



# **STRATEGIC PLAN**

*FOR:*

## **CARIBBEAN REGIONAL FISHERIES MECHANISM**

**CARICOM FISHERIES UNIT**  
**9<sup>TH</sup> DECEMBER, 2002**

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## Vision and Mission

### VISION

**THE SUSTAINABLE USE OF THE FISHERIES AND AQUACULTURE RESOURCES IN AND AMONG MEMBER STATES, BY THE DEVELOPMENT, MANAGEMENT AND CONSERVATION OF THESE RESOURCES IN COLLABORATION WITH STAKEHOLDERS TO THE BENEFIT OF THE PEOPLE OF THE CARIBBEAN REGION.**

### MISSION

**THE MISSION OF THE CRFM IS TO PROMOTE AND FACILITATE THE RESPONSIBLE UTILIZATION OF THE REGION'S FISHERIES AND OTHER AQUATIC RESOURCES FOR THE ECONOMIC AND SOCIAL BENEFITS OF THE CURRENT AND FUTURE POPULATION OF THE REGION.**

## List of Acronyms

CARDI	Caribbean Agriculture Research and Development Institute
CARICOM	Caribbean Community
CARIFORUM	Caribbean Forum of ACP States
CCMSC	Caribbean Common Market Standards Council
CDB	Caribbean Development Bank
CDERA	Caribbean Disaster Emergency Response Agency
CEHI	Caribbean Environment Health Agency
CFRAMP	CARICOM Fisheries Resource Assessment and Management Programme
CFU	Caribbean Fisheries Unit
CFTU	Caribbean Fisheries Technical Unit
CIDA	Canadian International Development Agency
COTED	Council for Trade and Economic Development
CPAGCC	Caribbean Planning for Adaptation to Global Climate Change
CRFM	Caribbean Regional Fisheries Mechanism
CRIP	Caribbean Regional Indicative Programme
CRISP	Caribbean Regional Institutional Strengthening Project
CROSQ	Caribbean Regional Organization for Standards and Quality
CSME	CARICOM Single Market and Economy
DFID	Department for International Development
ECCB	Eastern Caribbean Central Bank
ECLAC	Economic Commission for Latin America and the Caribbean
EEZs	Exclusive Economic Zones
EIPU	Economic Intelligence and Policy Unit
EU	European Union
EU-LAC	European Union, Latin America and the Caribbean
EUROSTAT	The Statistical Office of the European Community
FAO	Food and Agriculture Organization of the United Nations
ICCAT	International Commission for the Conservation of Atlantic Tunas
ICRAFDP	Integrated Caribbean Regional Agriculture and Fisheries Development Programme
IDB	Inter American Development Bank
IDRC	International Development Research Centre
IMO	International Maritime Organization
IUU	Illegal, Unreported and Unregulated
LDC	Less Developed Country
MDC	More Developed Country
NGO	Non-Governmental Organization
OCT	Overseas Countries and Territories of EU Member States
OECS	Organization of Eastern Caribbean States
RNM	Regional Negotiating Machinery
RTP	Regional Transformation Programme on Agriculture
SIDS	Small Island Developing States
UG	University of Guyana
UN	United Nations
UNDP	United Nations Development Programme
UNSTAT	United Nations Statistical Bureau
Univ.S	University of Suriname
UWI	University of the West Indies
WTO	World Trade Organization

## Guiding Principles

The CFRM is guided by principles derived mainly from the Code of Conduct for Responsible Fisheries which code is an international instrument that promotes, globally, the adoption of practices and standards for the sustainable use, management, development, and conservation of all fisheries and aquaculture resources through the voluntary compliance of governments, fishing industries, non-governmental organizations and other entities associated with fisheries.

In pursuance of its objectives, the Mechanism shall be guided by the following principles:

- Maintaining bio-diversity in the marine environment using the best available scientific approaches to fisheries management supported by comprehensive data collection and the networking thereof;
- Managing fishing capacity and fishing methods so as to facilitate resource sustainability;
- Encouraging the use of precautionary approaches to sustainable use and management of fisheries resources;
- Protecting and rehabilitating critical fisheries habitats and the environment generally through, *inter alia*, establishment of effective mechanisms for monitoring, control and surveillance;
- Promoting the use of post-harvest practices that maintain nutritional value and quality of products;
- The fostering of the co-management philosophy in all aspects of fisheries management planning and development as well as transparency in fisheries decision-making processes;
- Conducting trade in fish and fishery products according to applicable agreements;
- The fostering of cooperation with States in order to prevent disputes or resolve them in a peaceful manner;
- Promoting awareness of responsible fisheries exploitation through education and training;
- Ensuring safe, healthy and fair working and living conditions for fishery workers;
- According due recognition to the contribution of small scale and industrial fisheries to employment, income and food security, nationally and regionally; and
- Promoting aquaculture as a means of enhancing employment opportunities and food security, nationally and regionally.

Towards this end the following specific guiding principles will be adopted within the CFRM in respect to the development of programs and projects:

- Evaluation and quantification of the baseline circumstances of each participating country, in respect of each program area;
- A differentiated approach across Member States with regard to project design and implementation in order to address national needs more effectively. It is recognized that this will require innovation in project design as well as greater

- involvement of Member States in the process of project design, development and implementation;
- Acknowledgement of the outputs of national activities in order to efficiently augment the utilization of national resources;
  - The specification of realistic project aims and outputs for each country;
  - Specific budgeting to facilitate comprehensive consultations between the CRFM Secretariat and Member States in respect of the design and adaptation of project concepts to fully satisfy national requirements while taking into consideration national absorptive capacity;
  - Preference for the recruitment of technical expertise from the region as far as possible within the restrictions which funding agencies might impose;
  - The promotion of Technical Cooperation among Developing Country (TCDC) arrangements whenever possible, without causing disruption to the implementation of national work programs;
  - Transparency and accountability in respect of CRFM operations and work program delivery generally and the procurement of goods and services, monitoring and reporting specifically. This will be monitored by the relevant Standing Committee to be established by the Forum.



# **1. Situational Analysis and outline of Strategic Plan**

## **1.1 Economic Importance, Outlook and Implications**

### **THE FISHERIES SECTOR IS STRATEGICALLY IMPORTANT AND WILL BE INCREASINGLY SO IN THE FUTURE**

- ❑ Directly and indirectly it employs over 130,000 persons who are mostly from remote rural communities which lack other income earning opportunities, and many of whom are women who lack equity in the labor market;
- ❑ It contributes to the strengthening of the food security status of most countries, directly through inputs to the food supply and employment and indirectly through earnings from export and tourism associated activities;
- ❑ It earns over US \$150 million per year from export and saves the Region at least three times as much in foreign exchange since the volume of production is four times the volume of export.
- ❑ Entry into the industry is growing in a somewhat uncontrolled manner as the uncertainty of principal rural industries primarily banana and sugar loom because of the WTO pressures to remove the preferential trade treatments those industries have traditionally received from Europe.
- ❑ It accounts for up to 8% of GDP in some Member States'. This however is understated since the processing aspects of the industry are not included in the fisheries sub-sector GDP but rather computed in that of the manufacturing and processing sector.
- ❑ It creates opportunities for some of the most socio-economically disadvantaged population sub-groups, namely: the least educated, the rural poor, and women.
- ❑ It is a major source of protein especially in rural communities which usually exhibit a higher percentage of poverty than the national average.
- ❑ It complements and enhances the Region's tourism through its use as a vehicle for fishing excursions, "Sailing Week", and fishing tournaments.

## **1.2 The Current Situation**

The fisheries sub-sector is strategically very important for sustained economic opportunities and social soundness particularly within rural communities and among the poor, as well as for food security and economic growth. However it faces numerous challenges for sustainability, trade competitiveness and modernization.

They include:

- ❑ Improving the research and information capacities to enhance sound resource management, and effective policy formulation and planning for the sustainable utilization of the resource.
- ❑ Improving the systems of harvesting and processing to become environmentally sound and product quality oriented with special emphasis on internationally acceptable phytosanitary practices and standards.
- ❑ Empowering and enabling the human capital to spearhead the necessary modernization, resource management, and production practices in the industry.
- ❑ Empowering and enabling the fishers and community organizations need to become more effective co-management partners.
- ❑ Initiating effective technical interventions to diversify the sub-sector so that underutilized and unutilized aquatic resources could be developed and commercialized.
- ❑ Developing and promoting aquaculture as an option for diversifying the sector.
- ❑ Developing and promoting a program for risk reduction among fishers.
- ❑ Developing and promoting mechanisms for preventing and resolving conflicts in fisheries.

This Strategic Plan addresses these challenges.

### ***1.3 Priorities***

**THE COMMUNITY'S PRIORITY NEEDS FALL INTO NINE (9) AREAS WHICH HAVE BEEN USED TO DRIVE THE PROGRAMS FOR THIS STRATEGIC PLAN.**

They are to enhance:

- ❑ Research and data analysis to support policy formulation and decision making
- ❑ Preparation for global competitiveness (inclusive of compliance with phytosanitary standards).
- ❑ Resource assessment and management
- ❑ Human resource development and institutional strengthening
- ❑ Strengthening of fishers' organizations and improved community participation.
- ❑ Promotion of expansion and utilization of unutilized and underutilized aquatic resources.

- ❑ Development and promotion of aquaculture
- ❑ Development and promotion of risk reduction program for fishers.
- ❑ Development and promotion of programs for conflict resolution among multi-users in coastal zones.

## **1.4 Program Priorities**

**NINE (9) PROGRAMS HAVE BEEN CONCEPTUALISED TO ADDRESS THE RESPECTIVE PRIORITIES WITHIN THE CRFM FIVE (5) YEAR STRATEGIC PLAN.**

They are:

### ***Program – 1***

#### **RESEARCH AND DATA ANALYSIS FOR POLICY FORMULATION AND DECISION MAKING.**

This program seeks to enhance the data collection and management capabilities, and rationalize and strengthen institutions and facilities. It will also facilitate integrated planning as well as enhance decision making, policy formulation and collaborative management of shared fisheries resources involving straddling and migratory species. The major interventions will be targeted towards:

- ❑ Improvement in data collection and management systems.
- ❑ Research and recommendations for development of fisheries management plans and policies.
- ❑ Institutional rationalization and strengthening of existing research facilities.
- ❑ Promotion of product development and market access.

### ***Program – 2***

#### **PREPARATION FOR GLOBAL COMPETITIVENESS**

This program focuses on building institutional, infrastructural and technical capability and capacity to meet international standards of food safety and agricultural health. It will encompass the development and enactment of legislation, as well as processing standards and post harvest technologies to ensure that the community can overcome the technical barriers to entering foreign markets. The interventions should comprise:

- ❑ Establishment of a system of conformity using international instruments including those in the FAO model.

- ❑ Development of guidelines for training programs and certifying institutions.
- ❑ Support for the revision and enactment of the necessary legislation.
- ❑ Development of certifying laboratories
- ❑ Promotion of investment in resource sustainability and environmentally friendly harvesting practices.
- ❑ Promotion of internationally acceptable harvesting and post harvesting practices and processing standards inclusive of phytosanitary standards.

*Program – 3*    **RESOURCE ASSESSMENT AND MANAGEMENT**

This program will impact within national boundaries as well as across borders and will be directed towards the creation of a conducive environment for the management of marine resources. Within national boundaries the focus will be on enhancing the co-management strategy of fisheries management. Across national borders efforts will be directed towards increased collaboration among countries and with relevant international agencies. The interventions should encompass :

- ❑ Development of harmonized fisheries regulations.
- ❑ Development of a harmonized approach to the management of distant water fishing fleets.
- ❑ Development and implementation of a program for the Management of shared resources including voluntary compliance and monitoring control and surveillance (MCS) in collaboration with maritime administrations.
- ❑ Establishment of a management framework for sports fishing.
- ❑ Development and implementation of fisheries management policies and plans.
- ❑ Technical support for the participation in international resource management fora.

*Program – 4*

**HUMAN RESOURCE DEVELOPMENT AND  
INSTITUTIONAL STRENGTHENING**

This program is intended to enrich the stakeholders' knowledge capital in the region through five (5) interventions.

- ❑ Training of fishers in harvesting, conservation and management, handling, post harvest technology and entrepreneurship.
- ❑ Re-organization and strengthening of existing marine fisheries and related institutes.
- ❑ Upgrading of skills in areas needed to support sustainable development and management of fisheries and aquaculture.
- ❑ Promoting or establishing Regional Centers of Excellence with links to related international ones and providing technical and financial support for them.
- ❑ Institutional strengthening for effective governance.

***Program – 5***

**STRENGTHENING OF FISHER FOLK ORGANIZATIONS  
AND IMPROVED COMMUNITY PARTICIPATION**

This program is intended to encourage vibrant fishers' organizations and promote community organizations as the major change agents in the sector. This could be achieved through:

- ❑ Empowering fishers' organizations to be effective partners in co-management arrangements.
- ❑ Development and implementation of training programs for vessel owners/operators.
- ❑ Establishment of working partnerships between fishers' organizations and government
- ❑ Strengthening of fishing community advocacy groups.
- ❑ Promotion of public awareness about the importance of appropriate utilization and management of marine resources.
- ❑ Promotion of special interest group's awareness about the importance of the fishing industry.
- ❑ Enhanced public awareness of CRFM among fisher folks' organizations.

***Program – 6***

**PROMOTION OF THE EXPANSION AND UTILIZATION OF UNUTILIZED AND UNDERUTILIZED AQUATIC RESOURCES.**

This program is intended to promote expansion and optimize the use of aquatic resources achieving sustainability of the aquatic resource endowment.

- ❑ Promotion of product development and utilization from underutilized resources.
- ❑ Promotion and execution of exploratory and experimental fishing to obtain information on the availability and distribution of the stocks and determining the technical and socio-economic feasibility of developing fisheries for the targeted species or species group.
- ❑ Dissemination of successful fishing and fish utilization techniques through appropriate extension methodologies

***Program – 7* DEVELOPMENT AND PROMOTION OF AQUACULTURE**

The development of this sub-sector will follow a two tiered strategy. The first involves the establishment of a policy framework and regulatory environment to promote commercial aquaculture ventures while the second relates to the research on aquaculture initiatives in support of strengthening the marine fisheries sector. The major elements should entail:

- ❑ A policy framework to stimulate private investment and export oriented production of aquaculture..
- ❑ Development and promotion of the required global environmental standards among operators of enterprises in aquaculture.
- ❑ Development and promotion of harmonized guidelines for regulating the sub-sector.
- ❑ Development and promotion of aquaculture in collaboration with the relevant agencies.
- ❑ Research and development on specific species , dictated by the needs the marine fisheries sub-sector.

**DEVELOPMENT AND PROMOTION OF RISK  
REDUCTION PROGRAM FOR FISHERS**

The required interventions are:

- ❑ Development and promotion of guidelines for an appropriate personal insurance scheme.
- ❑ Development and promotion of a framework for a viable revolving loan fund credit scheme and mobilization of interested financiers.
- ❑ Development and promotion of warning systems related to the identification and characterization hurricanes and other adverse weather conditions which impact on the fisheries sector.
- ❑ Development of hurricane preparedness plans and mitigating measures for the fisheries sector.
- ❑ Development of user friendly educational materials on the use and importance of safety equipment and vessel.
- ❑ Development of user friendly educational/training material on the use and importance of safety equipment and vessel construction standards.
- ❑ Promotion of the use of safety equipment and the construction standards, implementation of vessel construction standards among member states.
- ❑ Sourcing support for the training of fishing vessel operators and the assisting of Member States in implementing safety measures.

**DEVELOPMENT AND PROMOTION OF PROGRAMS FOR  
CONFLICT RESOLUTION AMONG MULTI-USERS IN  
COASTAL ZONES.**

This program is intended to focus on the development and promotion of mechanisms which will minimize or prevent conflicts and or allow for the resolution of conflicts between fisher folk and other coastal zone users or between States. The program will entail:

- ❑ Development and promotion of mechanisms for resolution of conflicts, at the land water interface affecting the livelihood of fisheries and the development of the fishing industry.

- ☐ Establishment and promotion of mechanisms for the resolution of trans-boundary conflicts affecting the fishing industry.
- ☐ Development of mechanisms for conflict avoidance and resolution.

### **1.5 Required and Available Competencies to Address Priorities**

**THE NINE (9) PROGRAMS DEMAND A RANGE OF COMPETENCIES THAT THE MECHANISM CAN PROVIDE, LED BY CRFM SECRETARIAT COLLABORATING WITH MEMBER STATES AND WITH THE NECESSARY TECHNICAL ASSISTANCE SUPPORT.**

The required competencies include:

- ☐ Data and information systems management.
- ☐ Stock assessment.
- ☐ Institutional development.
- ☐ Socio-economics
- ☐ Sociological principles
- ☐ Organizational development
- ☐ Planning and policies.
- ☐ Legal and regulatory.
- ☐ Post harvest technology.
- ☐ Pelagic fishing methods.
- ☐ Resource mobilization /Negotiation skills
- ☐ Community involvement/and public education
- ☐ Public information
- ☐ Coastal zone environmental impact assessment (EIA)
- ☐ Quality assurance systems
- ☐ Comprehensive appreciation of aquaculture issues.
- ☐ Project development skills
- ☐ Knowledge of Food Safety, Public Health and Sanitary standards.

There are several national and regional organizations that could become part of the mechanism either because of their current activities which are relevant to the priority programs or their mandates and organizational plans and competencies An indicative list is presented for further validation.

For example:



- ❑ The research development and information systems program could possibly build some activities/interventions being implemented by: UWI, UG, Univ. of Suriname or other universities or research agencies in the region as well as some national fisheries divisions.
- ❑ The program to enable the Community for global competitiveness could possibly be executed in collaboration with: UWI, relevant national agencies, the Regional Negotiating Machinery and some private service firms. These organizations have been executing numerous activities in these areas.
- ❑ The enablement of regional mechanisms for assuring the management of resources could possibly be executed in collaboration with , regional universities and some national fisheries divisions, and possibly the NRMU in the OECS Secretariat.
- ❑ Various aspects of the development of human capital could likely benefit immensely from present activities at the UWI, Caribbean Maritime Institute, Caribbean Fisheries Training and Development Institute, the Institute of Marine Affairs (IMA), private organizations and other national tertiary and vocational training institutions.
- ❑ The strengthening of fisher folk organizations could possibly benefit immensely from CRFM's partnerships with national fisheries divisions, other relevant government institutions, private organizations, the universities, and NGOs
- ❑ The promotion of community participation could possibly be executed in partnerships with environmental NGOs, fisher folk organizations, and national fisheries divisions as well as public information services.
- ❑ The development, expansion and diversification of marine resources could possibly draw on the experiences of the universities, national fisheries divisions, other government agencies, private organizations, and the IMA.
- ❑ Risk reduction and credit schemes for fishers could draw heavily on the experience of insurance companies, government disaster management agencies, national fisheries divisions, and financial specialists. CRFM should therefore collaborate with them.

## **1.6 The Regionally Preferred Institutional Framework for CRFM.**

**CRFM SECRETARIAT MUST BE LEAN, AND ORGANIZED TO DELIVER VALUE FOR MONEY. IT MUST INCLUDE THE COMMUNITY OF CRFM MEMBERS STATES' CAPABILITIES IN ITS SERVICE DELIVERY FRAMEWORK, AS DICTATED BY THE FOLLOWING SITUATIONS.**

- ❑ CRFM Member States expect that:
  - The Secretariat must be a Regional facilitator in respect to fisheries matters
  - National and regional capacities must be utilized, cognizant of national absorptive capacities
  - Administrative costs should not exceed recent administrative support to CFRAMP.
  - They will provide incremental support only for programs .
- ❑ Program or projects which are country specific could be hosted by the relevant Member State (s).
- ❑ Most CRFM States are currently down sizing their own administrations and will therefore be reluctant to support expanded CARICOM bureaucracies.
- ❑ CRFM States don't have a good track record of timely support to its predecessor, the CFRAMP, as outstanding contributions increased from 2% of obligations in 1992 to 38.9% in 1995/96.

## **1.7 Organizational Structure and Staffing**

**THE CRFM STATES EXPECT IT TO BE AN AUTONOMOUS FACILITATORY ORGANIZATION USING A NETWORK OF REGIONAL AND NATIONAL INSTITUTION WITH COORDINATING RESPONSIBILITY IN THREE (3) DISTINCTIVE FUNCTIONAL AREAS: PROGRAM DEVELOPMENT AND COORDINATION; RESOURCE MOBILIZATION, ADVOCACY AND POLICY; AND INFORMATION AND TECHNOLOGY.**

The main features of the organization comprise:

- ❑ A Ministerial Council for policy leadership.
- ❑ A Technical Advisory Forum to provide close technical oversight leadership.
- ❑ An Executive Director responsible for executing the mandates of the organization.

- ❑ A Deputy Executive Director, responsible for the operations at the sub-regional office in St. Vincent and the Grenadines and for assisting the Director or general management of the unit.
- ❑ Three functional units – programs, advocacy policy/planning and information and technology.
- ❑ The Secretariat should have a core staffing of six (6) persons with other personnel hired on a projectized basis.

## ***1.8 Program Budget***

**THE INDICATIVE BUDGET FOR THE PLAN IS US \$ xx MILLION WITH THE FOLLOWING FEATURES.**

- ❑ The technical assistance component will be about US\$18.5 million or 77% while administrative and overhead costs will be about US \$5.5 million or 23%
- ❑ The budget builds around the provisions for the fisheries component of the Integrated Regional Agriculture and Fisheries Development Program, the indicative budget developed by the OECS for its Strategic Plan for fisheries and the CFRAMP initial budget.

## ***1.9 Some Enabling Factors***

The Strategic Plan will operate in a supporting environment with features that are conducive to its success. These include:

- ❑ The CRFM is a mandate from the Heads of Government and the Legal Agreement establishing the CRFM has already been entered into by eight initial signatories. In addition the CRFM Secretariat has already secured approval along with resource commitment from COTED for the next three years.
- ❑ The Government of Belize, the host country for the Secretariat, is at an advance of preparation of the office facilities which it has undertaken to provide in its capacity as host country.
- ❑ There are many national and regional organizations with the potential to be successful partners in the mechanism and they are presently engaged in various aspects of the Strategic Plan.
- ❑ Member countries are already supporting the work of CFRM through their commitment to its budget for the initial three years.

- ❑ The significant level of institutional knowledge capital at CFU garnered from the CFRAMP experience should be an invaluable asset for enhancing the success of CRFM.

### **1.10 Possible Threats and Strategies to Hurdle Them.**

**THERE ARE SOME PERCEIVED POSSIBLE THREATS OR OBSTACLES TO THE SUCCESS OF CRFM, SOME ARE REAL; AND SOME ARE NOT; HOWEVER THIS PLAN HAS BUILT-IN STRATEGIES TO HURDLE THEM.**

- ❑ The initial fear that there may not be consensus on the formula for sharing the cost of operating CRFM is not real because COTED recently approved one which is similar to what prevails for the CARICOM Secretariat. Further, the Plan recommends that the core functions of CRFM should be funded through CARICOM Secretariat to ensure the ease of collection. Further, the adoption of the guidelines on project design which ensures a differential approach to addressing varying country circumstances will create greater buy-in and promote demonstrated ownership. It is also recommended that the CRFM secretariat finance personnel beyond the core staff almost exclusively from project specific resources.
- ❑ The fear that Trinidad and Tobago may not support the initiative until it perceives CRFM to be “value for money” and that the operation has a significant presence there is belied by that country’s participation in the process for the development and establishment of the CRFM. In addition the three (3) pronged funding and implementation model proposed will encourage all CRFM Member States to participate fully. The three pronged model which comprises rationalized funding of the core activities of the CRFM Secretariat, program driven funding, and decentralized program management in partnership with selected national and regional institutions, will make and the eligibility to benefit from programs tied to the status of performance on required contributions to ensure that all Member States become active partners in the initiative and the programs they perceive to be beneficial.
- ❑ The minority of Members States that would like to see a super-structured CRFM will not have their way, and will not be influential because the majority including Jamaica and Trinidad and Tobago who are likely to account for up to 50% of the contributions do want a lean institution.
- ❑ The belief that the private sector which is targeted to play a key role as change agent may not participate enough is not real, because there are provisions in the Plan and its budget for interventions to promote meaningful partnerships between the private and public sectors.
- ❑ The fear that because the fishing communities and fisher folks organizations are not familiar with the work of CRFM, they may not adequately participate, is unfounded. The tailoring of the design of projects to specifically address the circumstances of participating countries will give countries co-ownership will

give fisher folk organizations better opportunities to participate more effectively. In addition, the program comprises an intervention to promote the CRFM among these organizations.

- ❑ The Region may not have the immediate manpower competencies or may not find it technically or financially viable to spearhead all the necessary research and information dissemination tasks or to give international credibility to its work or position on issues of global nature relating to fisheries and marine resources. This possible obstacle could be avoided through working alliances with global Centers of Excellence. These alliances should focus on mobilizing personnel/expertise to support initiatives in the Region, joint hosting of symposia and general consultations to brain storm issues and find solutions, joint sponsorship of research programs and scholarship program for training regional personnel.
- ❑ There are many distant waters fishing vessels, which have been underutilized because of quantitative restrictions on fishing in their respective jurisdictions. The consequential excess capacity in those jurisdictions means that many boats are either de-registered or are operating with much reduced rate of profitability. These vessels are finding their way into the Region. The threat is even more apparent as Member States become ship registration centers to give their flags to foreign vessels. As more Member States become ship registration centers with vessels carrying their flags, it becomes more difficult to monitor them effectively. The proposed CRFM should be mandated to introduce mechanisms to restrict movement of distant waters fishing vessels to the Region.
- ❑ The Community's track record of tardiness in the implementation of decisions and agreements is a possible threat. Some examples include: the Single Market and Economy and the Common External Tariff. Therefore there is a justifiable concern about the speed at which decisions related to the functioning CRFM will be implemented.
- ❑ The new economic order or globalization which will be directed by WTO and to a lesser extent regional trade blocs such as the Free Trade Area of the American (FTAA) will be a major challenge. This new order will take major decisions on technical and other related matters that will require participation or response from more Regional bodies that can be more effective than individual small states such as those in CARICOM. As island and small coastal states, influence over the management of marine resources will be a key factor for economic and social development as well as enhancement of equity between developed and developing countries. CRFM as a collection of small States, will be indispensable for addressing this global challenge. The Heads of Government have recognized the need for more mechanisms to face the challenges of globalization. It is for this reason that they have decided to establish and support the CARICOM Regional Organization for Standards and Quality (CROSQ) to deal with product standards. It is therefore likely that they will give CRFM similar strategic importance and consequential priority support.

### **1.11 Implementation Timetable**

The implementation of the CRFM is already behind schedule due mainly to the long, but necessary, process of consensus building among Member States. The timetable for commencing operation of the program will require a period of twelve (12) months for the necessary preparatory and operational start-up work. It will require a twelve (12) task follow-up work program to achieve a successful operational start-up. Namely:

- |                  |   |
|------------------|---|
| <b>TASK – 1</b>  | <b>SECURE MEMBER STATES GENERAL ENDORSEMENT OF THE STRATEGIC PLAN</b>                   |
| <b>TASK – 2</b>  | <b>FINALIZE A PLAN OF ACTION.</b>   |
| <b>TASK – 3</b>  | <b>DEVELOP A MEDIUM TERM PLAN WITH PROJECT PROFILES.</b>                                |
| <b>TASK – 4</b>  | <b>PROMOTION OF THE CRFM WITHIN THE REGION AS WELL AS INTERNATIONALLY</b>               |
| <b>TASK – 5</b>  | <b>PROMOTE PROJECTS AMONG TARGETED FINANCIERS.</b>                                      |
| <b>TASK – 6</b>  | <b>DEVELOP A MANAGEMENT OR OPERATIONAL PLAN</b>   |
| <b>TASK – 7</b>  | <b>SECURE COUNTERPART RESOURCE COMMITMENTS</b>  |
| <b>TASK – 8</b>  | <b>ENGAGE CORE STAFF</b>  |
| <b>TASK – 9</b>  | <b>HOST DONORS MEETINGS</b>   |
| <b>TASK – 10</b> | <b>SECURE TECHNICAL COOPERATION AGREEMENTS</b>  |
| <b>TASK – 11</b> | <b>EXECUTE TECHNICAL APPRAISALS, FINAL DESIGN OF INTERVENTIONS AND APPROVE FUNDING.</b> |
| <b>TASK – 12</b> | <b>LAUNCH FULL IMPLEMENTATION</b>   |

## 2. Introduction

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### ***2.1 CARICOM'S Mandate and Initiatives***

The CARICOM Region Faces Some Real Challenges in Managing its fisheries resources. These challenges revolve around, but are by no means limited to resource competencies and information for policy formulation and decision-making. Consequently, the Heads Of Government mandated CARICOM Secretariat to spearhead a Regional approach to meeting these challenges.

The CARICOM Secretariat working with Member Governments secured a CARICOM-CIDA Technical Cooperation Agreement known as CARICOM Fisheries Resource Assessment and Management Program (CFRAMP) to promote and support the development and management of the fisheries sector in a sustainable manner. CFRAMP had the following key objectives, namely:

- ❑ Establishment of a core group of Technical Expertise from the Region to advise CARICOM Member States on fisheries matters.
- ❑ Increasing the awareness of the importance of the fisheries sector.
- ❑ Improving and strengthening the capabilities of national fisheries authorities in the Community.
- ❑ Expanding the cadre of trained personnel in the Region.
- ❑ Improving the knowledge of conservation and fisheries management.
- ❑ Improving and expanding fisheries management information.
- ❑ Demonstration of the benefits of a collaborative approach to fisheries management in the regional and fostering the establishment of the CARICOM Regional Fisheries Mechanism.

The specific mandates and consequential work program for the CARICOM Fisheries Unit focused on four (4) key areas. Namely:

- ❑ Assessment and management of national resources and shared resources.
- ❑ National and regional institutional strengthening and capacity building.
- ❑ Human resource competency development.
- ❑ Design and establishment of a regional fisheries database.

Table 2-1 sets out the areas of focus for the CARICOM Fisheries Unit, and the more detailed activities or targeted outputs for each area in the mandate.

The CFRAMP which was launched in 1991 has performed satisfactorily on the achievement of its objectives. Specifically:

- ❑ Awareness of the importance of fisheries has increased, especially in the public sector, through various interventions which sought to assess and highlight the socio-economic importance of the industry.
- ❑ The National fisheries authorities have realized improved capacities and competencies through improved systems, the establishment of a regional aging laboratory, upgraded equipment, upgraded personnel competencies, computerization of their operations and other initiatives supported by CFRAMP funding.
- ❑ The human resources component of CFRAMP has delivered more than 90 person years of specialized professional expertise and over 700 persons have been trained in specialized areas such as: stock assessment, management of fisher folk organizations, extension methodology, computing, statistics and communications.
- ❑ The knowledge level of natural resource conservation and fisheries management has improved immensely through the upgraded extension service capabilities, pilot projects in co-management, stimulated community awareness, and training in leadership in fisher folk organizations.
- ❑ CFRAMP has also facilitated the networking of, and collaboration between fisheries departments.
- ❑ The results from the evaluation of the CFRAMP and the lessons learned have also been extensively used to set the stage for establishing CRFM.
- ❑ The fisheries management information has improved through the operation of information systems, improved collection of quantitative and qualitative statistical and biological data.

Table 2 – 2 which follows provides the details.

## **2.2 The Concept of A Regional Fisheries Mechanism**

The CARICOM Regional Fisheries Mechanism (CRFM) is an output from the CFRAMP. It is an institutional mechanism to deepen Regional integration in the management of marine resources. The guiding principles for the CARICOM Regional Fisheries Mechanism revolve around capacity building, post harvest technology, building professional competencies, data production and disseminations public awareness and promotion of community participation, promotion of institutional networking, and promotion of international trade standards. The specific guiding principles follow:

- ❑ Maintain biodiversity and use of ecosystem approaches to management.
- ❑ Manage fishing capacity and fishing methods to facilitate resource sustainability.
- ❑ Protect and rehabilitate critical fisheries habitats and the environment generally.



- ❑ Use post harvest practices that maintain nutritional value and quality of products.
- ❑ Include fisheries interests in all aspects of management planning and development.
- ❑ Establish effective mechanisms for monitoring, control and surveillance.
- ❑ Collect and provide data including sharing, pooling and information exchange.
- ❑ Ensure that fisheries decision-making processes are transparent and that all stakeholders have the opportunity to participate.
- ❑ Conduct trade in fish and fishery products according to applicable agreements.
- ❑ Cooperate with Member States in order to prevent disputes or to resolve them in a mutually acceptable manner.
- ❑ Promote awareness of responsible fishing through education and training.
- ❑ Ensure safe, healthy and fair working and living conditions for fisheries workers.
- ❑ Recognize the contribution of small-scale fisheries to employment, income and food security.

**Table 2 - 1: CARICOM Fisheries Unit - Mandate**

AREA	DESCRIPTION OF OUTPUT
1. Assessment and management of national and shared resources.	<ul style="list-style-type: none"><li>❑ Provide support for establishing regional organizations to manage regionally shared stocks.</li><li>❑ Provision of financial and technical support for such regional organization.</li></ul>
2. Strengthening national and regional institutions and capacity building.	<ul style="list-style-type: none"><li>❑ Training and awareness.</li><li>❑ Competency building in fisher folk organizations.</li><li>❑ Competency building in national organizations.</li><li>❑ Assistance with formulation and implementation of policies.</li><li>❑ Establishing regional network of national fisher folk organizations.</li></ul>
3. Enablement of human resource.	<ul style="list-style-type: none"><li>❑ Funding support for short term and long-term training programs for fishing officials in fisheries science and related areas, and fisheries management.</li></ul>
4. Design and establishment of a regional fisheries database.	<ul style="list-style-type: none"><li>❑ Technical assistance to develop national fisheries management software (LRS and TIP).</li><li>❑ Training of data personnel to use the regional database.</li></ul>

**Table 2-2: CFRAMP's Achievements**

AREA	DESCRIPTION
1. Increased awareness of the importance of fisheries.	Governments are now more aware of the industry's socio-economic importance.
2. Improved and strengthened capabilities of national fisheries units in the Community.	<input type="checkbox"/> Improved systems <input type="checkbox"/> Greater involvement of the fishing communities in management <input type="checkbox"/> Computerized fisheries units <input type="checkbox"/> Regional fish ageing lab <input type="checkbox"/> HRD at fishing units <input type="checkbox"/> National Fisheries Advocacy Committees <input type="checkbox"/> Upgraded fisheries unit equipment <input type="checkbox"/> Strengthened public relations <input type="checkbox"/> Extension capabilities improved
3. Expansion of trained personnel.	<input type="checkbox"/> 21 Scholarships of 94 person years – BSc, MSc and PhD. <input type="checkbox"/> Over 700 personnel from fisheries units received short term training in: <div style="display: flex; justify-content: space-between;"> <div>Stock assessment</div> <div>Statistics</div> <div>Vessel inspections and registration</div> </div> <div style="display: flex; justify-content: space-between;"> <div>Resource management</div> <div>Computing</div> <div>Extension methodology</div> </div> <div style="display: flex; justify-content: space-between;"> <div></div> <div>Communications</div> <div>Management of fisher folk organizations</div> </div>
4. Improved knowledge of conservation and fisheries management.	<input type="checkbox"/> Upgrading the national fisheries extension capabilities <input type="checkbox"/> Supporting co-management pilot projects <input type="checkbox"/> Stimulating community awareness <input type="checkbox"/> Training leaders in fisher folk organizations
5. Demonstration of the concept of Regional fisheries management and fostering the establishment of CRFM.	<input type="checkbox"/> Fisheries departments are networking and collaborating with each other through facilitation from CFRAMP. <input type="checkbox"/> Increased intra-CARICOM technical cooperation.
6. Setting the stage for Regional integration in fisheries.	<input type="checkbox"/> The work sets the stage for the CARICOM Regional Fisheries Mechanism (CRFM). <input type="checkbox"/> The lessons learned will benefit the introduction of CRFM.
7. Improved and expanded fisheries management information.	<input type="checkbox"/> Basic data and information systems established. <input type="checkbox"/> Quantitative and qualitative statistical and biological data improved. <input type="checkbox"/> Numerous specialized resource assessment and resource management studies and reviews completed and disseminated to stakeholders.

## **2.3 Scope of Work for Developing the Strategic Plan**

The expected outputs from this Strategic Plan are set out below:

1. A regional overview of the industry, its outlook and challenges
2. An overview of the Region's status with respect to the fulfilling its international obligations for the environment and other standards in the industry.
3. A review of national initiatives to address issues in the industry.
4. Assessment of Member countries' expectations from the institutionalization of CFRAMP.
5. A projection on the scope, mission and goals for the CRFM in light of the above situational analysis.
6. The institutional and organizational structures and strategic competencies that CRFM should have in order to fulfill its mission and goals.
7. Strategies to be used in building the requisite/institutional competencies and capacities.
8. The requisite strategies for sustaining financial viability and institutional relevance.
9. A Business Plan with the required list of interventions.
10. The risks associated with implementing the Plan and how they should be minimized.
11. An Action Plan comprising the critical success factors and how they should be strategically managed to enhance success of the Plan.

## **2.4 Methodology**

An iterative approach was used in the development of this Plan. The stages are as follows:

- |                         |   |
|-------------------------|---|
| <b><i>Stage – 1</i></b> | Participation in the stakeholders' review of the Working Group Report on the Framework for the CRFM.  |
| <b><i>Stage – 2</i></b> | Participation in the review of the Working Group Report on the CRFM. This review examined the framework developed for operating the CRFM.   |
| <b><i>Stage – 3</i></b> | Country visits for discussions with a wide cross section of stakeholders including: Personnel in national fisheries divisions, the relevant government ministries and agencies, public and private research |

- institutions, educational institutions, donor agencies, fishers associations, commercial processing operations, and policy makers.
- Stage – 4** Review of a wide range of Reports, and technical documents provided by Member countries and the CFU.
- Stage – 5** Participation in a technical Working Group meeting at the CARICOM Secretariat encompassing a presentation of the Indicative Plan.
- Stage – 6** Preparation of a first edition Draft Report based on the outputs of work from stages 1 to 5, for discussion with CFU.
- Stage – 7** Technical review of the First Draft of the Report with the Staff of CFU mainly to ensure that it fulfilled the terms of reference.
- Stage – 8** Preparation of the second edition of the Draft Report for discussion with the Working Group at a working session held in the Dominican Republic. The outcomes from the review have been used to prepare the third edition of the Report.
- Stage – 9** Preparation of the Third Edition of the Draft Report. This edition of the Report includes the inputs from the Working Group review held in the Dominican Republic. This edition of the Report was later reviewed with the management and technical staff of CFU.
- Stage – 10** Preparation of the Fourth Edition of the Report. This edition was distributed to Member States for review at a special meeting to held in St. Vincent and the Grenadines January 2002.
- Stage – 11** Preparation of the Fifth Edition of the Report to reflect the inputs from the Member States' review of the fourth edition.
- Stage – 12** Preparation of the Sixth (and current) Edition of the Strategic Plan to reflect consultations with Member States at a Workshop in St Vincent and the Grenadines in January 2002, and Working Group Meetings in Tobago and St Vincent and the Grenadines in April and June 2002, respectively.

## **2.5 Outline of this Report**

This Strategic Plan is intended to reflect an approach to realizing the vision of Sustainable Fisheries Development for the People of the Caribbean through a strong collaborative input from participating countries, led by a cadre of technical experts selected by the participating states. The Strategic Plan is presented in '9' sections as follows:

### **Section – 1 Summary and Recommendations**

This section contains a concise presentation of the industry situational analysis; the challenges the industry faces and how these could be addressed; together with the role and structure for the CRFM, the structure

for the CFRM and considerations related to the budget, the risks, and the required start up plan.

## **Section – 2    Introduction**

This section provides an overview of the CARICOM mandates and initiatives, the concept of a Regional Fisheries Mechanism, the scope of work for developing this Plan, and the methodology utilized .

## **Section – 3    Industry Overview**

Here the technical characteristics of the fishing industry are presented: its economic size and importance, and the production and technological structures. This section also contains an analysis of its sustainability, the organizational situation, the level of competencies, global positioning of the industry and some common policies and strategies among Members States.

## **Section – 4    Major Challenges and Required Strategies**

The many challenges facing the industry are outlined and assessed. These revolve around: research and development, globalization, regional capabilities, human resource competencies, organizational competencies, diversification, developing the marine sub-sector, mechanisms to reduce the effects of risks in the sector, and for avoiding and resolving disputes. This is followed by the presentation of respective strategies for successfully addressing them

## **Section – 5    Role for the CARICOM Regional Fisheries Mechanism**

This section reviews the performance of CFRAMP and highlights the priority services CRFM should provide to continue to build on the CFRAMP initiative as well as the relevance of the priorities to CARICOM's original mandate. The treatment is within the context of and an assessment of the environment for a Regional Fisheries Mechanism.

## **Section – 6    The Institutional and Organizational Frameworks for CRFM**

This section provides an overview of recent development, and institutional initiatives, the guiding principles for operating the Regional Fisheries Mechanism, the membership structure and institutional framework. It also defines the mission, the required organization and staffing, and the job functions and competencies.

*(NB Would need much amendment)*

## **Section - 7    Programs and Resource Requirements**

Here the list of necessary interventions, the required budget and suggested financing structure is presented.

## **Section - 8    Some Strengths, Possible Threats, and Required Treatments**

This section identifies some of the many strengths of the embryonic CRFM that will enhance its success. It also identifies some perceived threats that the Plan could face; assesses their likelihood; and recommends the strategies to deal with them.

## **Section – 9    Required Start- up Plan**

This section of the Strategic Plan will indicate the required follow up activities for a successful start-up and the timetable for implementing them.

## 3. INDUSTRY OVERVIEW

### ***3.1 The Industry Situation***

The CARICOM fisheries industry has both capture and culture components.

- The marine capture component is by far the most economically important in CARICOM. It comprises the harvesting of shrimp, prawns, spiny lobsters, conch, reef fishes, deep slope and bank fishes, offshore pelagic, coastal pelagic, and flying fish. Other species, which are of less importance, are: sea turtles, sea urchins, whales and porpoises and seaweeds. Inland capture fisheries are limited to the larger countries such as Guyana, Jamaica and Belize. Information on the inland capture fisheries is sparse. In Jamaica and Guyana, these fisheries are an important source of protein for rural communities. Some riverine species are collected largely for the ornamental fish trade. The extent to which riverine species are harvested for export is unknown.
- The culture fisheries are at varying stages of development and are generally more established in the larger territories such as Jamaica where the dominant food species is the red hybrid tilapia and Belize, which focuses on pangasid shrimp culture. Less developed food fish culture exists in other countries such as St. Lucia (sea moss) and Trinidad and Tobago (Tilapia). Guyana has recently embarked upon a major program for aquaculture. Ornamental fish culture development exists in some countries and is relatively well developed in Trinidad and Tobago.

The industry's sub-sectors comprise artisanal fisheries, industrial fisheries, processing and marketing for local as well as export markets, and sports and recreational fisheries.

- The artisanal sub-sector represents the largest segment of fishers. They operate on a small-scale informal basis, with their major investment being in small boats. Their fishing technologies are mostly traps, cast nets, and hook and line. They concentrate mostly on primary production, which is distributed through vendors primarily for domestic consumption. Most fish vendors are women who have special arrangements with the fishers. Often times these women are the wives or other family members of the fishers or are investors in the fishing operation. Their investment may be through boat and/or gear ownership or via the provision of financing for fishing trips (i.e. purchasing the fuel for the boat and food supplies for the crew). Some of the artisanal catches are sold directly to fish processing plants where it enters the export market. The marketing and distribution of the artisanal catches form part of the informal sector in most Caribbean countries. Table 3-1 which follows substantiates that the industry is dominated by many artisanal fisheries operations.



- The industrial sub-sector comprises larger capital intensive vessels which operate mainly in off shore areas, largely targeting highly priced high value added species such as spiny lobsters (Jamaica and the Bahamas), Conch (Jamaica, Bahamas and Belize), and shrimp and prawns (Guyana and Belize).
  - There is also a recreational fisheries sub-sector. The extent of this fishery is unknown but is considered to be very important in many Member States. It spans various aspect of tourism. This includes domestic and international sports fishing (tournaments) yachting and fishing, and weekend group and family fishing events.
  - The processing, distribution and marketing sub-sector is multi-dimensional, receiving raw material from both the artisanal and industrial sub-sectors and sending product to local, regional and international markets.
- ❑ Of the 17,753 vessels in the industry, 11,569 or 65% are artisanal types and 297 or approximately 17% are large commercial vessels, which concentrate mostly in Suriname, the Bahamas and Guyana.
- ❑ There are over 70,000 directly employed fishers.

### **3.2 Socio economic Importance**

This section assesses the economic contribution of the sector to the national output in relation to the gross domestic product (GDP), the trade balance and the level of employment.

- ❑ Fish production in CARIFORUM in 1998 was 126,360 metric tons of which 29.1% were crustaceans (shrimps, prawns, and spiny lobsters) and mollusks (mainly conch) and 70.9% were finfish. Table 3.2 provides the breakdown of total production by country. The estimated value using an average of US \$ 4,000 per metric ton is US \$505.4 million.
- ❑ The percentage contribution to GDP as primary production is significant in Guyana (8.3%) and to a lesser extent in Suriname (3.8%). It however ranges from between less than 0.3% to under 3.0% in all other Member States. Table 3-2 provides the details. The period for the available data is 1995 for most countries. Despite the fact that the sub- sector has grown over the past five years, as a primary product with low value, it has not significantly increased its share of the GDP. There are no significant developments in the sector, including resources availability to make the level of GDP significantly different. For example in Jamaica, where the sub-sector has expanded as a result of aquaculture over the past ten years, it has only increased its contribution to GDP from 0.29% in 1993 to 0.30% in 1998 (five years later). These figures understate the real value of the sector because its contribution is currently measured by primary fisheries output only (i.e. the ex-vessel value of landings) and does not take into account the value added in the secondary manufacturing/processing sector of the industry. The major activities such as: cleaning, storage, processing/manufacturing, packaging, transportation, vending and distribution are aggregated in other sectors.

- ❑ Based on the export data in Table 3-3, the export of fish and fish products in 1998 was 31, 524 metric tons. The estimated value of this 1998 export using an average of US \$5 per kilogram was US \$158 million. This compares with the US\$104.9 million export reported by FAO in 1996. The value of import in 1996, according to FAO Report was US\$474.1 Million. Assuming a 7% growth each year, the estimate for 1998 should be around US \$ 543 million. The dominant fish imports are salted fish, and processed canned fish such as: sardines, tuna, and mackerel.
- ❑ From a Regional perspective, the fisheries sector is generally a net importer except among the major producers – Bahamas, Belize, Guyana, St. Vincent and the Grenadines, and Suriname, Trinidad and Tobago and Grenada to a lesser extent. Table 3-3, provides the details. This means that while fisheries is an important contributor to food security it still has some level of dependence on foreign supplies.
- ❑ It is estimated that direct employment in the sector is over 70,000 and indirect or secondary employment based on the data provided for nine (9) CARIFORUM States is at least 88% of direct employment or another 62,000. Table 3-1 provides the details. Further, it is estimated that most (over 70%) of the labor in secondary employment are women engaged in processing and vending.

This employment of over 130,000 represents about 1.8% of those at work. This is computed on the assumption that the population is 22 million of which the labor force is 9.9 million or 45% and the employment rate is 75%.

Overall, the fisheries sector is assessed to be of considerable socio-economic importance to the economies of the Member States of CARICOM and CARIFORUM. In addition to the data provided on employment, trade and GDP, the following generally substantiate the socio-economic importance of the sector.

- ❑ It contributes immensely as an income generating or poverty alleviation opportunity for some of the most economically disadvantaged communities. For example:
  - Most of those engaged in seasonal construction, agriculture and tourism activities use fishing to supplement their income.
  - Remote rural and coastal communities which rank highest for poverty and lack of economic opportunities are the ones primarily engaged in fishing as a livelihood.
  - The continuous loss of competitiveness in the agricultural and manufacturing sectors due to trade liberalization and globalization, and the consequential dislocation among workers in these sectors, has resulted in an increasing number of dislocated workers turning to fishing as a source of income.

- Women, whose average rate of unemployment are more than twice the national rate, use fish processing and distribution (vending) as major income earning opportunities.
- Fisheries also play a major role in nutrition and food security. In many Member States, the bulk of the supply of animal protein for domestic consumption especially in rural, coastal communities comes from the fisheries sector. In this regards, marine and rive rain subsistence fisheries are widespread and play a critical role. Fish therefore has to be regarded as a vital source of protein and contributor to essential mineral and vitamins of the diet.

**Table 3-1: Fishers and Vessels Operating Structure in CARICOM Fisheries Sector**

Country	<i>Types Vessel</i>				
	Employment Fishers (Primary)	Employment Secondary	Artisanal	Small Commercial	Large Commercial
1. ANTIGUA BARBUDA	550	N.A.	195	41	0
2. BAHAMAS	8969	472	0	1500	395
3. BARBADOS	2200	1200	355	395	13
4. BELIZE	2300	N.A.	450	450	1
5. DOMINICA	2338	N.A.	889	4	0
6. DOMINICA REPUBLIC	8000	2000	2760	35	0
7. GRENADA	1240	120	699	36	1
8. GUYANA	4500	5500	900	500	120
9. HAITI	10,000	3500	N.A		
10. JAMAICA	12000	24,000	2000	20	15
11. MONSTERRAT	174	N.A.	N.A.	8	0
12. ST. KITTS-NEVIS	650	N.A.	388	5	0
13. ST. LUCIA	2000	N.A.	620	5	0
14. ST. VINCENT AND THE GRENADINES	3500	1020	390	10	0
15. SURINAME	4283	N.A.	516	185	2412
16. TRINIDAD AND TOBAGO	7300	4400	1350	20	14
<b>TOTAL</b>	<b>70,004</b>	<b>42,212</b>	<b>11,569</b>	<b>3,215</b>	<b>2,971</b>
<b>TOTAL VESSELS</b>				<b>17,753</b>	

**SOURCE: REPORT OF THE WORKING GROUP ON THE CARIBBEAN REGIONAL FISHERIES MECHANISM MAY 2000 APPENDIX – 1.**

TABLE 3-2:

CARICOM: CONTRIBUTION OF FISHERIES SECTOR TO THE GDP  
(VARIOUS YEARS BETWEEN 1987 AND 2000)

Country	% of GDP	Year
1. ANTIGUA BARBUDA	2.0	2000
2. BAHAMAS	2.3	1995
3. BARBADOS	0.5	2000
4. BELIZE	3.97	2000
5. DOMINICA	1.86	2000
6. GRENADA	1.28	2000
7. DOMINICAN REPUBLIC	N.A.	N.A.
8. GUYANA	8.3	1991
9. HAITI	1.2	N.A.
10. JAMAICA	0.3	1999
11. MONSTERRAT	0.6	1995
12. ST. KITTS-NEVIS	1.4	1995
13. ST. LUCIA	0.8	1995
14. ST. VINCENT AND THE GRENADINES	2.0	1995
15. SURINAME	3.8	1995
16. TRINIDAD AND TOBAGO	0.3	1987

***SOURCE: DATA OBTAINED FROM THE CARICOM SECRETARIAT AS WELL AS EXTRACTED FROM THE REPORT ON THE WORKING GROUP ON THE CARIBBEAN REGIONAL FISHERIES MECHANISM, MAY 2000 APPENDIX – 1.***

**Table 3-3: CARICOM – Analysis of Trade Balance in Fish and Fish Products 1998**

<b>Country</b>	<b>Production (mt.)</b>	<b>Imports (mt.)</b>	<b>Exports (mt.)</b>
ANTIGUA AND BARBUDA	500	394	105
BAHAMAS	10,127	1,239	2,641
BARBADOS	3,594	1,808	263
BELIZE	2,584	289	1,932
DOMINICA	1,212	603`	-
DOMINICA REPUBLIC	9,076	21,477	126
GRENADA	1,713	392	450
GUYANA	56,459	201	7,611
HAITI	4,769	12,016	1,215
JAMAICA	6,140	13,199	2,453
MONSTERRAT	50	-	-
ST. KITTS AND NEVIS	285	170	1
ST. LUCIA	1,314	1,173	8
ST. VINCENT AND THE GRENADINES	1,283	207	2,333
SURINAME	12,760	325	5,400
TRINIDAD AND TOBAGO	14,500	3,552	6,989
<b>TOTAL</b>	<b>123,366</b>	<b>56,945</b>	<b>31,524</b>

**SOURCE: FAO**

### **3.3 Fishers Technological Structure**

The fishers use a wide range of fishing methods or technologies. The most popularly used methods are hook and line, cast net, traps, bottom long lines and floating long lines. These are mostly artisanal technologies. Trawl is among the least used mainly because it is capital intensive and more suitable for industrial fishing. Table 3-4 provides the details based on a sample survey concentrated in selected representative fishing areas in each Member CARICOM country.

- Although the artisanal fishers play a significant socio-economic role, their dominance in benefiting from the industry is threatened by the growing percentage of production being attributed to industrial fishers most of whom are foreign operators from Japan, Taiwan, Korea, Spain, Venezuela and the United States. While there is no available up-to-date data on the distribution of landings between artisanal and industrial fisheries, the data for the period 1989 to 1994 indicate that industrial fishers have increased their share from 20.7% in 1989 to 26.7% by 1994. At this rate it is estimated that the current share attributed to industrial fishers should be at least 35%. Table 3-5 provides the details.

**TABLE 3-4: ANALYSIS OF THE USE OF FISHING GEAR AMONG FISHERS IN SELECTED SAMPLES OF FISHING AREAS.**

INDICATORS	PERCENTAGE OF FISHERS RESPONDING							RANGE
	ANTIGUA – BARBUDA	BELIZE		GUYANA	JAMAICA	ST. LUCIA		
1. Fish with traps.	56.3	13.7	8.0	-	36.7	31.3	3.0	3.0-56.3
2. Fish with floating long lines.	-	19.6	35.6	3.3	10.0	65.0	0.8	0.8-65.00
3. Fish with bottom long lines.	6.3	19.6	37.8	1.1	16.0	57.5	0.8	0.8-57.5
4. Fish with gill/draft net.	3.1	14.7	17.0	24.4	20.0	6.3	43.6	3.1 – 43.6
5. Fish with spear guns and scuba.	12.5	2.9	3.7	-	3.3	1.3	0.8	0.8 – 12.5
6. Fish with spear guns no scuba.	15.6	32.4	-	-	9.3	3.8	-	3.8-32.4
7. Only free dive.	6.3	60.8	-	-	2.0	1.3	-	1.3-60.8
8. Only scuba.	3.1	-	-	-	-	-	-	-
9. Hook or loop	9.4	58.8	-	-	1.3	-	0.8	0.8 – 58.8
10. Fish with hook and line.	43.8	66.7	5.7	1.1	66.0	13.8	51.9	1.1-66.7
11. Fish with lobster trap.	15.6	22.5	9.4	-	-	6.3	-	6.3-22.5
12. Fish with cast net	3.1	44.1	-	-	0.6	20.0	-	0.6-44.1
13. Fish with lampara.	-	2.0	-	-	-	1.3	-	1.3-2.0
14. Fish with trammel net.		13.7	-	-	8.0	10.0	-	8.0-13.7
15. Fish with harpoons.		13.7	-	-	-	3.8	1.5	1.5-13.7
16. Fish with trawl.		2.0	-	22.0	-	-	12.8	2.0-22.0

Source:

A socio-economic baseline survey of thirty fishing communities in twelve CARICOM countries Peter Espeut for Caribbean Natural Resources Institute, for the CFRAMP – December 1994.



**TABLE 3-5: ANALYSIS OF THE DISTRIBUTION OF LANDINGS BETWEEN  
ARTISANAL AND INDUSTRIAL FISHERS 1989 AND 1994**

MAIN SPECIES	Total 000 tons		Distribution 000			
	tons		1989		1994	
	1989	1994	ARTISANAL	INDUSTRIAL	ARTISANAL	INDUSTRIAL
1. Shrimp	9.4	8.7	0.5	8.9	0.5	8.2
2. Tuna	0.7	1.6	0.1	0.6	0.1	1.5
3. Spiny Lobster	6.9	8.5	6.6	0.3	8.1	0.4
4. Conch	1.2	3.3	1.1	0.1	1.1	2.2
5. Other finfish	56.2	82.1	50.8	5.6	66.5	15.6
<b>TOTAL</b>	74.6	104.2	59.1	15.5	76.3	27.9
<b>PERCENTAGES</b>	100.0	100.0	79.3	20.7	73.2	26.8

Source: *A Regional Fisheries Mechanism for CARICOM by Roderick Rainford and Carlyle Mitchell February 1998 Table -2.*

### **3.4 Trend in Sustainability and Driving Forces**

There are no reliable data available on stocks. However data from a survey carried out by Peter Espeut for CFRAMP in 1994, among fishers, vendors and others, present good indicators on the of the stocks and the level of sustainability. The data are drawn from sample surveys in representative fishing communities throughout CARICOM. Four indicators have been used. Namely: trends in catch weight, catch size, composition of species, and the frequency of changes in fishing locations. For this analysis, the data are drawn from 7 representatives Member States – Antigua- Barbuda, Belize, Grenada, Guyana, Jamaica, St. Lucia and Trinidad and Tobago. From all indications as substantiated in Table 3-6, it can be concluded that the stock is under serious threat.

- ❑ Catch weight is declining. All countries in the group report a declining trend with over an average of 40% of the fishers reporting that they were experiencing a trend of decline in the weight of the catch. As many as 64% of Jamaican fishers have been experiencing declining weight of the catch to as little as 18.9% in Grenada.
- ❑ The size of the catch is also declining in all the countries, with Belize having the most pronounced trend.
- ❑ Many fishers have to change fishing grounds over the years because of declining catches. In Antigua-Barbuda for example 48.6% of the fishers change locations.

Based on the solutions/strategies fishers suggested that in order to improve the rate of sustainability it appears there was need for improved: management, fishing practices, and fishing technology because the problem is being driven by:

- ❑ A large and increasing number of unlicensed fishers.
- ❑ A large and increasing number of fishers.
- ❑ Increased year round fishing activity.

- ❑ The extensive use of inappropriate size mesh.
- ❑ The increasing use of destructive gears.

The fishers have identified thirteen (13) specific solutions/strategies to improve sustainability, namely:

- ❑ Ensuring that all fishers are licensed.
- ❑ Impose fine on unlicensed fishers.
- ❑ Limit the number of fishers.
- ❑ Limit the weight of fish caught.
- ❑ Establish fish sanctuaries
- ❑ Establish closed season.
- ❑ Enforce the larger mesh size for fish traps.
- ❑ Enforce the use of wider net mesh.
- ❑ Enforce the protection of small fish.
- ❑ Enforce protection of mangroves, and coral reefs.
- ❑ Impose heavy fines for dynamiters.
- ❑ Limit the number of large boats.
- ❑ Ban some types of fishing gears.

Table 3-7A sets out the percentage distribution of fishers, by country, recommending each of the above strategies. Table 3-7B provides a list of all the key forces fishers believe to be causing the decline in the fish population and thus threatening the sustainability of the industry. They revolve around weather patterns, fishing technology or practices, open access entry into the industry, destruction of the ecosystems, illegal foreign fishers, and competing interests (e.g. sports fishers and hoteliers). It can be concluded from Table 3-7B that interventions into the industry will have to include biological as well as socio-economic solutions.

**TABLE 3-6: ANALYSIS OF FISHERS' EXPERIENCE WITH THE SUSTAINABILITY OF THE FISHERIES RESOURCES**

**PERCENTAGE OF FISHERS RESPONDING**

INDICATORS	ANTIGUA - BARBUDA	BELIZE		GUYANA	JAMAICA	ST. LUCIA		RANGE
1. Catch Weight Declined	48.6	49.0	18.9	36.2	64.0	36.3	40.6	18.9-64.0
2. Catch size declined.	14.3	29.4	5.7	17.8	17.3	15.0	13.5	5.7-29.4
3. Fish location changed.	48.6	26.5	39.6	15.6	30.0	23.8	2.2	2.2-48.6
4. Change of fishing grounds.	31.4	61.8	32.1	42.2	46.0	56.3	1.5	1.5-61.8

Source:

A socio-economic baseline survey of thirty fishing communities in twelve CARICOM countries by Peter Espeut for Caribbean Natural Resources Institute for the CFRAMP – December 1994.

**TABLE 3-7A: ANALYSIS OF FISHERS' PERCEIVED HIERARCHY  
OF STRATEGIES FOR FISHERIES MANAGEMENT  
FOR IMPROVED SUSTAINABILITY OF FISHERIES  
RESOURCES**

STRATEGIES	PERCENTAGE OF FISHERS RESPONDING							RANGE
	ANTIGUA- BARBUDA	BELIZE		GUYANA	JAMAICA	ST. LUCIA	T&T	
1. All Fishers must have licenses.	93.8	96.1	69.8	96.7	95.3	85.0	74.4	69.8-96.7
2. Fines for fishers with no license.	71.9	89.2	30.2	82.2	83.3	76.3	36.1	30.2-89.2
3. Limit number of fishers.	25.0	21.6	3.8	11.1	16.7	28.8	2.3	2.3-28.8
4. Limit weight of fish caught.	9.4	23.5	3.8	12.2	8.6	10.0	4.5	3.8-23.5
5. Establish fish sanctuaries.	68.8	75.5	94.3	41.1	65.3	57.5	62.4	41.1-94.3
6. Establish closed seasons.	34.4	70.6	96.2	38.9	60.7	63.8	18.8	18.8-96.2
7. Bigger fish trap mesh.	21.9	37.3	67.9	7.8	40.7	71.3	10.5	7.8-67.9
8. Wider net mesh	21.9	44.1	60.4	23.3	52.7	70.0	20.3	20.3-70.0
9. Protect small fish.	71.9	91.1	98.1	54.4	90.7	86.3	75.2	54.4-98.1
10. Protect mangroves, and coral reefs.	93.8	89.2	100.0	56.7	83.3	92.5	68.4	56.7-100.0
11. Heavy Fines/ punishment for dynamiters.	90.6	96.1	100.0	4.4	90.7	93.8	99.2	4.4-99.2
12. Limit the number of large boats.	12.5	51.0	3.8	22.2	27.3	37.5	51.1	3.8-51.1
13. Ban some types of gears.	9.4	41.2	47.2	24.9	45.3	47.5	27.1	9.4-47.5

Source:

A socio-economic baseline survey of thirty fishing communities in twelve CARICOM countries Peter Espeut for Caribbean Natural Resources Institute for the CFRAMP – December 1994.

**TABLE 3-7B: ANALYSIS OF FISHERS' PERCEPTION OF  
FORCES CAUSING DECLINE IN FISH  
POPULATION.**

	<b><u>PERCENTAGE OF FISHERS RESPONDING</u></b>						
	<b>ANTIGUA - BARBUDA</b>	<b>BELIZE</b>	<b>Grenada</b>	<b>JAMAICA</b>	<b>ST. LUCIA</b>	<b>T&amp;T</b>	<b>RANGE</b>
1. Weather Change.	96.9	94.1	77.4	75.6	78.0	16.5	16.5 – 96.9
2. Too many fish traps	25.0	51.0	-	5.6	16.0	5.3	5.3 – 51.0
3. Trap mesh too big	3.1	9.8	3.8	2.2	4.0	0.8	0.8– 9.8
4. Trap mesh too small	18.8	31.4	64.2	8.9	34.0	1.5	1.5 – 64.2
5. Pollution from farms	12.5	33.3	60.4	2.2	41.3	11.3	2.2 – 60.4
6. Too many sharks.	9.4	9.8	-	2.2	21.3	-	2.2- 21.3
7. Too many fishermen.	15.6	39.2	1.9	32.2	21.3	0.8	0.8- 39.2
8. Too many sports fishers	9.4	33.3	5.7	2.2	20.7	0.8	0.8- 33.3
9. Too many commercial fishers	3.1	26.5	-	11.1	18.0	36.8	11.1- 36.8

10. Too many spear fishers.	12.5	24.5	-	4.4	19.3	1.5	1.5-24.5
11. Sewage pollution.	28.1	26.5	15.1	2.2	61.3	1.5	1.5-61.3
12. Hotels, tourism.	50.0	26.2	1.9	-	34.0	-	1.9-50.0
13. Fish getting smarter.	34.4	58.8	3.8	21.1	80.7	-	3.8-80.7
14. Too many nets.	6.3	36.2	1.9	18.9	10.7	1.5	1.9-36.2
15. Net mesh too big	6.3	9.8	-	1.1	4.7	0.8	1.1-9.8
16. Net mesh too small.	12.5	29.4	41.5	6.7	38.7	8.3	6.7-41.5
17. Factors pollution.	18.8	23.5	-	3.3	56.7	33.8	3.3-56.7
18. Too many local thieves.	25.0	60.8	3.8	11.1	50.0	10.5	3.8-60.8
19. Illegal foreign fishers.	53.1	63.7	34.0	17.8	58.7	5.3	5.3-63.7
20. Not enough markets.	46.9	23.5	52.8	7.8	20.7	44.4	7.8-52.8
21. Not enough	87.5	35.3	17.0	6.7	52.7	49.6	6.7-87.5

h credit							
22. Destr uctio n of mang roves.	87.5	48.0	3.8	6.7	45.3	7.5	3.8- 87.5
23. Fish caugh t too youn g.	37.5	55.9	88.7	3.3	72.0	32.3	3.3- 88.7
24. Use of dyna mite.	9.4	59.8	43.4	15.6	71.3	2.2	2.2- 71.3

Source: A socio-economic baseline survey of thirty fishing communities in twelve CARICOM countries Peter Espeut for Caribbean Natural Resources Institute for the CFRAMP – December 1994.

### **3.5 Organization and Management**

All Member States have a Fisheries Division or Ministry with functional responsibility for management of the sector. They are functionally structured to carry out a range of regulatory and service tasks including:

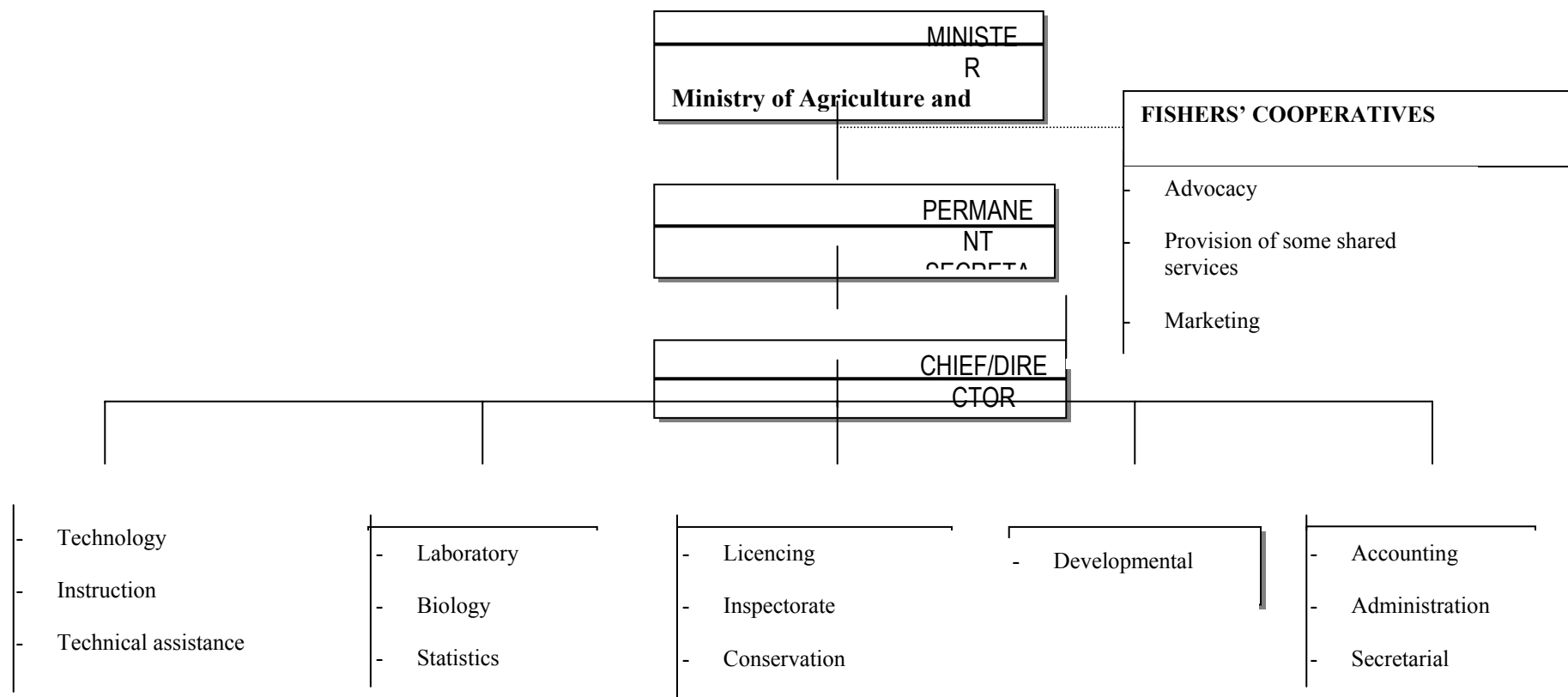
- ❑ Extension service spanning: practices and methods, training and providing technical interventions.
- ❑ Research – supported by varied forms of laboratory, biological and statistical capabilities.
- ❑ Resource management with focus on licensing, inspection or monitoring and other conservation practices.
- ❑ Aquaculture/Mariculture with emphasis on development and promotion of activities in the sub-sector.
- ❑ Administration-responsible for accounting, personnel, services and other secretariat support services.

Each division is headed by a Director or Chief and the Ministry with portfolio responsibility is usually the one with agriculture. In addition, there are some countries (e.g. Belize) where several fishers cooperatives with significant representation and advocacy capacities especially in the areas of rationalization of entry to the industry and policies and marketing for the industry. Exhibit 3-1 presents the composite functional organizational structure. The following can be observed from the composite structure.

- ❑ There is concentration on the biological aspect of the industry. These include extension to reinforce good practices, research on habitat, resource conservation (through licensing and inspection) and aquaculture development.
- ❑ There are no common provisions for bio-economic measures or cultural and environmental concerns, or the economic well-being and welfare of the many artisanal operators in the sector.
- ❑ In respect of aquaculture the approach does not reflect that the underlying tenets of this sub-sector are somewhat different to those of the capture fisheries sub-sector, particularly as it relates to the involvement of the private sector.
- ❑ The structure does not appear to specifically recognize and promote the philosophy of co-management of the resource.



# EXHIBIT 3-1: COMPOSITE FUNCTIONAL ORGANIZATIONAL STRUCTURE FOR NATIONAL FISHERIES ADMINISTRATIONS IN CARICOM.



### **3.6 CARICOM Community through the Working Group on the Regional Fisheries Mechanism.**

The Community has identified some 23 areas of competencies or experiences that are essential for the competent management of the fisheries sector. These are:

- ☐ Data management capability and knowledge
- ☐ Fisher folk organization development
- ☐ Stock assessment
- ☐ Resource mobilization to support interventions in the sector.
- ☐ Socio-economic
- ☐ Planning
- ☐ Project development and management
- ☐ Organization and development
- ☐ Institutional development
- ☐ Negotiations especially for global positioning
- ☐ Fisheries sociology
- ☐ Post harvest technology
- ☐ Vocational fishing skills
- ☐ Public awareness promotion
- ☐ Administration of health and sanitary standards.
- ☐ Development of aquaculture and mariculture
- ☐ Quality assurance management
- ☐ Market research
- ☐ Natural disaster management
- ☐ Research
- ☐ Legal and regulatory
- ☐ Coastal zone environmental impact assessment.
- ☐ Disputes resolution

**There is a network of regional and national institutions and organizations involved in various aspects of the above activities. They include:**

- ❑ Several regional and sub-regional institutions such as CARICOM Secretariat and the OECS/NRMU.
- ❑ National fisheries authorities/divisions, Caribbean Maritime Institute (CMI) The Institute of Caribbean Fisheries Training and Development Institute (CFTDI) CARICOM universities (University of the West Indies, University of Guyana, St. Georges University and the University of Technology of Jamaica and the University of Suriname) Consultants/specialist firms/ individuals, and other training institutions.
- ❑ There are also some NGOs such as CANARI, and CCA, which are involved, in related activities. Table 3-8 provides details of the range of related activities in which some institutions are engaged. The table is merely an indicator of what some institutions are initiating. It should not be construed as their areas of competencies or capacities.

Their involvement in these activities does not necessarily confirm that they have the requisite competencies. It however indicates that there are potential candidate institutions around which specific competencies could be built.

The following can be concluded from Table 3-8:

- ❑ Regional and national institutions are engaged in resource mobilization, management, research and coastal zone environmental impact assessment. Their experience in these strategic activities can be used to build the competencies of the fisheries sector.
- ❑ Member States fisheries authorities vary in the range of strategic activities they carryout. However they all have the potential to be good starting points for project development and management, and health and product standards.
- ❑ The Institute of Marine Affairs (IMA) has experience, which can be readily utilized and/or enriched for effective work in the areas of project development/management, post harvest technology, aquaculture/mariculture, and research to some extent.
- ❑ The Caribbean Maritime Institute (CMI) and the Caribbean Fisheries Training and Development Institute (CFTDI) have practice experience in fishers organization development and vocational training, navigation, safety at sea and seamanship. These experiences can be used as a starting point for training in the sector.
- ❑ The university facilities in the region are active in various areas with the University of the West Indies being the most prominent. The work among these institutions concentrates on: resource mobilization, socio-economic analysis, organizational development, institutional development, community development, public awareness, and biological research.

- ❑ There are Consultants resident in the Community with professional practices: in organization development, socio-economic analysis, planning, project development, management, community development, public awareness, market research, legal and regulatory regimes, and coastal zone environmental impact assessment.
- ❑ Other training institutions provide training services in community mobilization and public education.
- ❑ Some NGOs are also involved in activities, primarily in organizational development, community development, natural disaster management, and settlement of disputes.

Based on the foregoing, it can be concluded that many institutions in the CARICOM Community are engaged in various activities related to the management of the Region's fisheries resources.

**TABLE 3-8: ANALYSIS OF INSTITUTIONAL INVOLVEMENT IN CRITICALLY REQUIRED AREAS OF COMPETENCIES\* FOR THE FISHERIES SECTOR IN CARICOM.**

CRITICALLY REQUIRED COMPETENCIES	NATIONAL /REGIONAL INSTITUTIONS	M.S. DEPARTMENT OF FISHERIES MINISTRIES		CMI		UNIVERSITIES	CONSULTANTS SPECIALISTS	OTHER TRAINING INSTITUTES	NGOs
1. Data Management.	X	X				X	X		
2. Fisher Organization Development		X	X	X	X	X	X	X	X
3. Stock Assessment		X	X			X			
4. Resource Mobilization	X	X	X	X	X	X	X		X
5. Socio-economic/ Analysis	X	X				X	X		
6. Planning	X	X	X			X	X		
7. Project Development/ Management.		X	X	X	X	X	X		
8. Organization Development			X	X	X	X	X		X
9. Institutional Development				X	X	X	X		
10. Negotiations		X	X			X	X		
11. Fishery Sociology						X	X		
12. Community Development.						X	X	X	X
13. Post Harvest Technology		X	X		X	X	X		
14. Vocational Fishing Skills.				X	X			X	
15. Public awareness						X	X		X
16. Pelagic Fishing Methods.		X	X		X				
17. Health and Sanitary Standards.		X	X		X		X		
18. Aquaculture/ mariculture.		X	X		X		X		
19. Quality Assurance.		X	X		X		X		

**TABLE 3-8 (CONT'D): ANALYSIS OF INSTITUTIONAL INVOLVEMENT CRITICALLY REQUIRED AREAS OF COMPETENCIES \* FOR THE FISHERIES SECTOR IN CARICOM**

COMPETENCIES	REGIONAL INSTITUTIONS	FISHERIES MINISTRIES		CMI			CONSULTANTS SPECIALISTS	TRAINING INSTITUTES	NGOS
20. Market Research	X					X	X		
21. Natural Disaster Management.	X	X		X	X		X		
22. Biological Research	X	X				X	X		
23. Legal and Regulatory Regimes	X					X	X		
24. Coastal zone EIA	X	X				X	X		

\* This table merely provides a listing of the range of activities in which these institutions have been involved. It should not be construed as their areas of competencies or institutional capacities.

LEGEND ON ABBREVIATIONS

IMA – Institute of Marine Affairs

CMI – Caribbean Maritime Institute

CFTDI – Caribbean Fisheries Technical  
and Development Institute

UWI – University of the West Indies

### ***3.7 Global Positioning***

The Food and Agricultural Organization of the United Nations' (FAO's) 'Code of Conduct for Responsible Fishing' is the key benchmark that the Regional industry will have to achieve to be considered technically positioned to participate in the international trade of fish without any threat of technical barriers. There are nine (9) critical elements in the Code of Conduct, namely:

- ☐ Fisheries co-management should be encouraged and facilitated.
- ☐ There should be effective mechanisms to monitor fishing operations.
- ☐ Aquaculture development should be properly monitored and promoted.
- ☐ The integration of fisheries into coastal area management should be promoted.
- ☐ The promotion of, and practice of post harvest practices and trade should be encouraged.
- ☐ There should be fisheries research to enhance the quality of decision-making.
- ☐ There should be participation in International Plan Of Action (IPOA) – Sharks, fishing capacity and sea birds.
- ☐ Notification of the Compliance Agreement.
- ☐ There should be ratification of the Fish Stock Agreement.

The Region's overall performance in these areas is modest as highlighted below and detailed in Table 3-9.

- ☐ Fisheries management plans are generally available and there are some tangible practices to manage and/or control exploitation.
- ☐ Fishing operations are somewhat regulated mainly through licencing, and vessel registration. However there are very few measures in place for Monitoring Control and Surveillance (MCS).
- ☐ The aquaculture sub-sector is generally underdeveloped and lacks the necessary enablement policy and regulatory framework.
- ☐ There is no significant integration of fisheries into coastal area management.
- ☐ Post harvest practices and trade with emphasis on the HACCP quality assurance systems is at various stages of progress. Most Member States are at the training and preparatory stages while a few have recently upgraded some of their institutional systems and procedures to international standards.
- ☐ Fisheries research is progressing with the major challenges being around the recruitment and retention of qualified personnel.
- ☐ There is very little or no progress in the IPOA.
- ☐ The ratification of the Compliance Agreement is at various stages. Some Caribbean countries have already ratified it. However, several have not yet done so.
- ☐ The U.N. Fish Stock Agreement is ratified by some countries while others are yet to do so.

Several international and Regional organizations have been established to promote cooperation in the management of straddling and migratory stocks. Chief among them are the following:

- ☐ **The Inter-American Tropical Tuna Commission (IATTC)**, which was established, to study the yield from tuna fishing vessels within the geographical area and recommend management measures where necessary.
- ☐ **The International Commission for the Conservation of Atlantic Tuna (ICCAT)** that has responsibility for the scientific study and management of tuna, and billfish in the Atlantic Ocean has no resource capability. Member States have to do their own research to meet and arrive at consensus on allocation.
- ☐ **International Whaling Commission (IWC)** was established by the International Convention for the Regulation of whaling over 55 years ago. It applies to factory ships, land stations and whale catchers. There is no universal agreement among the

contracting governments on the definition of the species covered. It is however perceived among CARICOM Members States that the Commission is not empowered to recommend management measures for those species of small cetaceans. The purpose of the Convention is to provide for the proper conservation of whale stocks to enhance orderly development of the Whaling industry. The Commission's duty is to keep under review and revise as necessary the measures handed down in the schedule of the Convention. These include complete protection of certain species, prescribe open and closed seasons and size of whales to be caught. Antigua-Barbuda and Dominica, St. Kitts Nevis, St. Lucia and St. Vincent and the Grenadines are members.

- ❑ **The Latin America Organization for Fishery Development (OLDEPESCA)** was established by the Constitutional Agreement on the Latin America Organization for Fishery Development, approximately 19 years ago. The objective of the Agreement is to encourage the correct use and protection of fisheries resources within the maritime zones of each State. The Agreement covers all living marine resources. Although no CARICOM country is a party to the Agreement, several have participated in their meetings from the point of view that this is a regional organization concerned with Caribbean coastal States and the development and management of Caribbean fisheries resources. It is advisable that the CRFM formalizes a relationship with OLDEPESCA.
- ❑ **The Convention for the Conservation of Southern Blue Fish Tuna (CCSBT)** was established to decide upon total allowable catches (TAC) using criteria such relevant scientific evidence, sustainable development of fisheries, geographical interest and contribution to conservation.
- ❑ **The North West Atlantic Fisheries Organization (NAFO)** promotes adherence to total allowable catch based on scientific advice as the main conservation measure.
- ❑ **The South Pacific Forum Fisheries Agency (FFA)** which is a regional organization deals with international concerns of its members with special emphasis on cooperation in policy harmonization, distant water fishing, surveillance and enforcement, on shore fish processing, marketing and accessing the 200 mile zone of other parties.
- ❑ **FAO/Western Atlantic Fishery Commission (FAO/WECAFE)** was established by Resolution 4/61 of the FAO 28 years ago. Its jurisdiction spans parts of South America, Central America and the Caribbean. All CARICOM countries are members. The main objectives of the Commission are to: facilitate the coordination of research, encourage education and training, assist Member Governments in establishing rational policies and promote the rational management of resources that are of interest for two or more countries. The Commission does not have any regulatory power and can only perform advisory functions.



- ❑ **The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)** was agreed 26 years ago. Its aim is to ensure that international trade in certain specimen of wild animals and plants does not threaten their survival. There are now 150 States that are members. These include CARICOM /CARIFORUM countries except Haiti and the Turks and Caicos Islands. It presently, accords varying degrees of protection to more than 30,000 species of animals and plants. CITES is an international agreement to which States adhere to voluntary. Although CITES is legally binding on all the parties i.e. they have to implement the convention, it does not take the place of national laws. The convention bears significant relevance to development of the fisheries sector in the region. Through the provisions of CITES exports of fishers products and by-products can be severely restricted or prohibited. Currently the queen conch is included on the endangered list. This requires the establishment of an export quota and CITES permit for every shipment of conch. In addition, some species of marine turtles such as hawks bill turtle that are harvested for the domestic market in some OECS countries are included on CITES' list of endangered species (appendix II) which prohibits international trading in them. It is critical that the concerns and interests of the CRFM Members States are articulated and incorporated into the deliberation and decisions agreed upon by the parties to the Convention. CRFM should therefore establish its status as a regional institution with CITES.

Only a few of the above organizations-ICCAT and FAO/WECAFE, OLDEPESCA, CITES and FFA are potentially useful for CARICOM. The first four cited can impact directly on the goals and objectives of the CRFM. As a consequence, active participation in and interaction with these agencies is strongly recommended. The FFA, being an organization comprising primarily developing countries, many of which are themselves small island states, can potentially provide lessons from the experiences of that grouping, which might be useful study for the CRFM. The others are less appealing to CARICOM fisheries mainly for four (4) reasons.

- ❑ They are all promoting conservation while most CARICOM Member States are not at the stage where they are making major industrial investment in catching straddling and migrating stocks.
- ❑ They are all promoting quotas or total allowable catches mostly based on scientific evidence and other criteria. CARICOM Member States do not have the capabilities to provide the necessary scientific evidence. Besides, fishing continues to be an alternative opportunity for the high unemployed and under employed in the Region. It may therefore not be politically prudent to be actively engaged in cooperative agreements, which restrict entry into the industry or impose catch limits.
- ❑ CARICOM countries do not have the requisite capabilities to monitor fishing in their EEZs to effectively participate in quota oriented cooperation agreements. Further, most of these organizations do not operate technical secretariats to provide technical support to their members.
- ❑ It is not politically prudent for CARICOM to be a part of IWC.

Table 3-10 which follows summarizes the profile of each organization and implications for CARICOM Fisheries.

### **3.8 Major Common Challenges**

The CARICOM fishing industry faces some formidable challenges. The thirteen top ranking ones as perceived by Member States revolve around research for decision making, globalization, regional capability for managing fisheries, managing the flying fish resources, human resource development, strengthening of fishers/other operators' organizations, promotion of the expansion of pelagic fishery to reducing exploitation of near shore fishery, development of the marine fishery sub-sector, development of aquaculture, facilitation of diversification and sustainable production, introducing mechanisms to reduce risks in the industry, and effective management of disputes.

The challenges in each of the above areas are highlighted below and further detailed in Table 3-11.

- ❑ **The Research related challenges** are: enhancing the databases and information systems, integrating data into fisheries management plans, strengthening and regionalizing existing research institutions and collaborating in the management of shared resources.
- ❑ **Globalization challenges** relate to conforming to agreements, standards capabilities, meeting HACCP requirements and increasing the adaptation of post harvest technologies
- ❑ **Challenges relating to meeting regional capability for managing fisheries resources** span: Planning and regulation, implementing mechanisms for exploitation and management of shared resources, monitoring control and surveillance and establishing a framework for sports fishing.
- ❑ **The challenge of managing the flying fish and pelagic fish-groupers, lobsters and conch and ground fish resources** comprise: securing access to reliable supply, data management, monitoring illegal fishing and application of post harvest technologies.
- ❑ **The human development related challenges** are training of fishers, enabling existing relevant institutions and giving them regional status, upgrading skills in research and regulations and operating centers of excellence.
- ❑ **Fishers and "other operators" related organizations** span the enablement of institutional strengthening to fishing cooperatives; competency based licencing, vessel and technology management and working partnerships between government and fishers organizations.

- ❑ **The promotion of community participation faces the challenges** of educating and mobilizing consumers, mobilizing the community to protect marine resources, positioning the importance of the sector among community leaders and policy makers, and rationalizing and enhancing the effectiveness of public organizations serving the industry.
- ❑ **Expansion into pelagic fishing faces the challenges** of promoting the use of FADS, training fishers, developing a regional management plan for it, improving the data management for enhancing sound decision making.
- ❑ **Sustainable development of the marine fisheries** sub-sector entails the capacity to conduct applied research, the development of regulations and legislation to reinforce sustainable management, development of harmonized investment promotion policies and implementing effective investment promotion programs.
- ❑ **The development of aquaculture** faces the challenges of developing an appropriate policy framework, developing and implementing cost-effective research and extension programs, developing and promoting environmental standards and establishing guidelines for developing the sub-sector.
- ❑ **Facilitation of diversification and sustainable production** involves: building capacity for data collection, promoting cooperation among interest groups, increasing the use of discards and improving the effectiveness of the protection of critical habitats.
- ❑ **Introducing mechanisms** to reduce risks or improve the well being of the players in the industry entail several key challenges – developing harmonized insurance, developing harmonized frameworks for a revolving loan fund, providing technical assistance training for fishing boat inspectors, developing and promoting vessel construction standards, promoting the use of safety equipment, categorizing the impact of hurricanes on the sector, and developing hurricane preparedness plans.
- ❑ **Development and Promotion of mechanisms for resolution of conflicts affecting the fisheries sector.** This faces these challenges – characterizing conflicts, and developing and promoting conflict avoidance and resolution mechanisms.

Table 3-11, which follows provides details on these challenges and section -4 sets out the strategies for implementing them.

**TABLE 3-9: ASSESSMENT OF THE PROGRESS ON THE CODE OF CONDUCT FOR RESPONSIBLE FISHING**

ELEMENTS OF REQUIRED PERFORMANCE	PRESENT SITUATION
1. Fisheries Management	<ul style="list-style-type: none"> <li>❑ Fishers' management plans are generally available with focus on marine capture fisheries</li> <li>❑ Closed and open fishing seasons are applied as useful measures.</li> </ul>
2. Fishing Operations	<ul style="list-style-type: none"> <li>❑ Licencing is widely used.</li> <li>❑ Vessel registration is used.</li> <li>❑ Landing statistics are widely used.</li> <li>❑ The vessel monitoring system is minimally used.</li> <li>❑ Minimal measures have been taken to limit by-catch or discard. There are however regulations covering mesh-sizes, and fishing methods.</li> </ul>
3. Aquaculture Development	<ul style="list-style-type: none"> <li>❑ Very negligible framework for aquaculture development.</li> <li>❑ There are generally some procedures for undertaking EIAs.</li> <li>❑ The practice of conducting EIA's before farms are established is minimal.</li> <li>❑ There is only minimal routine monitoring of aquaculture operations.</li> <li>❑ There are some limited measures to promote responsible aquaculture practices. These include duty free concession in inputs in some Member States.</li> </ul>
4. Integration of Fishers Into Coastal Area Management	<ul style="list-style-type: none"> <li>❑ Some Member States have legal framework.</li> <li>❑ There are conflicts between fishers and others, especially those in recreational activities.</li> <li>❑ There are negligible mechanisms established to deal with conflicts.</li> </ul>
5. Post-harvest Practices and Trade	<ul style="list-style-type: none"> <li>❑ Only a few Member States have food safety and quality assurance systems in place.</li> <li>❑ Training has been provided in HACCP techniques.</li> <li>❑ Negligible measures are in place to reduce post-harvest losses or waste.</li> <li>❑ Negligible measures are in place to promote the use of by-catch.</li> <li>❑ Only some Member States have measures in place to avoid any processing or trade of illegally harvested fisheries resources. These measure include legislation on fish imports and surveillance of the foreign fishing vessels.</li> </ul>
6. Fisheries Research	<ul style="list-style-type: none"> <li>❑ Statistics on catches and fishing efforts are generally collected.</li> <li>❑ There is general lack of work in fish stock assessment, fishery statistics and assessment of socio-economic issues.</li> <li>❑ There is general lack of qualified personnel to undertake statistical analysis.</li> <li>❑ Fisheries management plans are largely based on catch and effort data.</li> </ul>

**TABLE 3-9 CONT'D:      ASSESSMENT OF THE PROGRESS ON THE CODE OF CONDUCT FOR RESPONSIBLE FISHING**

<b>ELEMENTS OF REQUIRED PERFORMANCE</b>	<b>PRESENT SITUATION</b>
	<input type="checkbox"/> There is minimal monitoring of the status of the marine environment, by-catch and discards.
7. International Plan of Action (IPOA). Sharks, Fishery Capacity, Seabirds	<input type="checkbox"/> No national assessment of fishing capacity has been compiled. <input type="checkbox"/> No national assessment of shark stocks has been undertaken.
8. Compliance Agreement	<input type="checkbox"/> The process of ratification is at various stages. Some were completed in late 2000, and others are likely to be completed in 2001.
9. U.N. Fish Stocks Agreement	<input type="checkbox"/> The process of ratification is at various stages. Some are completed and some are yet to be initiated.
10. Development of capacities for management, control and surveillance.	<input type="checkbox"/> Inadequate statistical catch and effort system. <input type="checkbox"/> Inadequate sea watch programs for fishers. <input type="checkbox"/> Inadequate budgetary support for coast guard patrols. <input type="checkbox"/> Inadequate provisions for public education and legislation.

SOURCE: FAO TECHNICAL PAPER (COFI/2001/3) OF THE COMMITTEE ON FISHERIES. TWENTY- FOURTH SESSION HELD IN ROME, ITALY 26 FEBRUARY – 2 MARCH 2001,

**TABLE 3-10: INTERNATIONAL AND REGIONAL ORGANIZATIONS ON STRADDLING AND MIGRATORY STOCKS**

<i>ORGANIZATION</i>	<i>DESCRIPTION</i>	<b>IMPLICATIONS OR LESSONS FOR CARICOM FISHERIES</b>
1. Inter-American Tropical Tuna Commission (IATTC)	The function of IATTC is to study tuna, the yield from tuna fishing vessels within the geographical area, and if necessary recommend management measures.	<ul style="list-style-type: none"> <li>❑ No real implications</li> <li>❑ This agreement is mostly for the benefit of countries with major investments in high technology vessels.</li> </ul>
2. International Commission for the Conservation of Atlantic Tuna (ICCAT)	It has responsibility for scientific study and management of tuna and billfish in the Atlantic ocean. ICCAT has no monitoring and surveillance capabilities. Member States do their own research and they meet and arrive at consensus on allocations.	<ul style="list-style-type: none"> <li>❑ ICCAT's inability to enforce management measures makes it ineffective especially in protecting smaller member states.</li> <li>❑ CARICOM States cannot afford offshore industrial fisheries and therefore may not benefit in the short run.</li> <li>❑ Restrictive entries for high unemployment countries such as those in CARICOM would be suicidal.</li> </ul>
3. The Convention for the Conservation of Southern Bluefish Tuna (CCSBT)	<p>The CCSBT decides upon total allowable catches (TAC) and its allocation among the path using a set of criteria:</p> <ul style="list-style-type: none"> <li>❑ Relevant scientific evidence.</li> <li>❑ Sustainable development of fisheries.</li> <li>❑ The Party is a geographical interest.</li> <li>❑ Contribution to conservation.</li> </ul>	<ul style="list-style-type: none"> <li>❑ It is very costly to participate effectively especially in terms of meeting the set criteria.</li> <li>❑ CARICOM countries cannot commit to quota due to the fact that an increasing number of their fishers use the sea because they can't find employment.</li> </ul>
4. North West Atlantic Fisheries Organization (NAFO)	It adapts total allowable catch (TAC) based on scientific advice as the main conservation measure.	<ul style="list-style-type: none"> <li>❑ Countries achieving their quotas in their zone proceed to fish in the NAFO zone.</li> <li>❑ CARICOM countries are unable to monitor fishing in their zones.</li> </ul>
5. The Forum Fisheries Agencies of the South Pacific	This is a regional organization with a	<ul style="list-style-type: none"> <li>❑ The FFA regulated access with U.S. and</li> </ul>
<p><b>TABLE 3-10 CONT'D: INTERNATIONAL AND REGIONAL ORGANIZATIONS ON STRADDLING AND MIGRATORY STOCKS</b></p> <ul style="list-style-type: none"> <li>❑ Policy harmonization.</li> <li>❑ Cooperation regarding distant water fishing nations.</li> <li>❑ Cooperation in surveillance and</li> </ul>		<p>own as the South Pacific tuna treaty was concluded.</p> <p>– It earned the region US\$ 67 million.</p>

<i>ORGANIZATION</i>	<i>DESCRIPTION</i>	<b>IMPLICATIONS OR LESSONS FOR CARICOM FISHERIES</b>
	<p>enforcement.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Cooperation re: onshore fish processing.</li> <li><input type="checkbox"/> Cooperation in marketing.</li> <li><input type="checkbox"/> Cooperation in access to the 200-mile zone of other parties.</li> </ul>	<ul style="list-style-type: none"> <li>– It earned an average of \$52,000 per vessel for license fee.</li> <li><input type="checkbox"/> This agreement is not really beneficial to CARICOM.</li> </ul>
6. International Whaling Commission (IWC)	<ul style="list-style-type: none"> <li><input type="checkbox"/> Promotion of conservation of whales through quotas, seasonal restriction etc.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> CARICOM States, which are members, are viewed as pro whaling countries. This is a position in opposition to their major trading partners U.K and USA who are not members.</li> <li><input type="checkbox"/> The CARICOM countries except St. Vincent and the Grenadines and Dominica are not likely to benefit.</li> </ul>
7. The Latin America organization for fishery Development (OLDEPESCA)	<ul style="list-style-type: none"> <li><input type="checkbox"/> Covers all living marine resources.</li> <li><input type="checkbox"/> Promotion of the correct use and protection of fishery resources within the maritime jurisdiction zones of each State.</li> <li><input type="checkbox"/> Produces research and development of interventions in fisheries resources technology, trade, environment and training.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> CRFM should establish a formal relationship.</li> </ul>
8. FAO/Western Atlantic Fishery Commission (FAO/WECAFC)	<ul style="list-style-type: none"> <li><input type="checkbox"/> Research to support policy design.</li> <li><input type="checkbox"/> Research for education and training.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> WECAFC can facilitate institutional capacity development.</li> <li><input type="checkbox"/></li> </ul>
9. The convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).	<ul style="list-style-type: none"> <li><input type="checkbox"/> It restricts and prohibits trading in endangered species.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> It affects the conch trade – It is subject to quota and permit for each shipment.</li> <li><input type="checkbox"/> It prohibits trade in some marine turtles produced in the OECS.</li> <li><input type="checkbox"/> CRFM should establish regional representational status with CITES.</li> </ul>

**Table 3-11: Major Common Challenges to be Addressed in the CARICOM Community Fishing Sector.**

<i><b>KEY CHALLENGES</b></i>				
<b>AREAS</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
1. Research	Enhancing the databases and information systems.	Integrating data into fisheries management plans.	Strengthening and regionalizing existing research facilities in the region.	Collaborating on the management of stocks of migratory species.
2. Globalization	Establishing systems and legislation in conformity with those signed by the Community.	Developing, disseminating and training in the guidelines for quality/standards and certification programs.	Securing technical assistance to become certified for HACCP, ISO 9000 and other requirements.	Promoting research and investment in post harvest technology.
3. Regional capability for managing fisheries resources.	Making fisheries plans and regulations.	Defining and implementing mechanisms for the exploitation and management of shared resources.	Improving fisheries monitoring, control and surveillance and enforcement.	Establishing and operating a management framework for sports fishing.
4. Managing the fish resources including flying fish.	Securing access to areas of good supply.	Integrating and improving the collection of biological data and catch/effort data.	Increasing surveillance to control illegal foreign fishing.	Improving post harvest technology to reduce losses.



**Table 3-11(Cont'd): Major Common Challenges to be Addressed in the CARICOM Community Fishing Sector**

<i><b>KEY CHALLENGES</b></i>				
<b>AREAS</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
5. Human resource development	Training fishers and fisheries officers.	Re-organizing and developing existing marine institutions into regional training providers.	On-going upgrading of skills in research, policy and regulations.	Developing Centers of Excellence in fisheries and facilitating training.
6. Strengthening of fishers other operators' organizations.	Developing and implementing an institutional strengthening program for fishing cooperatives.	Introducing a licencing system tied to training and competency.	Developing and implementing a training program in vessel and technology management.	Establishing partnerships between government and fishers' organizations.
7. Promotion of community participation and public support.	Developing and implementing consumer education about fish quality and standards.	Developing and implementing awareness in fishing communities about appropriate utilization and management of marine resources.	Increasing public awareness among community leaders and policy makers about the socio-economic importance of the fishing industry.	Rationalizing the number of governmental organizations serving the industry and simplifying their bureaucracies.
8. Promotion of the expansion of pelagic fishery to reduce exploitation of near shore fishery.	Promoting the use of FADS and artificial reefs.	Facilitating training in pelagic fishing methods.	Developing a Regional Management Plan.	Integrating and improving the collection of biological and catch/effort data.

**Table 3-11(Cont'd): Major Common Challenges to be Addressed in the CARICOM Community Fishing Sector**

<b><i>KEY CHALLENGES</i></b>				
<b>AREAS</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
9. Development of the marine fisheries sub-sector.	Conducting applied research	Developing legislation and regulations for management and sustainable development.	Developing harmonized policies for private investment.	Developing and implementing an investment promotion program.
10. Development of aquaculture.	Developing policy framework.	Developing and implementing research and extension programs.	Developing environmental standards for aquaculture.	Establishing guidelines for developing the sector.
11 Facilitation of diversification and sustainable production.	Improving capabilities for collection of data.	Decreasing resource use conflicts and destructive fishing practices.	Encouraging the use of discards.	Improving ecological monitoring of coastal habitat.
12. Introducing mechanisms to reduce risks and improve access to credit for small scale fishers	Developing mechanisms for instituting alternative insurance plans.	Establishing and operationalizing advisory groups on insurance.	Developing and implementing mechanisms to reduce the impact of natural disaster on the sector.	Developing framework for an affordable credit scheme and mobilizing financiers as well as national interests.
13. Development and promotion of mechanisms for resolution of conflicts affecting the fisheries sector.	Identifying and characterizing the conflicts	Developing conflict avoidance and resolution mechanisms.	Developing and promoting programs to avoid and resolve conflicts.	

### **3.9 Some Common Policies and Strategies Among Member States**

Member States have identified, and have been pursuing a range of common policy objectives in the fisheries sector, which will have to be a major consideration in the design and implementation of the CARICOM Regional Mechanism in Fisheries (CRFM). The common policy objectives including national, regional and sub-regional ones are:

- ❑ The operations in fisheries as well as interventions in the sector should generate optimal economic returns.
- ❑ The sector should continue to be a major source of employment especially for remote rural communities.
- ❑ The industry must be carefully managed in order to achieve sustainable yields.
- ❑ Diversification of fishing and fish products should be promoted.
- ❑ National institutions in the public sector, the private fishing organizations and related community based NGOs will have to be enabled to effectively perform as partners or agents of co-management.
- ❑ There should be reinforcements for ensuring compliance with conservation and management practices.
- ❑ The socio-economic status of fishers should be enhanced.
- ❑ Aquaculture should be pursued, selectively, as a means of diversifying the production of fish and other aquatic animals as well as a way of enhancing the sustainability of the marine stocks

The strategies being used to achieve the above policy objectives for the fisheries sector entail mainly the following:

- ❑ Introduction of the fisheries sector in the national industrial policy promotion programs.
- ❑ Introduction of investment incentive policies to promote private investment in the sector.
- ❑ Integration of fisheries issues with other sectors related to the coastal zone.
- ❑ Expansion of capability at the National fisheries authorities for monitoring and surveillance.
- ❑ Promotion of government-stakeholders co-management initiatives.
- ❑ Design and implementation of policies together with the provision of technical assistance in support of aquaculture.

### ***3.10 Expected Objectives for the CRFM***

Member States believe that the CRFM objectives for operating and serving the Region should include the following, among others.

- ❑ Support with maintenance of the population of species at levels that can yield optimal sustainability.
- ❑ Enhancement of the preservation of rare and fragile ecosystems.
- ❑ Ensuring the protection and restoration of endangered marine and fresh water species.
- ❑ Establishment of mechanisms to accommodate and improve the status of artisanal fishers.
- ❑ Promotion and facilitation of applied fisheries research.
- ❑ Promotion of the integration of the industry into the policy and decision-making process regarding fisheries and coastal zone management.
- ❑ Negotiation of cooperation and collaborative arrangements with strategic countries in the management of shared and highly migratory fish stocks.
- ❑ Promotion of technical cooperation on a bilateral basis between Member States especially in meeting export standards and the development of aquaculture.

## **4. MAJOR CHALLENGES AND REQUIRED STRATEGIES**

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This section builds on the major common challenges previously identified in section 3.8. The thirteen challenges and respective strategies to address them elaborated below in sections 4.1 to 4.13:

### ***4.1 Building Research and Development Capabilities***

The required research and development must seek to build capabilities in four (4) areas: fisheries data bases and information system, integration of data into fisheries management plans, the networking of research facilities and collaborating on the management of shared resources (including straddling and highly migratory stocks).

- ❑ The data bases and information systems should be maintained nationally as integral inputs into sustainable development and management plans. Technical leadership to this aspect of capacity building can be provided through agencies such as the Institute of Marine Affairs and the various universities.
- ❑ The use of a comprehensive and up to date the fisheries database will be required for preparing fisheries development and management plans. Each Member State should be facilitated with the development and upgrading of its fisheries plans using the database as a planning and decision making tool. The national fisheries authorities must spearhead these initiatives with facilitatory support from the CRFM.
- ❑ Research facilities in the region should be strengthened and linked into a vibrant network to enhance the regional research and development capacities. Such facilities include: the Institute of Marine Affairs, the University of Guyana, the University of the West Indies, The University of Suriname and selected national fisheries organizations and government's fisheries divisions. An advisory group could be established to spearhead the development of the specific programs. A Working Group of the CFRM would be ideal for this role.
- ❑ The Region should immediately initiate cooperation in the management of straddling and highly migratory species. The CRFM should facilitate the process through the development and implementation of memoranda of understanding. The targeted countries should include: The CARICOM Member States, the Dominican Republic, Haiti, Cuba and the dependent territories in the region.

### ***4.2 Positioning Globally***

Sound global positioning will require the region to have legislation and regulations governing fisheries, in accordance with global ones to which the Community is committed. These revolve around: food safety and agricultural health standards and procedures, industry personnel trained and qualified in quality assurance practices and environmental standards as well as certified HACCP status and post harvest management competencies and practices.

- ❑ The legislature and regulatory systems should be harmonized within the Region as far as practicable. The Region should use the FAO Code of Conduct for responsible fishing as a guide.
- ❑ An extensive training program in “quality assurance practices” responsible fishing and environmental standards should be developed and implemented. The FAO should be a good strategic partner since it has been promoting such standards. This could be carried out in collaboration with national and regional institutions such as: the Institute of Marine Affairs, University of the West Indies, University of Guyana, the University of Technology, (Jamaica), The University of Suriname, Caribbean Maritime Institute and the Caribbean Fisheries Training and Development Institute (Trinidad and Tobago).
- ❑ Since satisfying international food safety and agricultural health standards is mandatory for participating in international trade in seafood products it would be necessary for Member States, among other things, to have capabilities for fulfilling HACCP procedures and securing HACCP certification. The CRFM should therefore secure technical assistance to facilitate national institutions to become certifying bodies.
- ❑ Post harvest technologies will have to be promoted in order to enhance quality assurance as well as yield and the sustainability of fisheries. The CRFM should focus on securing technical assistance for applied research and introducing harmonized incentives schemes to promote investment in post harvest technology.

### ***4.3 Building Regional Capability for Managing Resources***

The region needs to build its capabilities in planning and regulations, exploitation of shared resources, monitoring, control, surveillance and enforcement and developing and implementing policy framework for sports fishing.

- ❑ In the above regard the development of fisheries policies, plans and regulations should be harmonized, as far as possible. The CRFM should secure technical assistance to enhance the capabilities of national fisheries divisions to carry out these tasks. The capability should also be expanded to include the development of sector policies using sound socio-economic analytical frameworks.
- ❑ The region needs to develop and coordinate partnerships involving the OECS, other Member CARICOM countries and other CARIFORUM countries to undertake joint research of specific projects for decision making through the CRFM.
- ❑ The capability for monitoring, control and surveillance and enforcement needs to be improved. This could be achieved through the enhancement of national capabilities in the development and operation of systems, legislation, technology

and training to analyze catch and effort data, and carrying out effective public education to increase public knowledge of various practices requirement.

- ❑ A management framework for the sports fisheries needs to be developed and implemented. This required initiative should be integrated into a fisheries/coastal zone planning and management system. The CRFM could secure funding for technical assistance to establish a pilot project (s) and then use it to promote replication in other Member States.

#### **4.4 Managing Flying Fish Resources**

A special intervention is required for a few selected countries such as include Trinidad and Tobago, Barbados, St. Kitts – Nevis and St. Lucia where flying fish is of major importance. The intervention should deliver the distinctive outputs: agreements for accessing flying fish, data base for biological and catch/effort information surveillance capability to control illegal fishing and introduction of post harvest technology to reduce loss and increase yield.

- ❑ Negotiating fishing access agreements could be facilitated through the spearheaded by CRFM with technical support from CARICOM Secretariat and the Regional Negotiating Machinery. The agreement could be on a bi-lateral and sub-regional basis.
- ❑ The national fisheries institutions in Trinidad and Tobago, St. Lucia, Barbados and St. Kitts- Nevis (Nevis) could be strengthened to collect and analyze biological and catch/effort data for use in the planning and decision making pertaining to flying fish.
- ❑ The national fisheries and allied institutions in Trinidad and Tobago, Barbados and St. Kitts-Nevis, St. Vincent and the Grenadines, and St. Lucia could be strengthened to carry out surveillance to monitor illegal fishing.
- ❑ An extension service support program could be developed and implemented in the concerned countries to promote improved post harvest practices and investment in the relevant associated technology.

#### **4.5 Enhancing Human Resource Development**

The challenge is to building knowledge in the industry as a main driver behind objectives such as responsible fishing, sound resource management, the upgrading of skills in research, policy and regulations and the operating of centers of excellence for training.

- ❑ The training of fishers and fishing officers could be carried out through institutions such as: the Caribbean Maritime Institute, the Caribbean Fisheries Development Training Institute and other competent institutions, as well as through in-country workshops. The training should focus on: training of trainers, training of personnel in fisher folk organizations, and fishers. Training programs will be

viable and deemed to be relevant if they become requirements for licencing and if the participants are awarded certification.

- ❑ Required programs should be initiated for re-organizing and enabling the competencies of the network of marine training institutions and programs and departments, as necessary. After they have been re-organized and strengthened they could get regional status to provide training services in fisheries. The targeted institutions should include the Institute of Marine Affairs, (Trinidad and Tobago) the Caribbean Fisheries Training and Development Institute, (Trinidad and Tobago) the University of Guyana (Guyana), St. Georges University (Grenada), the University of Technology (Jamaica), University of the West Indies (Barbados), the University of Suriname and Caribbean Maritime Institute (Jamaica).
- ❑ The three campuses of the University of the West Indies and the Institute of Marine Affairs should also be strengthened and their competencies upgraded in the areas of research, policy and regulations.
- ❑ A center (s) of excellence should be established as part of the human resource development program to promote and enhance competencies in the fishing industry.

#### **4.6 Strengthening Fishers Organizations**

The strengthening of fisher folk organizations should address the strengthening of fisher cooperatives, the introduction of licensing systems allied to training and competency, training programs for vessel operators, and the establishment of functional partnerships with the relevant government organizations.

- ❑ Institutional strengthening of fisher cooperatives could entail organizational restructuring, training in leadership and institutional management.
- ❑ The licensing system could be revised for implementation as a mechanism to reinforce compliance with responsible fishing standards. Fishers should be required to have certificate of competency to be licensed. The competency could span: responsible fishing methods, basic knowledge of relevant environmental practices, and basic public health and safety standards and practices.
- ❑ Development and implementation of training programs for vessel operators and owners should be acquired as pre-requisites for licensing of their boats. They should be trained in basic post harvest practices, environmental practices and fishing technology.
- ❑ The establishment of partnerships between governments and fishers organizations should be formalized. The partnerships should focus on joint responsibilities for shaping policies, and regulations, mobilizing the fishing community, promotion of



responsible fishing, fishers' welfare programs and to address all other issues affecting the sector.

#### **4.7 Promoting Community Participation and Public Support**

Community participation and public support will be required to: ensure that there is sound understanding of the socio – economic importance of the fishing industry, enlighten consumer groups about the required fishing standards and improve public attitude to fishers. This program should entail institutional strengthening of fishing community advocacy groups, community awareness of appropriate utilization and management of marine resources, public and leadership awareness of the importance of the fishing industry and rationalization of the bureaucratic organizations serving it.

- ❑ Development and implementation of an institutional strengthening program for fishing community advocacy organizations including environmental NGOs, community development NGOs, and consumer advocacy groups. The program should focus on mechanisms for cooperation, training, systems of governance and establishment of partnerships.
- ❑ Development and implementation of a public awareness program on appropriate utilization and management of marine resources will entail:
  - Public awareness of the importance of, and risks associated with fishers.
  - Development and implementation of, public education program on marine resources.
  - Implementation of an awareness program about globalization and implications for the environmental and quality assurance standards.
- ❑ Rationalizing the number of governmental organizations serving the fishing industry. This initiative should entail an operations review of the relevant organizations, review of policies and administrative practices and development and implementation of efficient facilitation programs.

## **Promoting Expansion of Pelagic Fishery and Other Underutilized and Unutilized Resources.**

This program should entail four (4) interventions: promotion of the use of FADS, training in pelagic fishing methods, development of a regional management plan, and integration of improvement of the collection of biological and catch/effort data.

- ❑ Promotion of the use of FADS should entail: development of exploration programs, development and introduction of incentives to mobilize investment in FADS and development and promotional of operation profiles to demonstrate the benefits of FADS.
- ❑ Training in pelagic fishing methods should target all categories of fishers. The intervention should include development and institutionalization of the training programs securing co-financing for the participating fishers and establishing and strengthening designated institutions.
- ❑ The development of a regional management plan for pelagic fishing should be carried out and subsequently used to guide national plans. The plans should also include policy framework to promote private investment in pelagic fishing.
- ❑ The integration and improvement of the collection and dissemination of biological and catch/effort data will be necessary to support sound and timely decision making in the pelagic fishing sub-sector.

### **4.8 Developing a Marine Fisheries Subsector**

Development of the marine sub-sector is necessary to diversify the fishing industry and reduce the pressure on traditional fisheries resources. The program should entail: undertaking applied research to determine potentially viable underutilized species, development of legislation and regulation for sustainable management, development of harmonized policies to encourage private investment and development and implementation of investment promotion programs.

- ❑ An applied research project should be undertaken to provide a short list of under utilized species. The study should also develop technical specifications and profiles about the species and critical cultural practices for production as well as proposal outlines for their optimal utilization.
- ❑ The development of legislation and regulations for management and sustainability of the sub-sector should be aimed at the creation of a sound user-friendly regulatory environment. The policies and regulatory framework should be harmonized across the region where practicable.

- ❑ The development of harmonized policies for private investment will be very crucial. The policy support mechanisms should include technical support services, fiscal incentives and research and development support.
- ❑ Development and implementation of an investment promotion program will be necessary to accelerate commercialization of the sub-sector and socio-economic returns to the investment in research and development and policy support mechanisms. The investment promotion program which should be coordinated by the national investment promotion organizations should entail the promotion of the opportunities and facilitation of interested investors.

#### **4.9 Developing Aquaculture**

Attention to this sub-sector should encompass the creation of a policy framework to promote private sector investment together with public sector support programs in areas such as extension programs, the enforcement of environmental standards and the establishment of guidelines for regulating the sub-sector.

- ❑ The policy framework should be designed to encourage private investment and export oriented production. It should entail fiscal incentives, technical support services, access to land, credit and human skill development.
- ❑ The research and extension programs could be carried out by regional and national institutions with significant financial support from the private sector and should produce technical packages to support investors, technical feasibility studies and technical analysis of species. Separately the public sector should support research directed towards the utilization of aquaculture techniques to enhance the sustainability of selected marine species.
- ❑ The development of environmental standards should span identification of global standards and compliance requirements, development and ratification of regional standards and promotion of the standards among operators of enterprises in aquaculture.
- ❑ The guidelines for regulating the sub-sector should be harmonized with international standards. Consensus building sessions, as well as international and Member States precedents could be used.

#### **4.10 Facilitating Diversification**

The recommended mechanisms entail building capabilities in information gathering and dissemination, decreasing resource use conflicts between interest groups and reducing destructive fishing practices, promoting the use of discards, and improving the ecological monitoring of coastal habitat.

- ❑ The capability to collect process and disseminate information including socio-economic data for sound policy decisions should be developed at the national fisheries authorities.
- ❑ Decreasing resources conflict between interest groups and reducing destructive fishing practices can be achieved through interventions to:
  - Integrate fisheries into coastal zone planning and management.
  - Establishment of functional working partnerships between strategic interest groups – government sports fishers, economic fishers, water, sports operators and hoteliers etc.
- ❑ Encouraging the use of discards could be achieved through inventions which focus on:
  - Conducting research on potential opportunities and disseminating the findings at stakeholders' workshops, with a plan of action.
  - Development of promotional literature with opportunities for use of discards.
  - Creation of special incentives to encourage productivity/production activities with discards.
- ❑ The improvement of ecological monitoring of coastal habitat can be realized through:
  - Improved legislation for coastal zone protection.
  - Partnerships with national coastal zone management authorities on marine space uses and habitat degradation.

### **4.11 Reducing Risks**

Small scale fishers are exposed to unusual levels of risks because of inadequate availability of affordable insurance, and personal and business exposures to natural disasters. This situation is influenced by the nature of the sea, lack of enforcement of safety regulations, ignorance among fishers, and complacency among them. Therefore a sub-program is necessary to:

- ❑ Develop proposals for a modified alternative risk insurance schemes.
- ❑ Develop and implement training programs on how to plan for, and manage disasters, seamanship, and survival and safety at sea.
- ❑ Establish safety legislation and guidelines for the monitoring and enforcement of same.

- ❑ Develop the necessary incentives schemes including duty concessions on safety gears.
- ❑ Research appropriate and affordable technology to promote safe practices and make it available to fishers.
- ❑ Promote awareness and practices in safety standards.
- ❑ Improve marine meteorological information for fishing areas similarly to the parish reports.

In addition, fisher folk do not have adequate personal funds to invest in improved fishing practices that could improve their compliance with mandatory environmental standards, yields, and general efficiencies. A sub-program is therefore necessary to develop the framework for a credit scheme and mobilize interest among donor agencies.

#### **4.12 Prevention and Resolution of Conflicts**

From time to time there are conflicts between Member States in the coastal areas as well as between the various users of the coastal zone in a state. All these conflicts affect the sustainable livelihoods of the fisher folk. Therefore a program is necessary to:

- ❑ Identify and characterize conflict situations affecting fishers in in-shore and off-shore areas.
- ❑ Develop conflict avoidance and resolution mechanisms.
- ❑ Develop and promote programs to avoid and resolve conflicts.

Table 4-1 which follows provides the details on the critical challenges and the respective strategies to address them. These are further consolidated and developed into programs and interventions in section – 7.

Table 4-1: Challenges Required Strategies, Outputs and Inputs.

AREAS AND CHALLENGES	REQUIRED STRATEGIES	OUTPUTS	REQUIRED INPUTS
<b>1. Research, Information, and Organizational Structure</b>			
1.1 Enhancing the databases and information systems.	Selected regional national fisheries organizations to perform tasks on a projectized basis.	Reliable databases and information systems to support sustainable management.	<ul style="list-style-type: none"> <li>❑ Institutional designation.</li> <li>❑ Professional personnel.</li> <li>❑ Information technology.</li> <li>❑ Structured data collection</li> </ul>
1.2 Integrating data into fisheries management plans.	Each Member State should develop a management plan for the industry.	National fisheries Management Plans.	<ul style="list-style-type: none"> <li>❑ Planning professionals</li> <li>❑ Comprehensive periodic reports on fisheries' status</li> </ul>
1.3 Strengthening and networking of existing research facilities.	An advisory group should review and recommend institutions for participating in regional network to provide regional reports, while they remain nationally owned.	Regional research programs with investment from Member States.	<ul style="list-style-type: none"> <li>❑ An advisory committee.</li> <li>❑ Expertise to develop appropriate programs.</li> <li>❑ National level commitment to regional network</li> </ul>
1.4 Collaborating on the management of straddling and migratory species.	Member States, neighboring and other CARIFORUM countries should sign and implement memoranda of understanding.	Memoranda of Understanding and management plans..	<ul style="list-style-type: none"> <li>❑ Technical assistance to develop a model MOU.</li> <li>❑ Member States action plans and commitment to collaboration.</li> </ul>

**Table 4-1(Cont'd): Challenges - Required Strategies, Outputs and Inputs**

AREAS AND CHALLENGES	REQUIRED STRATEGIES	OUTPUTS	REQUIRED INPUTS
<b>2. Preparation for Globalization</b>			
2.1 Establishing a system and legislation in conformity to those required by international treaty.	<p>Use of model systems with technical assistance from FAO.</p> <p>Use of intra-CARICOM technical cooperation in cases where initiatives are already made.</p>	Systems, legislation and regulations compatible with the standards agreed in respect to international trading arrangements.	<p>❑ Technical assistance/funding.</p> <p>❑ National level commitment to effecting the required institutional changes.</p>
2.2 Developing, and disseminating information and training in the guidelines, procedures and practices for quality standards and certification programs.	Secure international technical assistance (CIDA, EU, FAO, Others) and intra-CARICOM Technical Cooperation to develop standards. Designate and strengthen selected institutions to be certifying bodies.	<p>❑ International standards implemented</p> <p>❑ Certification procedures.</p> <p>❑ Accredited certifying institutions.</p>	<p>❑ Technical assistance.</p> <p>❑ Technical cooperation agreements, including TCDC arrangements within the Community.</p>
2.3 Securing technical assistance to become certifying HACCP institutions.	Secure international technical assistance (CIDA, EU, FAO, Others) and intra CARICOM technical cooperation to develop standards. Designate and strengthen selected institutions to be certifying bodies.	<p>❑ International standards implemented</p> <p>❑ Certification procedures.</p> <p>❑ Accredited certifying institutions.</p>	<p>❑ Technical assistance.</p> <p>❑ Technical cooperation agreements, including TCDC arrangements within the Community.</p>
2.4 Promoting research and investment in post harvest technology.	Gather and disseminate information on post harvest technology. Develop appropriate incentives for investing in post harvest technology.	<p>❑ Information on applied research and post harvest technology.</p> <p>❑ Supportive policy for investing in technology.</p>	<p>❑ Professionals to carryout research and policies design.</p> <p>❑ National policy commitments.</p>

**Table 4-1 (Cont'd): Challenges - Required Strategies, Outputs and Inputs.**

<b>AREAS AND CHALLENGES</b>	<b>REQUIRED STRATEGIES</b>	<b>OUTPUTS</b>	<b>REQUIRED INPUTS</b>
<b>3. Regional Capability for Managing Fisheries Resources.</b>			
3.1 Developing fisheries policies, plans and regulations.	Increase awareness of FAO Code of Conduct for responsible fishing and related arrangements. Establish harmonized regulations through participation in CRFM. Develop implementable sub-sector policies and plans.	<input type="checkbox"/> Plans and regulations for management and sustainable development of respective fisheries. <input type="checkbox"/> Policies to promote sound resource management	<input type="checkbox"/> Technical assistance/ funding. <input type="checkbox"/> Enhanced co-management arrangements
3.2 Defining and implementing mechanisms for the exploitation and management of shared resources.	Promotion of support to the CRFM. Continue close cooperation with OECS, and other CARIFORUM countries. Strengthen collaboration with neighbouring states Conduct research for decision-making.	<input type="checkbox"/> An implementable regime for exploitation and management of shared resources.	<input type="checkbox"/> A regional advisory group to develop the mechanisms. <input type="checkbox"/> Standing arrangements for dialogue with relevant countries <input type="checkbox"/> Funding.
3.3 Improving fisheries monitoring, control and surveillance and enforcement.	Implement and analyze statistical catch and effort system. Networking with coastal merchant ship captains and associations as well as national coast guard services Increase public education.	<input type="checkbox"/> Voluntary compliance. <input type="checkbox"/> Improved management.	<input type="checkbox"/> Educational material <input type="checkbox"/> Funds for public education program. <input type="checkbox"/> Strong support from partner agencies
3.4 Establishing and operating a management framework for sports fishing.	Restrict sports fishers to designated areas. Integrate fishing into coastal zone planning and management.	<input type="checkbox"/> Integrated fishing/coastal zone planning and management systems.	<input type="checkbox"/> Pilot project for the development of guidelines for national use. <input type="checkbox"/> Funding of the pilot project <input type="checkbox"/> Survey among users. <input type="checkbox"/> Consultations with users.



**Table 4-1 (Cont'd): Challenges - Required Strategies, Outputs and Inputs**

AREAS AND CHALLENGES	REQUIRED STRATEGIES	OUTPUTS	REQUIRED INPUTS
<b>4. Manage Flying Fish Resources.</b>			
4.1 Developing fisheries plans and regulations.	Inter country collaboration on the management of the fishery. Negotiate agreements for access to the fishery.	❑ Regulated access to fishing areas.	❑ Comprehensive data bases on the fishery. ❑ Regional/sub regional agreements for access to the fishery.
4.2 Integrating and improving the collection of biological and catch/effort data.	Collaborate with fishers. Carry out stock assessments.	❑ Improved databases.	❑ Computing facilities. ❑ Stock assessment staff. ❑ Strong co-management structures
4.3 Increasing surveillance during the season to control illegal foreign fishing.	Increase coast guard service. Networking with coastal merchant ship captains and associations and national coast guard services	❑ Improved management of the resource	❑ Educational material. ❑ Funds for public education program. ❑ Strong support from partner agencies
4.4 Improving the post harvest technology to reduce losses.	Promote private investment in post harvest technology through incentives policies.	❑ Increased yield from the harvest.	❑ Expertise to identify suitable technology and investment promotion mechanism. ❑ Training on improved handling/processing techniques.

**Table 4-1 (Cont'd): Challenges - Required Strategies, Outputs and Inputs**

AREAS AND CHALLENGES	REQUIRED STRATEGIES	OUTPUTS	REQUIRED INPUTS
<b>5. Human Resource Development and Institutional Strengthening.</b>			
5.1 Training of Fishers and fishing officers.	Conduct training needs assessment. Train trainers to sustain program. Develop training programs with appropriate certification. Use existing institutions such as Caribbean Fisheries Training and Development Institute and Caribbean Maritime institute, as appropriate.	<input type="checkbox"/> Training programs targeted to identified needs. <input type="checkbox"/> Trained trainers <input type="checkbox"/> Trained fishers. <input type="checkbox"/> Trained fishing officers. <input type="checkbox"/> Responsible fishers.	<input type="checkbox"/> Survey to identify training needs. <input type="checkbox"/> Funding for effecting the training <input type="checkbox"/> Training facilities.
5.2 Re-organizing and developing existing marine institutions into regional training providers.	Concentrate on existing institutions such as: Caribbean Maritime Institute (Jamaica) and Caribbean Fisheries Training and Development Institute (Trinidad and Tobago) for vocational level training. Target tertiary level and research and educational institutions such as: the universities within the Community and the Institute of Marine Affairs, for building professional capabilities.	<input type="checkbox"/> Re-organized and competent institutions. <input type="checkbox"/> National institutions designated as regional training and research providers.	<input type="checkbox"/> Technical assistance/ funding <input type="checkbox"/> Member States agreement. <input type="checkbox"/> Cooperation of the universities and national research agencies
5.3 On-going upgrading of skills in research, policy and regulations.	Secure regional provider status for the appropriate universities and national research agencies Carry out needs assessment and develop institutional strengthening program.	<input type="checkbox"/> Re-organized and competent regional institutions.	<input type="checkbox"/> Survey of skills profile: agencies and universities. <input type="checkbox"/> Technical Assistance/ funding
5.4 Developing Centers of Excellence in fisheries and facilitating training.	Carry out comparative assessment of institutions and centers. Develop mandate and program of work. Develop operational and funding strategies.	<input type="checkbox"/> Designated Centers of Excellence to promote and enhance competencies in the fishing sector.	<input type="checkbox"/> Survey to identify skills profile of agencies and universities. <input type="checkbox"/> Technical assistance/ funding.

**Table 4-1 (Cont'd): Challenges - Required Strategies, Outputs and Inputs.**

AREAS AND CHALLENGES	REQUIRED STRATEGIES	OUTPUTS	REQUIRED INPUTS
<b>6. Strengthening of Fishers/Operators Organizations.</b>			
6.1 Developing and implementing an institutional strengthening program for fishers' organizations.	Mobilize organizations. Provide technical assistance to restructure the organizations/associations. Provide training in leadership and institutional management.	<input type="checkbox"/> Organized fishing cooperatives. <input type="checkbox"/> Trained personnel to lead and manage the organizations/associations	<input type="checkbox"/> Expertise on the functioning of community based organizations <input type="checkbox"/> Funding to support training and technical assistance
6.2 Introducing a licencing system tied to training and competency.	Introduce regulations and policies requiring registered/licensed cooperatives to be certified in certain areas of competencies.	<input type="checkbox"/> Certified competent fishers' cooperatives.	<input type="checkbox"/> Policy support <input type="checkbox"/> Regulation
6.3 Developing and implementing a training program in vessels and technology management.	Develop and implement training programs for vessel owners. Make training a requirement for licenses.	<input type="checkbox"/> Vessel owners trained in management and personnel administration. <input type="checkbox"/> Vessel owners trained in fishing technology.	<input type="checkbox"/> Regulation/policy support <input type="checkbox"/> Funding for training <input type="checkbox"/> Expertise to provide technical assistance and training
6.4 Establishing partnerships between government and fishers organizations and other stakeholders association.	Identify mutual interests of stakeholders' organizations and government. Develop a framework for partnerships. Establish partnerships through Memoranda Of Understanding.	<input type="checkbox"/> Established working partnerships.	<input type="checkbox"/> Expertise on partnership building

**Table 4-1 (Cont'd): Challenges - Required Strategies, Outputs and Inputs.**

AREAS AND CHALLENGES	REQUIRED STRATEGIES	OUTPUTS	REQUIRED INPUTS
<b>7. Promotion Of Community Participation And Public Support.</b>			
7.1 Developing and implementing institutional strengthening program for fishing community advocacy groups.	Use consumer education to promote the demand for product standards in the industry. Promote joint public education program between fishers' organizations community advocacy organizations and consumer advocacy groups.	<input type="checkbox"/> Consumer awareness of standard and their benefits. <input type="checkbox"/> Cooperation between consumers, fishers and community organizations.	<input type="checkbox"/> Targeted consumer and public awareness programs <input type="checkbox"/> Funding for program implementation
7.2 Developing and implementing awareness in fishing communities about appropriate utilization and management of marine resources.	Develop partnerships between government, fishers' organizations and community based non-government organizations. Train the leadership in these organizations about the sustainability of marine resources. Develop and implement joint public education/social marketing program.	<input type="checkbox"/> Community partnerships. <input type="checkbox"/> Promotional programs on sustainability of marine resources.	<input type="checkbox"/> Targeted public awareness programs <input type="checkbox"/> Funding for program implementation
7.3 Increasing public awareness among community leaders in strategic interest groups about the importance of the fishing industry.	Develop and implement public awareness programs with strategic groups in tourism, fisheries and community development.	<input type="checkbox"/> Partnerships to promote and protect the industry. <input type="checkbox"/> Public awareness programs.	<input type="checkbox"/> Targeted public awareness programs <input type="checkbox"/> Funding for program implementation
7.4 Rationalizing the number of bureaucratic organizations serving the industry and simplifying the bureaucracies.	Identify strategic organizations. Review policies and administrative practices. Rationalize and implement user-friendly programs.	<input type="checkbox"/> Improved bureaucratic services to the fisheries industry.	<input type="checkbox"/> Policy support <input type="checkbox"/> Analysis of industry institutional needs <input type="checkbox"/> Funding.

**Table 4-1 (Cont'd): Challenges - Required Strategies, Outputs and Inputs**

AREAS AND CHALLENGES	REQUIRED STRATEGIES	OUTPUTS	REQUIRED INPUTS
<b>8. Promotion of the Expansion of Pelagic Fishery and other Unutilized and Underutilized Resources to Reduce Exploitation of Near Shore Fishery.</b>			
8.1 Promoting the use of FAD's.	Develop exploration fishing programs. Create investment incentives. Develop and promote operations profiles and the projected benefits to fishers of pelagics.	<input type="checkbox"/> Exploratory fishing program. <input type="checkbox"/> Positive fisher response.	<input type="checkbox"/> Supportive policy environment funding. <input type="checkbox"/> Technical assistance and training on use of FAD's
8.2 Facilitating training in pelagic fishing methods.	Develop institutionalized programs for trainers and fishers. Secure co-financing as incentives for fishers. Establish designated institutions. Deliver institutional strengthening to designated institutions.	<input type="checkbox"/> Trained trainers and fishers <input type="checkbox"/> Institutionalized training.	<input type="checkbox"/> Technical assistance/ funding
8.3 Developing a Regional Management Plan.	Develop national and regional plans that are implementable. Develop harmonized investment promotion policy framework.	<input type="checkbox"/> National commitments <input type="checkbox"/> Positive responses from investors.	<input type="checkbox"/> Technical assistance/ funding on use of selected methods and gear
8.4 Integrating and improving the collection and dissemination of biological and catch/effort data.	Provide technical assistance to fisheries divisions.	<input type="checkbox"/> National competencies in fisheries information and statistics for planning, policies and management.	<input type="checkbox"/> Design of management plans <input type="checkbox"/> Technical assistance re implementation of plans.

**Table 4-1 (Cont'd): Challenges - Required Strategies, Outputs and Inputs**

AREAS AND CHALLENGES	REQUIRED STRATEGIES	OUTPUTS	REQUIRED INPUTS
<b>9. Developing A Marine Fisheries Sub-Sector.</b>			
9.1 Conducting applied research.	Develop profile of underutilized or unutilized species for enhanced exploitation  Develop and promote technically feasible options with companion incentive packages.	<input type="checkbox"/> Species specific plans for the diversification of the fisheries.	<input type="checkbox"/> Comprehensive data base on the distribution pf the target species <input type="checkbox"/> Pilot research project on enhancing the utilization of target species <input type="checkbox"/> Design and implementation of policy framework featuring, <i>inter alia</i> , appropriate incentives.
9.2 Developing legislation and regulations for management and sustainable development.	Develop guidelines for a regional policy and regulatory framework for the sub-sector, encompassing underutilized an unutilized species.	<input type="checkbox"/> A comprehensive regulatory environment for the sub-sector.	<input type="checkbox"/> Government commitment <input type="checkbox"/> Technical assistance re the design of a policy framework.
9.3 Developing harmonized policies for private investment.	Develop guidelines for a regional policy framework for promoting private investment in marine fisheries. This will include technical support services, fiscal incentives, and research and development support.	<input type="checkbox"/> A suitable investor friendly policy environment.	<input type="checkbox"/> Government commitment. <input type="checkbox"/> Technical assistance re the design of a policy framework.
9.4 Developing and implementing an investment promotion program.	Identify investment opportunities.  Promotion to target local, regional and foreign investors.	<input type="checkbox"/> Positive responses from investors.	<input type="checkbox"/> Implementation of creatively designed promotional programs <input type="checkbox"/> Targeted promotional programs <input type="checkbox"/> Coordination by national investment promotion agencies.

**Table 4-1 (Cont'd): Challenges - Required Strategies, Outputs and Inputs**

AREAS AND CHALLENGES	REQUIRED STRATEGIES	OUTPUTS	REQUIRED INPUTS
<b>10. Development of Aquaculture.</b>			
10.1 Developing policy frameworks.	Develop of policies for promoting investment and export oriented production.	<input type="checkbox"/> An investor/exporter friendly policy	<input type="checkbox"/> Policy guidelines for adoption to specific national circumstances

10.2 Developing and implementing research and extension programs.	Develop technical support packages for investors. Develop technical analysis of species. Conduct technical feasibility studies. Develop institutional capacities.	<input type="checkbox"/> Technical studies and research reports to enhance commercial aquaculture ventures <input type="checkbox"/> Technical studies and research reports to support the sustainability of the depleted marine stocks.	<input type="checkbox"/> Nationally tailored research programs with strong / demonstrated private sector inputs <input type="checkbox"/> Selected research programs geared towards enhancing the sustainability of the marine environment
10.3 Developing and enforcing environmental standards for aquaculture.	Identify trade and technology driven/standards. Develop and ratify Regional standards. Promote Regional standards.	<input type="checkbox"/> Internationally accepted standards for aquaculture, production and products.	<input type="checkbox"/> Technical assistance to facilitate the establishment of internationally accepted food safety and agricultural health standards.
10.4 Establishing guidelines for regulating the sector, in accordance with international standards	Develop internationally acceptable regulatory frameworks through consensus building process.	<input type="checkbox"/> Investor, trade and community friendly frameworks.	<input type="checkbox"/> Technical assistance re international standards.

**Table 4-1 (Cont'd): Challenges - Required Strategies, Outputs and Inputs**

AREAS AND CHALLENGES	REQUIRED STRATEGIES	OUTPUTS	REQUIRED INPUTS
<b>11. Facilitation of Diversification and Sustainable Production.</b>			
11.1 Improving capabilities for collection and dissemination of information.	Improve the capabilities of the national fisheries divisions.	<input type="checkbox"/> Improved data collection capacity	<input type="checkbox"/> Appropriate national level data systems and infrastructure. <input type="checkbox"/> Cooperation from co-management partners.
11.2 Decreasing resource use conflicts and destructive fishing practices.	Integrate fisheries management into coastal zone planning and management. Establish partnerships between fishers, sports fishers, and water sports operators etc.	<input type="checkbox"/> Reduced number of conflicts	<input type="checkbox"/> Comprehensive educational and awareness program targeted to coastal zone users <input type="checkbox"/> Promotion of partnership

			building
11.3 Encouraging the use of discards.	Conduct situational analysis re disposition of discards. Disseminate findings of studies to stakeholders. Promote new opportunities for use of discards.	<input type="checkbox"/> Structured proposals re on the use of discards. <input type="checkbox"/> Optimal usage of discards.	<input type="checkbox"/> Technical assistance re analysis of the potential for the utilization of discards
11.4 Improving ecological monitoring of coastal habitat.	Develop and implement legislation for coastal zone protection. Establish partnerships with national coastal zone management authorities on zone uses and habitat degradation.	<input type="checkbox"/> Improved coastal zone management	<input type="checkbox"/> Technical assistance re coastal zone monitoring and management



**Table 4-1 (Cont'd): Challenges - Required Strategies, Outputs and Inputs.**

AREAS AND CHALLENGES	REQUIRED STRATEGIES	OUTPUTS	REQUIRED INPUTS
<b>12. Mechanisms To Reduce Risks Among Fishers.</b>			
12.1 Developing mechanisms for instituting alternative insurance plans.	Pursuit of cooperative arrangements with existing insurance companies re the development of schemes as necessary. Determine mechanisms for instituting modified schemes.	<input type="checkbox"/> An indepth analysis of the strengths and weaknesses of existing schemes <input type="checkbox"/> Improved schemes..	<input type="checkbox"/> Collaboration of existing insurance companies <input type="checkbox"/> Data and information from co-management partners
12.2 Establishing and operating an advisory group on insurance and risks.	Establish advisory group on risk management in the industry to develop comprehensive mechanisms to protect the welfare of fishers/workers.	<input type="checkbox"/> Improved welfare programs, and occupational environmental for operators and workers.	<input type="checkbox"/> Funding to facilitate consultants.
12.3 Developing and implementing mechanisms to reduce the impact of natural disaster on the sector.	Analyze vulnerability of the sector, and potential impact of natural disasters.  Develop action plan to manage disasters.  Develop and disseminate information and training manuals.	<input type="checkbox"/> Categorization of the vulnerability of the sector <input type="checkbox"/> Guidelines to combat vulnerability. <input type="checkbox"/> Improved preparedness for disaster management.	<input type="checkbox"/> Technical assistance re preparation of guidelines
12.4 Developing and promoting a credit scheme.	Development of an innovative low risks schemes. Mobilization of national interests in the scheme. Mobilization of donor interests.	<input type="checkbox"/> Appropriately designed credit scheme	<input type="checkbox"/> Technical expertise for the design <input type="checkbox"/> Cooperation of the private sector and fishers organizations.
12.5 Developing and promoting safety practices and standards.	Promotion of the value of safety standards and practices.	<input type="checkbox"/> Established vessel construction and operating standards. <input type="checkbox"/> Trained personnel in safety standards and practices	<input type="checkbox"/> Technical assistance to develop and promote the standards.

**Table 4-1 (Cont'd): Challenges - Required Strategies, Outputs and Inputs.**

AREAS AND CHALLENGES	REQUIRED STRATEGIES	OUTPUTS	REQUIRED INPUTS
<b>13. Prevention and Resolution of Conflicts</b>			
13.1 Identifying and Characterizing potential	Encouraging the avoidance /minimization of	<input type="checkbox"/> Analysis of existing conflicts. <input type="checkbox"/> Analysis of potential conflicts.	<input type="checkbox"/> Goodwill from

conflict situations.	conflicts. Promotion of an inclusive approach to conflict resolution		coastal zone users <input type="checkbox"/> Technical assistance on conflict resolution
13.2 Developing conflict avoidance and resolution mechanisms.	Consensus building seminars Research	<input type="checkbox"/> Practice manuals	<input type="checkbox"/> Goodwill from coastal zone users <input type="checkbox"/> Technical assistance on conflict resolution
13.3 Developing and promoting programs to avoid and resolve conflicts.	Execution of social marketing program. Training of relevant program personnel	<input type="checkbox"/> A social marketing program <input type="checkbox"/> Trained personnel	<input type="checkbox"/> Design and promotion of conflict avoidance/minimization program

## 5. ROLE FOR THE CARICOM REGIONAL FISHERIES MECHANISM

### 5.1 Performance of CFRAMP

It is important to assess the performance of CFRAMP, the predecessor Regional initiative in fisheries, to the intended CARICOM Regional Fisheries Mechanism. This will help to set the stage for determining the role for the successor (CRFM).

Caddy (2001) in his review of CFRAMP wrote, “The overall level of funding for CFRAMP was not huge and countries got value for money. Very clearly CFRAMP dovetailed with, and enhanced the work of the Fisheries Departments. In fact CFRAMP helped to focus government attention on the fisheries which were always neglected before. The continued queries on CFRAMP activities also sensitized government to the skills now available in the departments and they are now more ready to heed advice.”<sup>1</sup>

A summary of the performance of CFRAMP, by key areas of interventions, is highlighted below:

#### **Fisheries Data and Information System.**

This intervention has produced a data collection and storage system, in Member States. Consequently the information bases for improved management of fisheries do exist.

The National Fisheries Divisions however face the challenge of securing adequate budgets and retaining skilled personnel to maintain and build on the systems.

**The Licencing and Registration System (LRS).** This system was intended to provide a wide range of data on fishers and their operations.

The system is found to be user friendly. It works and is widely used.

The system however faces some challenges, which must be addressed in a timely manner. These revolve around securing adequate manpower for data management at the national level, the dynamism of the inward and outward movement of fishers, the poor quality of available data on boat ownership and the limited fields in the system to accommodate any perceived additional analyses.

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<sup>1</sup>. JOHN F CADDY FISHERIES CONSULTANT, IN HIS REPORT ON PROGRESS AND ACHIEVEMENT OF THE CFRAMP PROJECT AND SOME PERSPECTIVE FOR THE FUTURE IN FISHERS MANAGEMENT FOR CARICOM/CARIFORUM COUNTRIES UNDER A COMMON CARIBBEAN FISHERIES MECHANISM PAGE

□ **Fisheries Resource Assessment**

Much more work is still required in this highly complex area of activity. The work to date has been fragmented and concentrated mostly in the larger WECAFC countries.

□ **Fisheries Management**

This area has not realized overwhelming success primarily owing to the lack of political will, weak policy enhancement, and inadequate empowerment of fishers organizations.

The mechanism of Fishery Advisory Committees, which was expected to be used to drive the process, has not been adopted in many Member States.

The Fishery Management Plans prepared by most Member States are perceived to be too general and do not have shared ownership among the various stakeholders.

□ **Community Involvement and Education**

There has been a good deal of progress in mobilizing the fisher folk organizations as part of the bottom-up approach to co-management.

There is however a general lack of extension workers to reinforce community involvement and inadequate financial capacity of community or fisher folk organizations to maintain the momentum in community involvement.

CFRAMP should concentrate more resources for strengthening this area.

□ **Training**

Both long-term training of fisheries personnel as well as short-term technical training has been successful.

22 persons have been trained to the post graduate level (Masters and PhD Degrees) with 94 academic years of scholarships for specialized training being awarded. Further, 700 persons have been trained in short courses.

However there has been inadequate training delivered to fisher folk representatives.

## □ **Project Staffing**

It was concluded that the CFRAMP staffing was too concentrated in administrative work and that CFRM should avoid such excessive use of resources.

## □ **Representation of CARICOM on Fisheries Commissions.**

WECAFC working group meetings can be very helpful to the region. Participation should be assured through budget provisions from CARICOM Secretariat or CRFM.

Participation in the Commission meetings could prove to be less cost-effective for the Region.

From the foregoing, it can be concluded that a Regional Mechanism for Fisheries is necessary and can be very cost –effective. Among the lessons learned from the predecessor, CFRAMP is that programs oriented to enable national capacities can be very cost – effective. There is however much more work to be done at the regional level especially since some of the priority interventions which are required can be carried out more cost-effectively at this level. It is also the perception that CRFM needs to expend less resource on administration than its predecessor, CFRAMP.

## **5.2 Priority Services**

Twelve categories of priority services were identified through the contact research with stakeholders during the preparation of this Strategic Plan. Arising from his evaluation of CFRAMP, the consultant John Caddy (*op cit.*) also identified a list of services that CRFM should continue to provide. An analysis of the compatibility of both lists is set out in Table 5-1 which follows. From this analysis it can be concluded that there is a high degree of correlation between the current analysis and the previous work by Caddy in six (6) of the 12 categories, namely:

- Research and development with databases, information systems and institutional strengthening.
- Globalization in terms of conformity with legislation, regulation, standards certification and post harvest technology.
- Regional capability for managing resources i.e. planning control, and monitoring etc.
- HRD comprising training of fishers and institutional capacity building.

- Strengthening fishers' organizations.
- Facilitating diversification.

In the main, the other priorities identified by this current work were not applicable in the review undertaken by Caddy. These priorities comprise:

- Managing the fisheries resources including flying fish.
- Promoting community participation.
- Promotion of, and expansion of pelagic fishing.
- Development of, aquaculture
- Introduction of mechanisms to reduce fishers' exposure to risk.
- Introduction of mechanisms to avoid conflicts and resolve disputes.

**TABLE 5-1: COMPARATIVE ANALYSIS OF INDICATIVE PRIORITIES FOR CRFM**

<i>1</i>	<i>2</i>	
<b>PRIORITY AREAS IDENTIFIED THROUGH CONTACT WITH STAKEHOLDERS DURING PREPARATION OF THE STRATEGIC PLAN</b>	<b>PRIORITY AREAS IDENTIFIED BY CFRAMP EVALUATION CONSULTANT JOHN CADDY</b>	<b>LEVEL OF CORRELATION OF 1 AND 2</b>
1. Research and development databases information systems institutional strengthening, and collaboration on stock and migratory species.	Data collection, storage and fisheries management	1
2. Globalization – legislation, regulation, standards certification and post harvest technology.	Euro certification, fisheries access agreement and cooperation with other organizations	1
3. Regional capability for managing resources – planning, control, monitoring, and provisions for sports fishing	Licencing, monitoring, control and surveillance and general fisheries management.	1
4. Managing fisheries resources including flying fish	None	4
5. HRD – training fishers, re-organizing relevant training institutions, and establishing centers of excellence etc.	Training in areas not touched by CFRAMP	1
6. Strengthening fishers organizations.	Training of persons in fishers organizations	2
7. Promotion of community participation and public support. - Institutional strengthening, public awareness, rationalization of bureaucracies.	None	4
8. Promotion and expansion of pelagic fishery.	Use of fads	3
9. Development of marine fisheries sub-sector	Not applicable	4
10. Development of aquaculture	Not applicable	4
11. Facilitation of diversification	Pilot projects, fisheries management, subsidies	2

12. Mechanisms to reduce risks – disaster management, safety practices etc.	Not applicable	4
13. Mechanisms to avoid conflicts and resolve disputes	Not applicable	4

#### LEGEND ON CORRELATION OF 1 AND 2

**1 = HIGHLY COMPATIBLE**

**2 = FAIRLY COMPATIBLE**

**3 = SOMEWHAT COMPATIBLE**

**4 = NO COMPATIBILITY**

### **5.3 RELEVANCE OF PRIORITY FOCUS TO CARICOM ORIGINAL MANDATE**

Based on the analysis, the policy objectives of CARICOM'S mandate for interventions in the fisheries sector are:

- ☐ Optimal economic returns to its resources
- ☐ Creation of employment opportunities
- ☐ Strengthening of the food security status of the Region
- ☐ Realization of sustainable yield
- ☐ Diversification of the use of the resources
- ☐ Building institutional competencies including fishers organizations.
- ☐ Conservation and management of the resources
- ☐ Enhancement of the socio-economic status of the fishers.

A comparison of the extent to which the priority services identified are compatible with the objectives of the CARICOM'S mandate for the fisheries sector is presented in Table 5-2 . It can be concluded from the table that the priority services identified have an overwhelming level of compatibility with the objectives of CARICOM's mandates for the fisheries sector.



**TABLE 5 – 2: ANALYSIS OF THE COMPATIBILITY OF THE PRIORITY SERVICES IDENTIFIED WITH THE OBJECTIVES OF CARICOM’S MANDATE FOR INTERVENTIONS IN THE FISHERIES SECTOR.**

<b>PRIORITY SERVICES AREA</b>	<b>MATCHING CARICOM OBJECTIVES</b>	<b>COMPATIBILITY</b>
1. Research and Development and information systems and data.	Conservation and management of resources	<b>2</b>
2. Globalization legislation standards etc.	Optimal economic returns.	<b>2</b>
3. Regional capability for managing resources.	Conservation and management of resources	<b>2</b>
4. Managing fisheries resources including flying fish.	Conservation and management of resources	<b>2</b>
5. HRD	Building institutional competencies	<b>2</b>
6. Strengthening fishers’ organizations	Building institutional competencies	<b>1</b>
7. Promotion of community participation.	Realization of sustainable yields.	<b>2</b>
8. Promotion and Expansion	Diversification of the use of the resources.	<b>1</b>
9. Development of marine resources	Diversification of the use of the resources.	<b>1</b>
10. Development of aquaculture.	Diversification of the use of the resources.	<b>1</b>
11. Facilitation of diversification.	Diversification of the use of the resources.	<b>1</b>
12. Introducing mechanisms to reduce risks.	Enhancement of the socio-economic status of the fishers.	<b>1</b>
13. Introducing mechanisms to avoid and resolve conflicts.	Enhancement of the socio-economic status of fishers.	<b>1</b>

**LEGEND ON COMPATIBILITY**

**1 = HIGH**

**2 = ABOVE AVERAGE**

## **5.4 ENVIRONMENT FOR A REGIONAL FISHERIES MECHANISM**

The following are the critical success factors for the CRFM.

- ❑ Fishers have to have positive attitude to the guiding principles of the CRFM.
- ❑ Departments of fisheries must be committed to strong collaboration with the CRFM.
- ❑ Member governments have to be committed to participation as well as to fund it.
- ❑ Regional programs in fisheries must be compatible with assessed priorities.
- ❑ A minimum core group of participating states is required to make it viable.
- ❑ There has to be some regional capacities in the required competencies.
- ❑ The mechanism has to enjoy goodwill in the broader region, as well as global support.
- ❑ There has to be general agreement to maintain a low fixed cost secretariat.

The overall assessment of these success factors follows in table 5-3. This is an assessment of the state of readiness for launching a successful CRFM and it shows that the region is generally ready for the CRFM with only one area of major concern, namely, the lack of consensus that the secretariat should be a low fixed cost operation. The highlights follow:

- ❑ Fishers' attitudes to the principles are very favorable.
  - Over 80% of them believe that they should be involved in fisheries management, with many believing that they should take the lead roles.
  - A high percentage of fishers are already involved in voluntary conservation practices.

Table 5-4 provides detailed data on fishers' attitude and table 5-5 substantiates the high percentage of voluntary restrictive fishing.

- ❑ The fisheries divisions as substantiated in the CFRAMP evaluation report have been very responsive to the interventions, despite their shortage of staffing. However in this latter regard greater cognizance should be taken of the absorptive capacity of the fisheries divisions in the designing and implementing of projects.

- Member governments are committed to fund the CRFM. The proposal for the establishment of CFRAMP received unanimous approval from the COTED. However there are some concerns that must be addressed in the resource mobilization strategies. These are:
  - Several governments feel that the CRFM secretariat should not cost them any more than they were required to pay to the CFRAMP secretariat.
  - The member states' contributions to the CFRAMP secretariat were in serious arrears. Table 5-6 substantiates that an increasing number of governments had unpaid balances equivalent to 39% of the amounts due.
- Compatibility with present regional program is high. The European union's support to CARIFORUM which will be managed by CFRAMP secretariat or its successor for the next five years is valued at over us\$5 million. It is known as the integrated Caribbean Regional Agricultural and Fisheries Development Programs (ICRAFD) – Fisheries Component. It covers fisheries data management, resource management, pelagic resource assessment, institutional strengthening, community involvement, HRD, surveillance and enforcement. The CFRAMP managed integrated Caribbean regional agriculture and fisheries development program – fisheries component is well timed to succeed CFRAMP. CFRAMP was implemented from 1992 to 2001 while ICRAFD will run from 1999 to 2005. The highlights of its budget are as follows:

### **SUMMARY OF ICRAFD'S BUDGET 1999 – 2005**

ACTIVITIES	BUDGETED AMOUNT IN US \$000
1. Management/support	844
2. Inception	25
3. Fisheries data management systems	913
4. Fisheries resource management	1509
<b>TOTAL</b>	<b>5,271</b>
	<b>US\$ 000</b>

The foregoing substantiate that CRFM will “kick off” with a funded program which spans the priorities in this strategic plan. The stage is therefore set for it to be successful.

- ❑ The potential size of the mechanism could be much larger than the Caribbean Community if the Dominican Republic and other neighboring countries are involved. CFRAMP currently serves the Dominican Republic and Haiti as members of CARIFORUM<sup>1</sup>. The CRFM should seek to include these two countries as well as the dependent territories in the region (subject to the approval of their metropolitan powers) within the CRFM fold. The CRFM should therefore leverage its present working relationship with the Dominican Republic and Haiti.
- ❑ The capabilities in the regional and national networking institutions, as illustrated in table 3-9, are significant. These institutions comprising national ones, member states departments of fisheries, the institute of marine affairs, the Caribbean marine institute, the Caribbean fisheries training and development institute, UWI, university of Guyana, University of Suriname and others have ample capabilities to become effective players in an institutional network serving the CRFM.
- ❑ The CRFM'S goodwill for broader regional and global support is solid. The present working relationship with other CARIFORUM countries and WECAFC will assure it of access to support from other institutions in these countries and from other donor agencies working with WECAFC.
- ❑ There is a general view that CRFM should operate with a low fixed cost budget, but there is no general agreement to maintain a low cost operating one. There are varying views on this matter. Trinidad and Tobago and Jamaica are two major proponents of a low fixed cost operating budget. The CFRAMP evaluation consultant John Caddy also highlighted this assessment in his Report as follows:  
 “One general comment by several correspondents is that it has too high a ratio of administrative to technical staff and that the CRFM should be much “leaner” in this respect, especially since once Member countries make a substantial contributions to the CRFM they will be scrutinizing closely the administrative overheads”.

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<sup>1</sup> Haiti joined CARICOM in July of 2002.

**TABLE 5-3: ASSESSMENT OF THE STATE OF READINESS FOR LAUNCHING A SUCCESSFUL CRFM**

<b>CRITICAL SUCCESS FACTORS</b>	<b>RATING</b>
1. Fishers attitude to the principles.	1
2. Commitment of the departments of fisheries	1
3. Commitment of Member Governments to fund it	2
4. Compatibility of present regional programs.	1
5. Potential size of the region for viability	1
6. Capabilities in regional and national networking institutions	2
<b>7. GOODWILL FOR BROADER REGIONAL AND GLOBAL SUPPORT.</b>	2
<b>8. GENERAL AGREEMENT TO MAINTAIN LOW FIXED COST SECRETARIAT.</b>	3

**LEGEND**

**1 = MOST FAVORABLE; 2 = QUITE FAVORABLE; 3 = SOMEWHAT FAVORABLE.**

**Table 5-4: Analysis of Fishers' Attitudes to Co-management Among Fishers in Selected Fishing Areas**

INDICATORS	PERCENTAGE OF FISHERS RESPONDING							RANGE
	ANTIGUA- BARBUDA	BELIZE		GUYANA	JAMAICA	ST. LUCIA	T&T	
1. Fishers should be involved in fisheries management.	96.9	94.1	100.0	61.1	97.3	95.0	98.5	61.1-100.0
2. Fishers to take lead role.	96.9	75.5	67.9	56.7	91.3	95	81.2	56.7-96.9
3. Fishers will unite to manage.	65.6	69.6	58.5	44.4	82.2	82.5	74.4	44.4-82.5
4. Fishers would turn-in someone with no licence.	62.5	58.8	22.6	55.6	57.3	71.3	34.6	22.6-71.3
5. Fishers would turn-in some one in no fishing area.	65.6	64.7	49.1	3.3	63.3	57.5	50.4	3.3-65.6
6. Fishers would turn-in dynamiters.	93.7	79.4	73.6	3.3	67.3	86.3	98.5	3.3-98.5
7. Fishers would turn in users of small mesh.	68.8	63.7	22.6	31.1	6.4	62.5	39.1	6.4-68.8

**Source:**

*A socio-economic baseline survey of thirty fishing communities in twelve CARICOM countries Peter Espeut for Caribbean Natural Resources Institute for the CFRAMP – December 1994.*

**Table 5-5: `Analysis of Voluntary Restrictive Fishing Practices Among Fishers in Selected Fishing Areas**

PRACTICE	PERCENTAGE OF FISHERS RESPONDING							
	ANTIGUA - BARBUDA	BELIZE		GUYANA	JAMAICA	ST. LUCIA	T&T	RANGE
Avoid closed season fishing.	2.7	82.4	n.a.	n.a	14.0	7.5	0.8	0.8-82.4
Avoid fishing in areas closed to fishing.	8.3	66.7	n.a	n.a	11.1	1.3	-	1.3-66.7
Do not catch certain size of fish.	30.6	59.8	n.a	n.a	47.3	1.3	-	1.3-59.8
Artificial reefs.	2.7	61.8	n.a	n.a	8.0	1.3	-	1.3-61.8
Avoid using certain gear.	19.4	50.0	n.a	n.a	14.0	2.5	-	2.5-50.0

Source:

A socio-economic baseline survey of thirty fishing communities in twelve CARICOM countries Peter Espeut for Caribbean Natural Resources Institute for the CFRAMP – December 1994.

**TABLE 5-6: MEMBER STATES' CONTRIBUTION TO CFRAMP IN THE FIRST FOUR YEAR  
S 1992/93 – 1995/96 IN EC \$000**

CONTRIBUTION/DUE	1992/93	1993/94	1994/95	1995/96
1. Contributions Due	172.4	355.8	365.6	376.2
2. Amount Paid	167.9	344.2	263.1	230.0
3. Amount Outstanding	3.5	11.6	102.5	146.2
4. Percentage Outstanding	2.0	3.2	28.0	38.9
5. Number of Countries fully or mostly paid.	10	10	6	5
6. Number of Countries unpaid or partially paid.	2	2	6	7

**Source: CFRAMP**



## **6. THE INSTITUTIONAL AND ORGANIZATIONAL FRAMEWORKS FOR CRFM**

### ***6.1 The Vision and Mission***

CRFM's vision is the sustainable use of the fisheries and aquaculture resources in and among member states by the development, management and conservation of these resources in collaboration with stakeholders, to the benefit of the people of the Caribbean Region.

The mission of the CRFM is to promote and facilitate the responsible utilization of the region's fisheries and other aquatic resources for the economic and social benefits of the current and future population of the region.

The CRFM will work through its network of Member and Associate Member States, and Observer Regional and International institutions, to carry out its mission with the focus being on: research and information dissemination, technology adaptation, resource management and co-management, building national competencies, mobilization of technical assistance, harmonization of policies and standards and development of the human capital within the Members and Associate Members of the CRFM.

### ***6.2 Guiding Principles for the CRFM***

The following guiding principles are deemed pertinent to the functional and organizational structure of the CRFM.

- ❑ Maintaining bio-diversity in the marine environment using the best available scientific approaches to fisheries management supported by comprehensive data collection and the networking thereof;
- ❑ Managing fishing capacity and fishing methods so as to facilitate resource sustainability;
- ❑ Encouraging the use of precautionary approaches to sustainable use and management of fisheries resources;
- ❑ Protecting and rehabilitating critical fisheries habitats and the environment generally through, *inter alia*, establishment of effective mechanisms for monitoring, control and surveillance;
- ❑ Promoting the use of post-harvest practices that maintain nutritional value and quality of products;
- ❑ The fostering of the co-management philosophy in all aspects of fisheries management planning and development as well as transparency in fisheries decision-making processes;
- ❑ Conducting trade in fish and fishery products according to applicable agreements;
- ❑ The fostering of cooperation with States in order to prevent disputes or resolve them in a peaceful manner;
- ❑ Promoting awareness of responsible fisheries exploitation through education and training;
- ❑ Ensuring safe, healthy and fair working and living conditions for fishery workers;

- ❑ According due recognition to the contribution of small scale and industrial fisheries to employment, income and food security, nationally and regionally; and
- ❑ Promoting aquaculture as a means of enhancing employment opportunities and food security, nationally and regionally.

Within this context it is recognized that:

- ❑ The CRFM will function as a facilitator and institutional clearing house using an enhanced network of Participating States and Regional/International institutions as far as possible.
- ❑ The outputs from the Member States' workshops and Working Groups would serve to refine or enhance the institutional arrangements for the CRFM on a continual basis.

### **6.3 Membership Structure and Institutional Framework**

The Caribbean Regional Fisheries Mechanism has a three-tier membership structure – full Members, Associate Members and Observers.

- ❑ **Membership** of the Mechanism is open to Member States and Associate Members of CARICOM.
- ❑ **Associate Members** of the Mechanism could be any State or Territory of the Caribbean Region which is able and willing to discharge the obligations required under the Agreement Establishing the CRFM.
- ❑ **Observers** would comprise representation from institutions and bodies such as Fisher Folk Organizations and Private Fishing Companies within the Caribbean; Regional bodies and institutions working in the area of fisheries as well as Non-Governmental Organizations with a similar focus.

Exhibit 6-1 which follows sets out the recommend membership structure.

The institutional framework is also three-tiered as illustrated in Exhibit 6-2. It is comprised of: the Ministerial Council, the Caribbean Fisheries Forum (the Forum), and the Technical Unit.

- ❑ **The Ministerial Council**, which is the oversight body, has responsibility for, *inter alia*, policies, program appraisal, resource allocation, fisheries cooperative agreements and related decision-making.

- ❑ **The Forum** will provide technical leadership to CRFM. More specifically it will provide technical direction, advise the Ministerial Council; review and recommend work programs; and provide oversight to the operations of the Technical Unit.
- ❑ **The Technical Unit** will have day-to-day coordinating responsibility for executing work programs, collaborating with national fisheries authorities, mobilizing resources, and managing the institutional networking to promote optimal involvement and the efficient functioning of the network.

The institutional network is perceived to be in three categories.

***Category – 1***      **The Internal and Allied Institutions.**

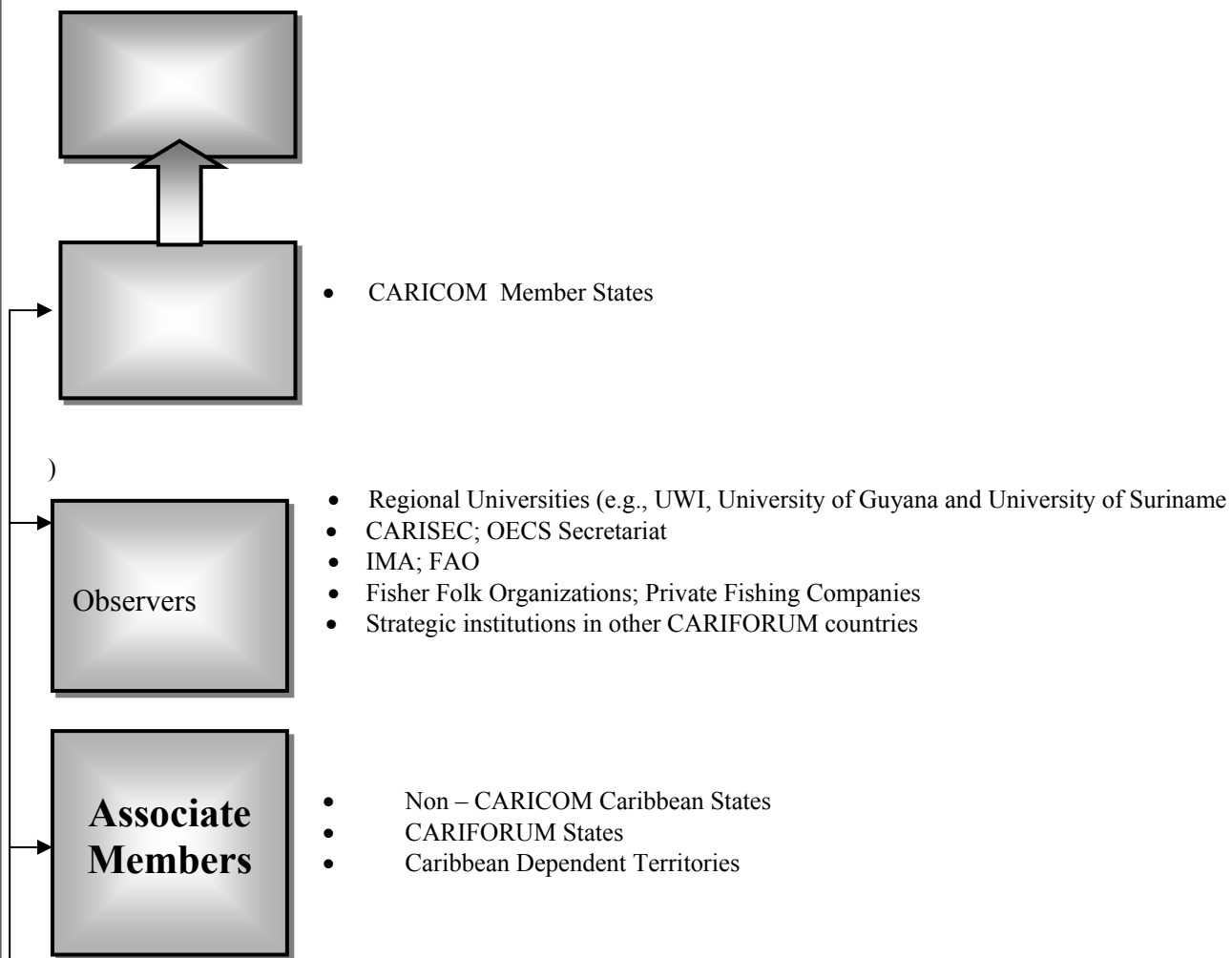
These include: CARICOM Secretariat, the OECS Secretariat, the OECS NRMU, the national fisheries authorities, the strategic educational institutions, and fishers organizations.

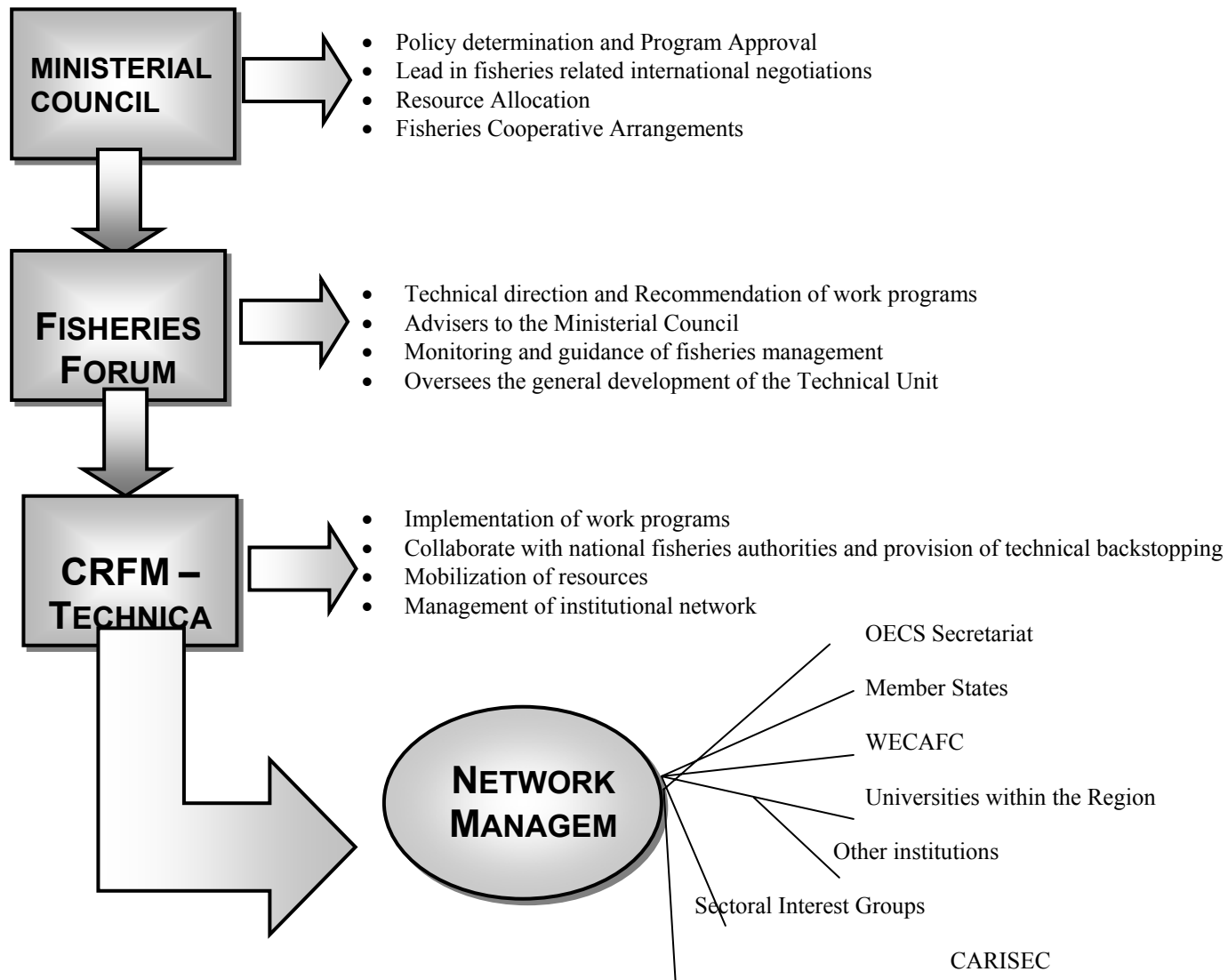
***Category – 2***      **The Stakeholder Intra- CARICOM Community** allied institutions including: regional NGOs, UNEP, CAIC, ECLAC, SIDS, Caribbean Development Bank, FAO/WECAFC, National environmental organizations, tourism organizations, CARICOM fishing companies, and CARIFORUM fisheries experts.

***Category – 3***      **The Extra-CARICOM Strategic Institutions.**

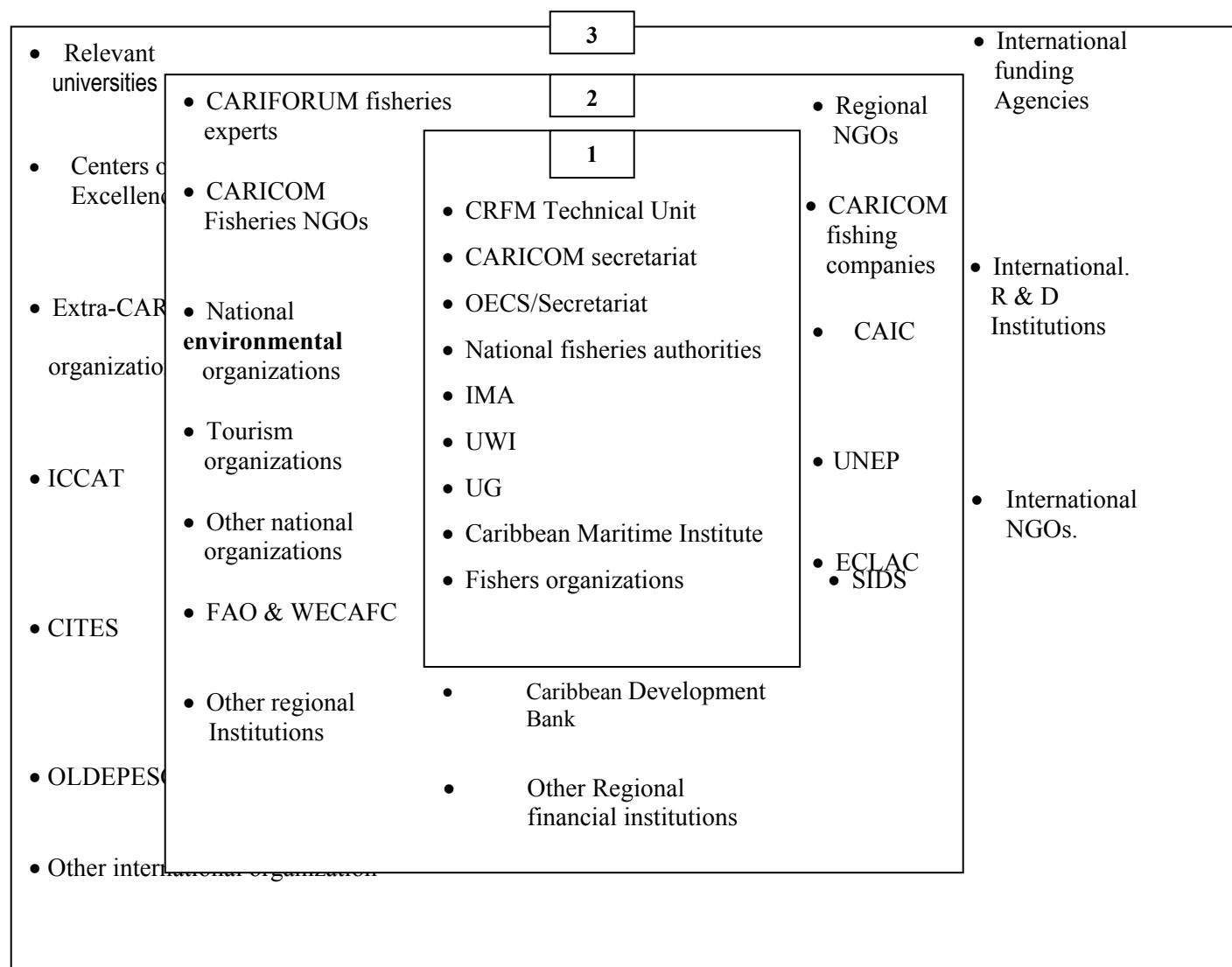
These should include: relevant universities, national fisheries organizations, CITES, ICCAT, OLDEPESCA, international funding agencies, international NGOs, international research and development institutions and centers of excellence.

Exhibit 6-3 schematically sets out the structure.





# EXHIBIT 6-3: INDICATIVE CRFM INSTITUTIONAL NETWORK



## **6.4 The Functions and Required Competencies**

The Objectives of the CRFM are:

- ❑ The efficient management and sustainable development of marine and other aquatic resources within the jurisdictions of Member States;
- ❑ The promotion and establishment of co-operative arrangements among interested States for the efficient management of shared, straddling or highly migratory marine and other aquatic resources;
- ❑ The provision of technical advisory and consultative services to fisheries authorities of Member States in the development, management and conservation of their marine and other aquatic resources.

These will be pursued through the functioning of the Ministerial Council which will determine the policy of the Mechanism, the Forum which will determine the technical and scientific work of the Mechanism and the Technical Unit. Among other things the Technical Unit will serve as the Secretariat to the Ministerial Council and the Forum as well as provide consultative and advisory services to Members in areas such as policy formulation and management, resource assessment and management, capacity building and resource mobilization.

In general the Caribbean Community can expect the CRFM to deliver the following tangibles.

- ❑ Facilitation of the Member States to gain technical and economic competitiveness and competencies in development, production and trade.
- ❑ Facilitation of legislative and administrative reforms for the Single Market and Economy, particularly as it pertains to marine and other aquatic resources.
- ❑ Facilitation of sound positioning for CARICOM in hemispheric and global trade and investment, and in international trade negotiations.
- ❑ Facilitation of the mobilization of resources for regional or multi-country interventions.

In respect of fisheries and fisheries related matters some specific expectations of the Community are:

- ❑ Program development and coordination;
- ❑ Resource mobilization;
- ❑ Advocacy and policy;

- ❑ Promotion of improvements in fishing, and fish processing /marketing technologies;
- ❑ Information storage and dissemination;
- ❑ Institutional development and networking;
- ❑ Human resource development and institutional strengthening;
- ❑ Resource assessment and management;
- ❑ Resolution of conflicts in the fisheries sector; and
- ❑ Negotiations in international trade;

Based on the foregoing, the CRFM Technical unit should therefore have competencies in program development, project design and coordination, social marketing, resource assessment, management and mobilization, policy formulation and coordination, fisheries technology, technology marketing and adaptation, information management, communication, institutional and organizational development, management of institutional networks and conflict resolution.

## **6.5 Organization and Staffing**

The technical unit will be staffed by a core team of six senior persons supported by a small core of administrative and clerical staff. They comprise:

- ❑ A Director who will have overall management responsibility for the unit.
- ❑ A Deputy Director who will coordinate programs in the sub-regional office in St. Vincent and the Grenadines and also assist the Director in the general management of the unit.
- ❑ Three technical officers with each being responsible for different clusters of subject matters. Namely:
  - National fisheries stock management
  - Data and information management/analysis
  - Sociological and economic and planning.
- ❑ A financial administrator assisted by clerical and administrative support staff of four.



Each member of the six senior staff will be multi-skilled in fisheries related competencies. The professional staff complement will comprise the following:

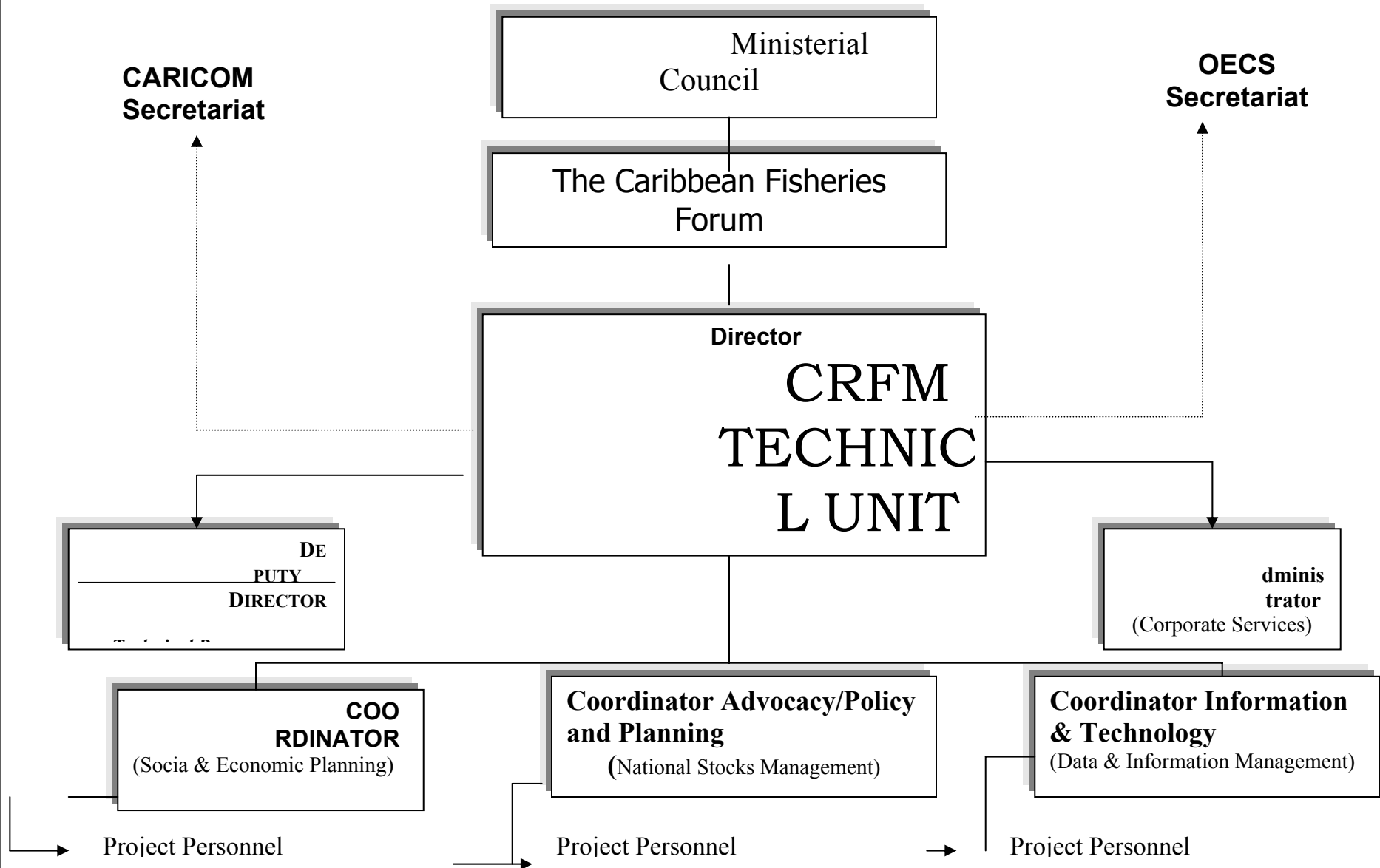
- ❑ The Director will be responsible for institutional network, institutional development, resource mobilization and general management of the Secretariat.
- ❑ The Deputy Director will have responsibility for management of the sub-regional operations. In addition, he or she will assist the Director in the general management of the unit.
- ❑ A program Coordinator responsible for facilitating the development and implementation of programs.
- ❑ An advocacy, policy and planning Coordinator, responsible for the developmental and community outreach activities.
- ❑ An information and technology Coordinator responsible for information storage and dissemination and promotion of technology.
- ❑ One Administrator responsible for the non-technical operations of the unit.

Associated with the Coordinators, in a close working relationship, will be personnel recruited through discrete projects being administered by the CRFM.

- ❑ The funding of the Director, Deputy Director, Coordinators, and Administrator will be from the fixed costs of the unit.
- ❑ The Project Personnel will be funded from the variable costs of the unit. They will be recruited on the basis of funded projects with specific deliverables, manpower input and termination dates.

Exhibit 6-4 sets out the recommended organizational structure.

Exhibit 6-4: Organization Structure for the CRFM



## **6.6 Job Functions and Required Competencies**

This section focuses on the six (6) core positions as schematically set out in Exhibit 6-4, namely: Director, Deputy Director, Administrative Officer (Administration), Coordinator (Programs), Coordinator (Advocacy, Policy and Planning) and Coordinator (Information and Technology).

- ❑ **The Director** will have overall responsibility for the performance of the Technical Unit. The performance of the Technical Unit is deemed to be satisfactory when it is relevant; it is financially sound; all its programs have shared ownership with Member States; the targets in its Strategic Plan are achieved; Member States are satisfied with their experience in working with the Unit. This will be evident by relevant Member States' marine/fisheries authorities and allied institutions being active partners in the work programs; the Region's fisheries industry achieving global competitive trade standards and its marine resource endowment becoming sustainable; high staff morale; the
- ❑ Technical Unit being perceived by stakeholders and the relevant global institutions to be generally credible and adequate Regional counterpart funding for programs.
- ❑ The core functions of the Director will entail, but not limited to: development and execution of Strategic Plans and programs, general administration of the Technical Unit, coordination of initiatives to deepen regional cooperation in the fisheries and related sectors, facilitation of the work of various regional advisory groups in the fisheries sector, and the provision of general advice to the relevant regional authorities negotiating for the Community and other members of the CRFM on fisheries related matters.

The Director will need to have outstanding competencies in regional institutional management, fisheries management and development, entrepreneurship, program management, policy management, communications and public administration. The Director should possess at least a Masters Degree and seven (7) years related experience. He or she should be bilingual (English and Spanish or French) with English being the mother language and also proficient in the use of information technology applications for core management functions.

- ❑ **The Deputy Director** will be responsible for the operation of the Eastern Caribbean office, and will assist the Director with the overall operation of the Technical Unit. The Deputy Director will be required to have a broad knowledge and experience in fisheries development and management. In particular the Deputy Director will focus on developing program(s) for the management of shared stocks, and should have a good knowledge of international fisheries management and fisheries assessment. The Deputy Director will play a strong supporting role to the Director in the development of projects and the acquisition of funding and should have knowledge and experience in this area.

The Deputy Director should have a graduate degree in a fisheries related field; at least a masters degree and six (6) years of relevant experience or a PhD with five (5) years experience. Bilingual skills encompassing English, Spanish and French are also highly desirable.

- ❑ **The Administrator** (Corporate Services) will have front line day-to-day responsibility for administration of finance, personal welfare, office supplies, the fixed assets and monitoring of the budget. The administrator is deemed to be performing satisfactorily when all financial reports are up-to-date; funding agencies are generally satisfied with the reporting standards and funds management; the external auditors give a favorable overview of the administration of the funds and other assets, staff morale is high, and the cash flow remains positive.

The Administrator should have at least a BSc Degree in accounts or ACCA level II with a certificate or equivalent in business administration and four (4) years relevant experience. He or she should have sound competencies in accounting practices, policies and standards, human relations, use of computer applications for financial administration, general office management, communications and project management.

- ❑ **The Coordinator (Social and Economic Planning)** will have overall leadership responsibility for the technical operations of the full range of programs and regional interventions in the sector. Such programs will span, but not necessarily limited to catch and effort collection systems, pelagic and reef fish resource assessment, shrimp and ground fish resource assessment, strengthening national fisheries management and human resource development and post harvest processing and marketing. The job is deemed to be performing satisfactorily when the programs represent the Community's priorities; the programs are adequately funded; performance evaluation reports on the programs are favorable, programs are completed on time and within the budget, and consultants complete their work with satisfactory professional standards.

The Coordinator's core functions will entail, program planning and development, program implementation and performance monitoring, maintenance of relationships between the Technical Unit and Member States fisheries institutions, general project management and providing a wide range of technical advice to the Director and counterpart institutions associated with the CRFM. The program coordinator should have competencies in: planning, program/ project management, marine resource management, institutional development, cost: benefit analysis, human relations, and communication. He/she should have at least a Masters Degree in a related area and four (4) years related experience.

- ❑ **The Coordinator (Advocacy/Policy and Planning)**. This position has coordinating responsibility for policy formulation, planning for the development and execution of advocacy programs, execution of outreach programs, promotion of participation of interest groups/stakeholders and promotion of good practices/ standard in the fisheries industry. This job is deemed to be performed satisfactorily when: suitable policies are developed and implemented to improve the environment especially for small fisheries, fisher folk organizations are playing a significant role in addressing issues related to the fisheries sector and are co-managing the resource conservation mechanisms; the regions fisheries enjoy sound positioning in international trade and Member States are satisfied with their experience with the unit. This position will require professional level competencies in policy, planning, corporate development, social marketing, fisheries organizations, socio-economic analysis, statistics and marine resource management.

He or she should have at least a Master Degree in a related field and four (4) years relevant experience.

- ❑ **The Coordinator (Information and Technology).** This position is responsible for research and design of relevant data bases, and the dissemination of information and technology to support the programs of the CRFM in general as well as those of the Technical Unit and to facilitate policy formulation and management in Member States' fisheries sectors. The position is also responsible for the management of any regional data bases. The position is deemed to be performing satisfactorily when: Member States' are satisfied with the information and data support services, as well as the responsiveness of research and technology promotion programs to national and regional priorities, and technology and information services are making significant impacts on the industry and the fisher folk organizations in Members States.

The position requires competencies in fisheries and related research, information technology, fisheries resource management, program management, communications, fisheries data management, and operations research. He/she should have at least a Masters Degree in the relevant area and four (4) years of related experience.

## **7. PROGRAM AND RESOURCE REQUIREMENTS**

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**THIS CHAPTER FOCUSES ON THE PROGRAMS AND RESPECTIVE INTERVENTIONS, THE BUDGET AND POSSIBLE SOURCES OF FINANCING. EACH IS DISCUSSED IN SECTIONS 7.1 AND 7.2 RESPECTIVELY.**

### ***7.1 Programs and Required Interventions***

The priority programs can be drawn from Tables 4 – 1 and 5 – 2. They are clustered into nine (9) programs. Namely:

<b><i>Program – 1</i></b>	<b>RESEARCH AND DATA ANALYSIS FOR POLICY FORMULATION AND DECISION MAKING</b>
<b><i>Program – 2</i></b>	<b>PREPARATION FOR GLOBAL COMPETITIVENESS.</b>
<b><i>Program – 3</i></b>	<b>RESOURCE ASSESSMENT AND MANAGEMENT.</b>
<b><i>Program – 4</i></b>	<b>HUMAN RESOURCE DEVELOPMENT AND INSTITUTIONAL STRENGTHENING</b>
<b><i>Program – 5</i></b>	<b>STRENGTHENING OF FISHER FOLK ORGANIZATIONS AND IMPROVED COMMUNITY PARTICIPATION.</b>
<b><i>Program – 6</i></b>	<b>PROMOTION OF THE EXPANSION AND UTILIZATION OF UNUTILIZED AND UNDERUTILIZED AQUATIC RESOURCES.</b>
<b><i>Program – 7</i></b>	<b>DEVELOPMENT AND PROMOTION OF AQUACULTURE.</b>
<b><i>Program – 8</i></b>	<b>DEVELOPMENT AND PROMOTION OF RISK REDUCTION PROGRAM FOR FISHERS.</b>
<b><i>Program – 9</i></b>	<b>DEVELOPMENT AND PROMOTION OF PROGRAMS FOR CONFLICT RESOLUTION AMONG MULTI-USERS IN COASTAL ZONES.</b>

The details of each program are discussed below.

## **PROGRAM – 1**

### **RESEARCH AND DATA ANALYSIS FOR POLICY FORMULATION AND DECISION MAKING**

The objectives of the program are to enhance the databases and information system and rationalize and strengthen the research facilities to facilitate integrated planning, sound decision-making and collaborative management of shared resources including straddling and migratory species. The program will have four (4) components. Namely:

- 1.1 **Improvement in Data Collection and Management Systems.** This entails on-going development of the framework for the databases and improvement in the data collection and management in CRFM's Member States. Several institutions including the universities within the region, national fisheries authorities and the Institute of Marine Affairs could participate in spearheading this intervention.
- 1.2 **Development of Relevant Fisheries Databases for Management Plans and Policy.** The databases should be used to develop a fisheries management plans and policies in each Member State.
- 1.3 **Institutional Rationalization and Strengthening of Existing Research Facilities.** This intervention should entail an institutional review or audit of the national and regional institutions to determine their competencies and recommend the ones that should participate in regional programs in research and development and the provision of data. This intervention could be led by an Advisory Group with technical assistance through a consultancy.
- 1.4 **Promotion of Product Development and Market Access.** This entails research and development for product innovations, new product features and facilitation of access to markets through information, negotiations and technical assistance.

## **PROGRAM – 2**

### **PREPARATIONS FOR GLOBAL COMPETITIVENESS**

The scope of this program encompasses the enhancing of institutional, infrastructural and technical capacity and capability to meet international standards of food safety and agricultural health. It includes the development and enactment of legislation, processing standards, and post harvest technologies to allow the region to be able to export fish on a global basis.

- 2.1 **Establishment of a System for Conformity.** This entails a review of, and enactment of modified legislation to conform to the global standards to which the region is committed. The FAO Code for responsible fishing as well as Codex Alimentarius guidelines should be used as benchmarks. This should be provided through technical assistance.

- 2.2 Development of Guidelines, Training Programs, and Certifying Institutions.** This should comprise development of information packages on required procedures and practices for quality assurance together with the execution of training programs through a network of selected institutions.
- 2.3 Technical assistance support for the Review and Revision of the Relevant Legislation** and enactment thereof to permit conformity with international standards.
- 2.4 Development of Certifying laboratories.** A technical assistance program should be implemented to audit, strengthen and designate selected laboratories as HACCP certifying bodies.
- 2.5 Promotion of Investment in Resource Sustainability and Environmentally Friendly Harvesting and Post Harvest Technology and Practices.** This intervention should entail research into the appropriate types of technologies and development of harmonized incentives schemes to encourage investment in, and the use of such technologies and practices. Such incentives could span credit for equipment, fiscal concession for investing in equipment, and technical assistance training.
- 2.6 Promotion of Internationally Acceptable Post Harvesting and Processing Standards.** This should entail fiscal concessions for investment, technical assistance training, and credit arrangements to support the embracing of new technology.

### **PROGRAM – 3      RESOURCE ASSESSMENT AND MANAGEMENT.**

This program will impact within national boundaries as well as across borders and will be directed towards the creation of a conducive environment for the management of marine resources. Within national boundaries the focus will be on enhancing the co-management strategy of fisheries management. Across national borders efforts will be directed towards increased collaboration among countries and with relevant international agencies. Six interventions are projected, namely:

- 3.1 Development of Harmonized Fisheries Regulations.** This intervention should comprise the use of technical assistance to use the FAO code of Conduct for Responsible Fishing and other related arrangements to which the Region is committed, to develop and enact harmonized regulations.



- 3.2 Development of a Harmonized Approach to the Management of Distant Water Fishing Fleets.** This entails the harmonization of maritime administration policies, practices and procedures as they relate to flag carriers and distant water fishing fleets.
- 3.3 Development and Implementation of a Promotion Program for the Management of Shared Resources including Voluntary Compliance and Monitoring Control and Surveillance in collaboration with Maritime administrations.** This should encompass the extensive use of the reports from the statistical catch and effort systems, public education material and specially designed public awareness programs, to promote responsible fishing methods and practices.
- 3.4 Establish Management Framework for Sports Fishing.** This intervention should entail the implementation of a carefully designed pilot project to integrate fishing into coastal zone planning and management systems and to restrict sports fishers to designated areas.
- 3.5 Development and Implementation of Fisheries Management Policies and Plans.** These will be plans and policies to promote resource management for sustainable utilization of the resources.
- 3.6 Technical Support to the Participation in International Resource Management Fora.** This would involve providing technical advice to country delegations which take part in selected international resource management fora. Additional support may also be offered depending on resource availability.

#### **PROGRAM – 4 HUMAN RESOURCE DEVELOPMENT AND INSTITUTIONAL STRENGTHENING.**

The aim of this program is to enrich the fisheries sector's knowledge capital in the region through training of fishers, strengthening of the relevant training institutions, skills upgrading in research, policy and regulation, and operation of Centers of Excellence. The recommended interventions are as follows:

- 4.1 Training of Fishers** – There should be an on-going project designed to conduct needs assessment, develop targeted training programs, align training with the licencing system, and provide certification of training. This should include, but not necessarily be limited to harvesting, handling, post harvest technology, conservation and management and entrepreneurship. The Caribbean Fisheries Training and Development Institute and the Caribbean Marine Institute and others could be important players in the delivery of this intervention.

- 4.2 **Re-organization of Existing Marine Institutions** – The candidate institutions to be designated as Regional training providers could include the University of Technology (Jamaica), the Institute of Marine Affairs (Trinidad and Tobago), the UWI (all campuses), the University of Guyana, the University of Suriname, the Caribbean Fisheries Training and Development Institute (Trinidad and Tobago) and the Caribbean Maritime Institute (Jamaica). A study should be undertaken to assess and select the suitable institutions. This should be followed up with plan for the delivery of the training curricula in a manner which utilizes the resources efficiently.
- 4.3 **Upgrading of Skills in the Areas Needed to Support Sustainable Development and Management of Fisheries and Aquaculture.** This involves the identification of the relevant needs followed by the development and implementation of institutional strengthening programs to enhance their capabilities for research, policy formulation and regulations, extension and administration, with respect to the satisfying of those needs.
- 4.4 **Establish Regional Centers of Excellence in association with international ones and Provide Support for them** – The interventions should entail assessment, selection of institutions and development of mandates and programs as well as funding strategies for such centers. Efforts should also be directed to establishing or strengthening the linkages with related international agencies.
- 4.5 **Institutional Strengthening for Effective Governance** – The scope of this intervention embodies reviewing, restructuring, and the improvement of fisher organizations management systems, together with the training of their management and leadership personnel.

## **PROGRAM – 5      STRENGTHENING OF FISHERS’ ORGANIZATIONS AND IMPROVING COMMUNITY PARTICIPATION.**

This program has two objectives. The first is to strengthen fishers’ organizations through: training, organizational restructuring and systems improvement, empowerment with authority and formalized working partnerships with government. The second is to promote community organizations, highlighting their role as co-management partners and major change agents, specifically through institutional strengthening of the relevant advocacy groups, public awareness of appropriate management of fisheries resources and the importance of the fishing industry and the rationalization of the interfacing organizations servicing the sector. The recommended interventions are indicated as follows:

- 5.1 **Empowering Fishers’ Organizations to be Effective Partners in Co-management Arrangements.** This entails introduction of licencing systems for fishers linked to training in required competencies and empowering the organizations with the accreditation status to certify fishers with competencies as prerequisite for securing fishing licenses.

- 5.2 Development and Implementation of Training Programs for Vessel Owners/Operators.** This includes conduct of training needs assessments, development and implementation of training and certification programs and establishment of a system for ensuring that fishers' licenses to operate are tied to training.
- 5.3 Establishment of Working Partnerships Involving Fishers' Organizations, Sports Fishers, Relevant Women's Groups Government and Other Stakeholders** – This should entail the identification of mutual interests, the development of an institutional framework for the partnerships, and the formulation a model memorandum of understanding, (MOU) of a working program for execution among the partners.
- 5.4 Strengthening of Fishing Community Advocacy Groups.** This should encompass development of public awareness programs and training in product standards in fisheries for consumer advocacy groups; as well as institutional training and the provision of support systems for community organizations promoting consumer and environmental standards and protection.
- 5.5 Promotion of Public Awareness about the Importance of Appropriate Utilization and Management of Marine Resources.** This should entail the development and implementation of targeted public awareness programs and the training of the leadership of community based organizations about the importance of sustainable management of marine resources.
- 5.6 Promotion of Special Interest Groups' Awareness about the Importance of the Fisheries Industry.** The program should be designed to reach strategic groups such as: hoteliers, sports fishers, policy makers and the leadership of community development organizations.
- 5.7 Execution of a Public Awareness Project on the CRFM** – This intervention will encourage fisher folks to support regional cooperation programs in fisheries and aquatic resource management.

## **PROGRAM – 6**

### **PROMOTION OF EXPANSION AND UTILIZATION OF UNUTILIZED AND UNDERUTILIZED AQUATIC RESOURCES.**

The aim of this program is to promote optimal use of the aquatic resources while achieving sustainability of the aquatic resource endowment. The required interventions are as follows:

**6.1 Promotion of Product Development and Utilization from Under-utilized resources** - This should target players involved in primary fishing, marketing and processing ,and promote practices which would lead to increased yield.

**6.2 Promotion and execution of exploratory and experimental fishing to obtain information** – on the availability and distribution of the stocks and determine the technical and socio-economic feasibility of developing fisheries for the targeted species and species group.

## **PROGRAM – 7**

### **DEVELOPMENT AND PROMOTION OF AQUACULTURE**

This program will follow a two tiered strategy. The first involves the establishment of a policy framework and regulatory environment to promote commercial aquaculture ventures while the second relates to the research on aquaculture initiatives in support of strengthening the marine fisheries sector. The specific interventions should comprise:

**7.1 A policy framework to stimulate private investment in the production and marketing of aquaculture products.**

**7.2 National Projects to Develop and Deliver Technical Assistance to Initiatives in Aquaculture, with strong inputs from the private sector.** The range of technical assistance should include: techno-economic studies, extension services, research and market development and development of product standards and environmental practices.

**7.3 Development and promotion of the required global environmental standards among operations of enterprises in aquaculture.**

**7.4 The development and promotion of a harmonized framework for regulating the aquaculture sub-sector.**

**7.5 Development and promotion of aquaculture in collaboration with the relevant agencies.**

**7.6 Research and development on specific species dictated by the needs of the marine fisheries sub-sector plan.**

## **PROGRAM – 8      DEVELOPMENT AND PROMOTION OF RISK REDUCTION PROGRAM FOR FISHERS’**

The aim of this program is to minimize the risk to which fishers are exposed. Such risks span: natural disasters, the perils of the sea and unfavorable terms of credit. The projected required interventions are:

- 8.1 Development and Promotion of Guidelines for An Appropriate Personal Insurance Scheme.** This will entail review of the existing schemes, in close collaboration with the insurance companies, and the proposal of guidelines for modifying them to make them more appropriate to the circumstances of the fisher folk.
- 8.2 Development of a Harmonized Framework for a Viable Revolving Loan Fund Credit Scheme and Mobilization of Interested Financiers:** This intervention should involve the development of an innovative credit scheme to give fisher folk access to more favorable terms of credit for the acquisition of equipment for improved catching and post harvest practices.
- 8.3 Development and Promotion of Warning Systems for the Identification and Characterization of Hurricanes and other adverse weather conditions which impact on the fisheries sector.**
- 8.4 Development of Hurricane Preparedness Planning and Mitigation Measures for the Fisheries Sector.** This intervention should entail an assessment of the vulnerability of the sector to, and likely impact of natural disasters, it will also include hurricane preparedness plans, an action plan to manage recovery from disasters, and preparation of training manuals to facilitate the learning process.
- 8.5 Development of User Friendly Educational Materials on the use and Importance of Safety Equipment and Vessel Construction Standards.** This should comprise public awareness and training in: vessel construction standards, the range of safety equipment and usage and in practices and procedures for reinforcing adherence.
- 8.6 Promote the use of Safety Equipment and the Implementation of Vessel Construction Standards among Member States.**
- 8.7 Source Support for the Training of Fishing Vessel Operators and Assistance to Member States in Implementing Safety Measures.**

## **PROGRAM – 9      DEVELOPMENT AND PROMOTION OF CONFLICT RESOLUTION AMONG MULTI-USERS IN COASTAL ZONES.**

This program aims at developing and promoting mechanisms which will minimize or prevent conflicts and facilitate resolutions of conflicts in the coastal trans-boundary or cross-border areas affecting the sustainability of the livelihood of fisheries and between states. The program should comprise three dimensions as follows:

- 9.1 Development and promotion of mechanisms for the resolution of conflicts at the land water interface affecting the livelihood of fisher folks and development of the fishing industry.
- 9.2 Establishment and promotion of mechanisms for the resolution of trans-boundary conflicts affecting the fishing industry.
- 9.3 Develop mechanisms for conflict avoidance and resolution.

### ***7.2 Projected Budget***

The budget can only be indicative or “ball park” at this time. The detailed work will have to be done by the project appraisal team. This indicative budget takes into consideration.

- ❑ The CARICOM –CIDA initial program (CFRAMP).
- ❑ Budgetary provisions suggested by some Member States/institutions for specific related interventions.
- ❑ The indicative budget being used by the OECS for its own related planned interventions in the sector.
- ❑ The budget for the fisheries component of the Integrated Caribbean Regional Agricultural and Fisheries Development Program.

The budget is estimated at US\$ 24.0 million with required technical assistance accounting for US\$18.5M or 77% and overheads and other administrative cost accounting for US\$ 5.5 million or 23% as summarized below and presented in Table 7-1.

## SUMMARIZED INDICATIVE BUDGET FOR CRFM'S FIVE YEAR STRATEGIC PLAN

PROGRAM	Amount US\$00
1. Research, Development and Information	4,360
2. Enablement for Global Competitiveness.	2,900
3. Resources Assessment and Management.	2,150
4. Human Resource Developments and Institutional Strengthening.	2,940
5. Strengthening of Fishers' Organizations and Improving Community Participation.	2,120
6. Promotion of Expansion and Utilization of Unutilized and Underutilized Aquatic Resources.	1,600
7. Development and Promotion Of Aquaculture	5,795
8. Development and Promotion of Risk Reduction Program for Fishers'.	1,550
9. Development and Promotion of Programs for Conflict Resolution Among Multi-Users in Coastal Zones.	615
<b>Total</b>	<b>US \$24,030</b>

*Source: Table 7-1*

Table 7 – 1: Estimated Budget for CRFM Five Year Plan

PROGRAM AND INTERVENTIONS	TOTAL US \$000	TECHNICAL ASSISTANCE	PROJECT PERSONNEL/ ADMINISTRATION
<b>1.0 RESEARCH, DEVELOPMENT AND INFORMATION</b>	<b>4,360</b>	<b>3,300</b>	<b>1,060</b>
1.1 Improvement of the Databases and Information Systems.	1280	960	320
1.2 Fisheries Management Plans	300	225	75
1.3 Institutional Rationalization and Strengthening of Research Facilities.	1900	1425	475
1.4 Mechanisms for collaborating on the Management of Straddling and Migratory Species.	480	300	120
1.5 Promotion of product development and market access.	400	330	70
<b>2. PREPARATION FOR GLOBAL COMPETITIVENESS.</b>	<b>2,900</b>	<b>2,223</b>	<b>677</b>
2.1 System for Conformity	700	525	175
2.2 Guidelines, Training Programs and Certifying Institutions.	325	244	81
2.3 Review and revise the relevant legislation.	200	160	40
2.4 Development of Certifying Institutions.	850	638	212
2.5 Investment in Resource Sustainability Environmentally Friendly Harvesting and Post Harvesting technologies.	475	356	119
2.7. Promotion of International Standards	350	300	50
<b>3. RESOURCES ASSESSMENT AND MANAGEMENT</b>	<b>2150</b>	<b>1613</b>	<b>537</b>
3.1 Development of Harmonized Fisheries Regulations.			
3.2 Harmonized Framework to Distant Water Fishing Fleet.	400	300	100
3.3 Program for Promoting Voluntary Compliance.	1200	900	300



<b>PROGRAM AND INTERVENTIONS</b>	<b>TOTAL US \$000</b>	<b>TECHNICAL ASSISTANCE</b>	<b>PROJECT PERSONNEL/ ADMINISTRATION</b>
3.4 Management MCs and Framework for Sports Fishing.	200	150	50
<b>4. HUMAN RESOURCE DEVELOPMENT AND INSTITUTIONAL STRENGTHENING</b>	<b>2,940</b>	<b>2,205</b>	<b>735</b>
4.1 Training of Fishers.	1000	750	250
4.2 Re-organizing and Strengthening Marine Institutions.	640	480	160
4.3 Skills Upgrading Especially in Research, Policy and Regulations	400	300	100
4.4 Programs for Centers of Excellence.	300	225	75
4.5 Institutional Strengthening for Effective Governance.	600	450	150
<b>5. STRENGTHENING OF FISHERS' ORGANIZATIONS AND IMPROVING COMMUNITY PARTICIPATION</b>	<b>2,120</b>	<b>1,615</b>	<b>505</b>
5.1 Fishers Cooperatives.	670	503	167
5.2 Training Program for Vessel Owners.	200	150	50
5.3 Partnerships Between Fishers' Organizations and Government.	150	112	38
5.4 Fishing Community Advocacy Groups.	200	150	50
5.5 Utilization and Management of Marine Resources.	300	225	75
5.6 Awareness About Importance of Fisheries Industry.	300	225	75
5.7 Promote Public Awareness of CRFM.	300	250	50
<b>6. PROMOTION OF THE EXPANSION AND UTILIZATION OF UNUTILIZED AND UNDERUTILIZED AQUATIC RESOURCES.</b>	<b>1,600</b>	<b>1,350</b>	<b>250</b>
6.1 Promotion of Product Development	1200	1000	200
6.2 Exploratory Studies	600	500	100
<b>7. DEVELOPMENT AND PROMOTION OF</b>	<b>5795</b>	<b>4450</b>	<b>1345</b>

**TABLE 7 – 1(Cont'd): ESTIMATED BUDGET FOR CRFM FIVE YEAR PLAN**

	<b>PERSONNEL/ STRATION</b>		
<b>AQUACULTURE</b>			
7.1 Development of Policy Framework	150	120	30
7.2 A national and Regional Technical Assistance Program	4,500	3,500	1,000
7.3 Development and Promotion of Global Environmental Standards.	250	175	75
7.3 Development of Harmonized Regulatory Framework	175	125	50
7.4 Development and Promotion.	500	350	150
7.5 Research and Development of Marine Fisheries Sub-sector Plan.	220	180	40
<b>8. DEVELOPMENT AND PROMOTION OF RISK REDUCTION PROGRAM FOR FISHERS'.</b>	<b>1550</b>	<b>1210</b>	<b>260</b>
8.1 Personal Insurance Scheme.	80	60	20
8.2 Development of Harmonized Credit Scheme.	100	75	25
8.3 Characterized Hurricanes.	250	200	20
8.4 Hurricane Preparedness	350	275	75
8.5 Educational Material	170	120	50
8.6 Promotion of Safety	300	280	20
8.7 Training Vessel Operators	250	200	50
<b>9. DEVELOPMENT AND PROMOTION OF PROGRAMS FOR CONFLICT RESOLUTION AMONG MULTI-USERS IN COASTAL ZONES.</b>	<b>615</b>	<b>500</b>	<b>115</b>
9.1 Development and Promotion of Mechanisms for Resolution of Conflict	225	170	55
9.2 Establishment of Mechanisms for Resolution of Trans-boundary Conflicts.	250	210	40
9.3 Development of Mechanisms for Conflict Avoidance and Resolution.	140	120	210
<b>TOTAL</b>	<b>24,030</b>	<b>18,466</b>	<b>5,484</b>

## 8. SOME STRENGTHS, POSSIBLE THREATS AND REQUIRED TREATMENTS

### 8.1 *Some Strengths*

CRFM and its Strategic Plan will be operating in an environment with several favorable conditions to enhance its success. Chief among them are the following:

- ❑ The establishment of a regional fisheries mechanism to manage the Region's marine resources was an implicit mandate from the Heads of Government more than ten years ago, within the context of the agreement on the establishment of the CFRAMP initiative. There is even more commitment to the concept today because of the threat that globalization could impose technical barriers to trade in fish and fish products, the dwindling yields and the threat from foreign fishers in regional waters.
- ❑ COTED has already approved the establishment of the CRFM together with its first three year indicative program and operating budget.
- ❑ The Government of Belize, the host country for the CRFM, is committed to financing the office facilities and has already made the necessary investment. The construction work is at the advanced stage of completion.
- ❑ The CRFM it will build on CFRAMP which has been a success. Besides CFRAMP now has a four year CARIFORUM-EU fully funded program in progress. Many of the interventions in this program overlap with or, are complementary to those in the CRFM Strategic Plan.
- ❑ There are already several national and regional institutions such as the Caribbean Fisheries Training and Development Institute, the Institute of Marine Affairs, the Universities within the Community and Caribbean Maritime Institute that are engaged in related capacity building programs that will be of immense benefits to the CRFM.
- ❑ All Member States have a keen interest in the mechanism because the fisheries sub-sector is strategically important to each of them, albeit in different ways. They will therefore support the CRFM. Further, the programs set out in the Strategic Plan comprise the priorities of Member States, as identified by them.
- ❑ Member countries through COTED already agreed to the formula for sharing the operating cost of the CRFM secretariat.

- ❑ The CRFM will start off with a significant level of institutional knowledge capital secured from over one decade of work carried out by CFRAMP and institutionalized at CFU.
- ❑ The membership will be broadened beyond the CARICOM Members to include other CARIFORUM countries in the Region. It will therefore have a larger resource base and large population to make more affective international representation.
- ❑ A sub-office already exists to support fisheries mechanisms in the OECS. It could be an invaluable asset for programs or sub-programs that will be implemented in the OECS sub-region.

## ***8.2 Possible Threats***

The commencement and successful operations of the CRFM face about eleven perceived threats of varying degree of importance. Some of these must be addressed as preconditions for successfully launching the CRFM. The perceived threats are:

- ❑ Trinidad and Tobago's support will depend on whether the government perceives the CRFM as a "value for money" institution and also the extent of its presence in the country. However that country's participation in the process for the development of the CRFM is a positive signal.
- ❑ The Community's commitment to counterpart financing for the Strategic Plan may be difficult to secure based on the CFRAMP's experience in its inception period, although there was subsequent improvement.
- ❑ Some segments of the stakeholders want CRFM to be a superstructure with broad based multi-disciplinary program management capacity.
- ❑ The private sector stakeholders (fishers, fishers' organizations and boat owners) are not keenly interested because they feel that there have been no mechanisms for securing their meaningful participation.
- ❑ The targeted communities are not familiar with the work of the CRFM through their national organizations. They are therefore not likely to be effective change agencies.
- ❑ Efforts to ensure a smooth transition from CFRAMP, which officially terminated in September 2001, to the CRFM, which was formally inaugurated in February 2002.

- ❑ The Region may not have the immediate competencies or may not find it technically and economically viable to spearhead all the necessary research and information dissemination tasks to give international credibility to its work or position on issues. This could undermine the cost-effectiveness of the CRFM.
- ❑ There may be an increasing number of fishing fleets in the Caribbean from the distant waters because of fishing restrictions in those jurisdictions. This will be difficult for a single small state to monitor and control. This threat could become even more significant as more CARICOM Member States establish ship Registries so that foreign ships could carry their flags. Members States are engaged in improving their Maritime administrations to better manage the ‘flag of convenience’ service but it is not clear whether there will be provisions for surveillance of the movements or activities in the regional waters.
- ❑ The new economic order/globalization directed by WTO demands strong regional or hemispheric representation. It is feared that the CRFM may not have the capacity for this global challenge.

The recommended treatments for each of the above threats are set out in the next section.

### **8.3 Comments on the Threats Recommended Strategies**

CFU should implement the following recommendations in order to adequately avoid the threats listed above that are of greater significance.

- ❑ Trinidad and Tobago’s position to support the CRFM to the extent that it is delivering value for money service and tangible benefits to the country is not an unreasonable position. This can be fulfilled through the four (4) prong model – core secretariat funding, program funding, decentralized program management in partnership with selected national or regional institutions and eligibility to benefit from programs on basis of status of contributions as follows:
  - The core functions of the secretariat should get its funding through CARICOM Secretariat.
  - The programs to be funded will be those on the Member States’ priority lists.
  - The management of the programs will be decentralized in Member States in accordance with its relevance to their national priorities, institutional capacities to implement and commitment to provide a significant portion of the counterpart financing in kind.
  - Member States’ eligibility to participate in programs will depend on whether they fulfill their required contributions to such programs.

This approach gives Member States the opportunity to co-own programs, minimize their direct contributions to a Secretariat, and contribute to co-hosting the program and contributing to programs to be eligible for benefits.

- ❑ The Community's Commitment to counterpart financing can be secured through three mechanisms. Namely:
  - Application of a contribution formula which requires all Member States to pay.
  - Ensuring that program benefits are distributed only to the eligible Member States i.e. those who are in good standing with their contributions to the core and program budgets.
  - Giving Member States the opportunity to compete for hosting programs on the basis of making significant contribution in kind to the required counterpart funding.
- ❑ The desire among some stakeholders for a broad based multi-disciplinary super structured CRFM is not feasible. It will not be cost effective; and some Member States including Trinidad and Tobago and Jamaica, who together could account for about 50% of the budget, will not fund a super structure. The CRFM organization should therefore be very lean.
- ❑ The private sector stakeholders are not likely to be responsive to efforts to mobilize their participation in any change management program because they do not believe that the environment for partnerships is sufficiently conducive. They believe that national mechanisms to encourage their participation in a range of national issues affecting the sector should be a first step. The Strategic Plan therefore provides for interventions to promote serious dialogue between fisher organizations and government. The targeted communities (fishing communities) are not familiar with the proposals of the CRFM. They are therefore reluctant to make commitment including counterpart contributions to its programs. The decentralization of the management of programs in Member States and interventions designed to promote partnerships between government and community based and fishers' organizations will help to effectively mobilize fishing community commitments.
- ❑ The start-up period for implementation of the Strategic Plan was September 2001 to coincide with the termination of the CFRAMP. Time and unforeseen delays have overtaken this target. However this Plan could still secure the necessary approvals and resource commitment in a timely manner without it being to the detriment of the CRFM. The approach below, which is built into this Plan, should therefore be used to ensure continuity.
  - The CARICOM Secretariat should secure as part of its mandate, budget support for the core functions of the CARICOM Fisheries Unit. This should be used to maintain the operation of the CFRAMP Secretariat, the CFU, until the CRFM is fully operational.

- The Government of Belize, which is hosting the CRFM, could assume payment for the facilities and related expenses before the CRFM is fully operational.
  - The personnel currently on staff could be funded by the CFU core funds and from the current CARIFORUM-EU program, which has overlapping interventions with the Strategic Plan for the next four (4) years.
- ❑ It is perceived that the Region may be too small to cost-effectively undertake some work to support it with credible analysis, decisions and position on some international issues. In addition the securing of international agreements on some issues critical to the well being of the Region may require strong collaboration with other countries as well as international agencies. The CRFM should therefore work with a network of Centers of Excellence and institutions such as OLDEPESCA, FAO/WECAFC, CITES and ICCAT.
  - ❑ The threat of increasing distant waters fishing fleet in the Region is real. The CRFM should seek a mandate to monitor this situation and represent the Region on the matter. Further, in view of the fact that Member States are establishing ship registries and maritime administrations; the CRFM will need to include them as integral stakeholders. It will have to secure Memoranda of Understanding with Member States to set out the arrangements for their collaborative working relationships. It will also have to facilitate the development and adaptation of a harmonized approach to the management of distant water fishing fleets.
  - ❑ The new economic order/globalization directed by WTO demands strong regional and hemispheric representation. The CRFM should be implemented as the indispensable regional fisheries institution to represent the Region on related globalization issues. It should work in alliance with a network of international institutions and Centers of Excellence to be optimally effective.

The above recommended strategies for treating these threats are all practical and acceptable to Member States. The threats to the start-up of CRFM are therefore quite manageable and should only be regarded as temporary challenges.

## **9. REQUIRED START-UP PLAN**

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### ***9.1 Required Start-up Activities***

The next set of outputs desired from this initiative are: a consensus on the program and implementation strategies, a plan of action, the list of projects, developed project profiles, promotion of project profiles among targeted donors, engagement of core staff, securing Member States counterpart resource commitment, securing technical cooperation agreements, final appraisal and design of the interventions, and implementation. These outputs will require the twelve (12) work steps set out below.

<b>TASK – 1</b>	<b>SECURE MEMBER STATES' GENERAL ENDORSEMENT OF THE STRATEGIC PLAN</b>
<b>TASK – 2</b>	<b>FINALIZE A PLAN OF ACTION.</b>
<b>TASK – 3</b>	<b>DEVELOP A MEDIUM TERM PLAN WITH PROJECT PROFILES.</b>
<b>TASK - 4</b>	<b>PROMOTION OF THE CRFM WITHIN THE REGION AS WELL AS INTERNATIONALLY</b>
<b>TASK – 5</b>	<b>PROMOTE PROJECTS AMONG TARGETED FINANCIERS</b>
<b>TASK - 6</b>	<b>DEVELOP A MANAGEMENT PLAN</b>
<b>TASK - 7</b>	<b>SECURE COUNTERPART RESOURCE COMMITMENTS</b>
<b>TASK – 8</b>	<b>ENGAGE CORE STAFF</b>
<b>TASK - 9</b>	<b>HOST DONORS MEETINGS</b>
<b>TASK – 10</b>	<b>SECURE TECHNICAL COOPERATION AGREEMENTS</b>
<b>TASK – 11</b>	<b>EXECUTE TECHNICAL APPRAISALS, FINAL DESIGN OF INTERVENTIONS, AND APPROVE FUNDING.</b>
<b>TASK – 12</b>	<b>LAUNCH FULL IMPLEMENTATION</b>



An annotation of each of the twelve tasks follows:

**TASK – 1      SECURE MEMBER STATES' ENDORSEMENT OF THE STRATEGIC PLAN**

The CARICOM Secretariat will facilitate a final review session with the selected representatives of Member States to secure the general endorsement of the Plan at a regional workshop, likely in St Vincent and the Grenadines or Trinidad and Tobago, during the first quarter of 2003.

**TASK – 2      DEVELOP A PLAN OF ACTION.**

The special workshop will also develop a Plan of Action to accelerate implementation of the Strategic Plan with minimum constraints.

**TASK – 3      FINALIZE MEDIUM TERM PLAN AND PROJECT PROFILES.**

It is estimated that about fifteen priority interventions will be required for the nine (9) programs in the Medium Term Plan. The CFU has already engaged the consultants to develop them as part of the preparatory work for promoting them among financiers/donors. These interventions were reviewed and amended following the Member States review meeting held in St. Vincent and the Grenadines in January 2002, as well as the Working Group Meetings of Tobago and St Vincent and the Grenadines of April and June 2002, respectively.

**TASK- 4      PROMOTION OF THE CRFM WITHIN THE REGION AS WELL AS INTERNATIONALLY**

The effectiveness of the CRFM will depend, in large measure, upon the extent to which participating Members, Associate Members and Observers forge strong linkages and undertake cooperative actions towards the achievement of the objectives of the CRFM. In this regard a concerted effort to promote the CRFM to all stakeholders, at the inception, will enhance the prospects of the Mechanism becoming a very effective arrangement promotion of the sustainable development of the fisheries and other aquatic resources of the region. This promotional activity should be multifaceted, targeting all the major stakeholders, in view of the co-management philosophy.

#### **TASK – 5      PROMOTE PROJECTS AMONG TARGETED FINANCIERS.**

CFU hopes to host a donors meeting to mobilize interests in the projects. A great deal of preparatory work should be undertaken prior to the meeting. The work should involve one-to-one presentations to the agencies, securing indicative areas of interests from them, and working with Member Governments to promote the projects among local interest groups as well to the donor agencies that are resident in their respective countries. The target agencies should include: The European Union, CIDA, CDB, Commonwealth Secretariat, IDRC, IDB, USAID, UNDP, and FAO.

#### **TASK - 6              DEVELOP A MANAGEMENT PLAN**

The Member States review meeting held in St. Vincent and the Grenadines January 2002, recommended that CFU prepare a management plan immediately. This management Plan will set out the operational activities and timetable for implementing the Plan Strategic Plan.

#### **TASK – 7      SECURE COUNTERPART RESOURCE COMMITMENTS**

Member States counterpart support mostly in-kind will be required for the interventions. These could account for about 20% of the required financial inputs. CFU will be required to design a program for Member States institutional participation.

#### **TASK – 8      ENGAGE CORE STAFF.**

The CFU having received Member States Commitment should proceed to establish a functional CRFM with a core staff to provide technical and administrative leadership to the organization and its strategic program and planned interventions. It will be required to follow the procedure set out in the framework document and the Policies and Practice Manual for recruiting all members of staff.

#### **TASK – 9      HOST DONORS MEETING.**

A donors meeting should be held in the Eastern Caribbean where most of the Member States are, to discuss the Plan and the interventions and secure final donors interests in them. The donors who will be invited and mobilized are those listed in task – 5.

#### **TASK – 10    SECURE TECHNICAL COOPERATION AGREEMENTS**

The CFU, having received commitments from Member Governments and indicative support from interested donors, should proceed to develop and establish Technical Co-operations Agreements.

#### **TASK – 11    EXECUTE TECHNICAL APPRAISALS AND FINAL DESIGNS OF INTERVENTIONS AND APPROVE FUNDING.**

The committed donors will need to develop the projects.    CFU should work with Member States to facilitate the execution of this task.

#### **TASK – 12            LAUNCH FULL IMPLEMENTATION**

CRFM, CARICOM Secretariat and the donors should jointly launch the implementation of the programs.

### **9.2 Recommended Timetable**

This twelve (12) task follow-up work plan will have to be implemented during the first half of 2003. The Special Workshop meeting will determine the timetable. However an indicative schedule is presented below and can be used as a guide by the meeting.

Exhibit 9-1:

Recommended Indicative Timetable for Executing Follow-up Activities for Launching the Strategic Plan for the CRFM.

### Months/Week 2003

Dec.	Jan				Feb.				March				April				May				June				July				Aug				Sept				October				Nov.			
TASKS	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
1. Secure Member States General Endorsement of the Strategic Plan																																												
2. Finalize a Plan of Action																																												
3. Finalize a Medium Term Plan with a Plan of Action.																																												
4.Promote the CRFM																																												
5. Promote Projects Among Targeted Financiers.																																												
6. Develop A Manage-ment Plan																																												
7. Secure Counterpart Resources																																												
8. Engage Core Staff.																																												

TASKS	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
9.Host Donors Meetings																																								
10. Secure Technical Cooperation Agreement s																																								
11. Execute Technical Appraisals, Final Designs of Interventions and Approve Funding.																																								
12. Launch Full Implement -ation																																								