matrix, and the various subsets of this function follow.
- (viii) Clarification was given in respect of the financing of the current CZMA – the Authority is fully financed by the Government of Belize and has one (1) staff. This present scenario must be carefully examined against the consultants' Report which proposes four (4) staff. The importance of sustainable financing was repeatedly raised, and the difference between core and programmatic cost was mentioned in respect of the consultants' report. Further, the consultant was asked to exercise care in the use of the word "Integrated" in the draft report since it was creating some confusion. Reservations were expressed in respect of the suitability of the Ministry of National Development to house the Authority, since it was said – that Ministry has a macro-perspective and a perform coordinating function.
- (ix) The question was raised as to the role of fisheries in respect of the CZMAI. It was felt that this aspect was understated in the consultants' report, and could not be ignored. This question/issue was raised several times.
- (x) The meeting was advised that the University of Belize struggles with the same issue of financial sustainability, and that its mandate includes the development of research, conservation and education services for local and international markets – the University was hoping to become more involved in research and monitoring and service oriented activities, which are consistent with the role of the CZMI, i.e. the delivery technical research products.
- (xi) It was stressed that the core problem with the current CZMAI was a management one, and not a structural one. The importance of advocacy before and after

Board Meetings was mentioned. The quality of the Board of Directors was also mentioned as an issue, and the rotation of the Chairmanship of the Board was considered as desirable. Other weaknesses general to Belize were; inability to work as teams, inability to manage.

3. **Way Forward**

In respect of the way forward the meeting was advised:

- (a) Consultants will refine the document
- (b) A Report of the Stakeholders Consultation will be prepared
- (c) The Report of the Stakeholders Consultation and the Consultants' Report will be forwarded to the Board of Directors of CZMAI which will forward recommendations, then to Cabinet for decision-making.