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The UNEP Regional Seas Programme: A Critical Analysis of Programme Evaluation Capacity

Shannon M. Christie

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Faculty of Graduate and Postdoctoral Studies
In partial fulfillment of the requirements
For the MA Degree in Geography

Department of Geography
Faculty of Arts
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ABSTRACT

The United Nations Environment Programme's Regional Seas Programme (RSP) is one of many international regimes for the protection and management of the marine and coastal environment. However, the literature suggests that this programme has, above others, attracted numerous accolades. Notably, the RSP has been referred to as "the jewel in UNEP's crown". Absent from this literature is evaluation based evidence to corroborate such declarations.

The complexity of the evaluation science literature necessitates the creation of a three-part Model of Evaluation Science to capture recurring themes and concerns. The first part presents a typology of evaluation forms. The second part details the generic steps involved in the policy and programme evaluation process. The third part decants a set of key barriers and challenges to conducting evaluation.

The Model is tested through a diagnostic field study in the case study of the Caribbean RSP. Evidence obtained from Content Analysis of the literature and Key Informant Interviews with strategically-placed personnel at the Caribbean Regional Coordinating Unit, indicates that capacity does not exist to evaluate the RSP's impacts on the state of the environment. As such, the Model is used to examine the state of programme evaluation capacity. Data obtained from the Interviews is presented as a set of "actual" capacity conditions, contrasted with the ideal or "expected" conditions provided by the tenets of the Model. Finally, the thesis concludes by passing judgment on the "jewel in the crown" declaration, and presents a set of recommendations to strengthen evaluation capacity in the Wider Caribbean Region.

RÉSUMÉ

Le programme des mers régionales (PMR) du Programme de l'Environnement des Nations Unies est un des nombreux régimes internationaux pour la protection et la gestion de l'environnement marin et côtier. Cependant, la littérature suggère que ce programme a recueilli, plus que d'autres, de nombreux qualificatifs. Il est notamment, désigné sous le nom de "bijou de la couronne de PNUE". Absent de cette littérature est l'évidence basée par évaluation pour corroborer de telles déclarations.

La complexité de la littérature d'évaluation rend nécessaire la création d'un modèle d'évaluation en trois parties pour identifier les thèmes et préoccupations récurrents. La première partie présente une typologie des formulaires d'évaluation. La deuxième partie détaille les étapes spécifiques utilisées dans le processus de évaluation du programme de politique, et la troisième partie rassemble les principaux défis et barrières à la conduite de l'évaluation.

Le modèle est examiné par une étude diagnostique sur le terrain du PMR des Caraïbes. Les évidences obtenues à partir de l'analyse du contenu de la littérature ainsi que des entrevues d'informateurs-clef avec le personnel stratégiquement placé de l'Unité Régionale de Coordination des Caraïbes, indiquent que la capacité d'évaluation pour évaluer les impacts du PMR sur l'état de l'environnement n'existe pas. De sorte que le modèle est employé pour examiner l'état de capacité de évaluation du programme. Les données obtenues à partir des entrevues sont présentées comme un ensemble d'états "réels" de capacité, par opposition avec les conditions idéales ou "anticipées" selon les principes du modèle. En conclusion, la thèse porte un jugement sur "le bijou de la couronne", et présente un ensemble de recommandations pour renforcer la capacité d'évaluation dans la grande région des Caraïbes.

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LIST OF ACRONYMS

- AMEP – Assessment and Management of Environmental Pollution
- ARQ (s) – Associated Research Question (s)
- CaMPAM – Marine Protected Areas Managers’ Network
- CAR/RCU – Regional Co-ordinating Unit for the Caribbean Environment Programme
- CARSEA – Caribbean Millennium Sea Assessment
- CBD – Convention on Biological Diversity
- CCAMLR – Convention on the Conservation of Antarctic Marine Living Resources
- CCMP – Comprehensive Conservation and Management Plan
- CEP – Caribbean Environment Programme
- CEPNET – Information Systems for the Management of Marine and Coastal Resources
- CIDA – Canadian International Development Agency
- CIMAB – Land-Based Sources and Activities Regional Activity Centre: Centro de Ingeniería y Manejo Ambiental de Bahías y Costas
- CITES – Convention on International Trade in Endangered Species of Wild Fauna and Flora
- COP – Conference of (Contracting) Parties
- CRQ – Central Research Question
- CTF – Caribbean Trust Fund
- CZM – Coastal Zone Management
- CZMA – Coastal Zone Management Act (United States)
- DEC – Division of Environmental Conventions
- EA – Environmental Assessment
- ECLA – Economic Commission for Latin America
- ECLAC – Economic Commission for Latin America and the Caribbean
- EIA – Environmental Impact Assessment
- EM – Environmental Management
- EPA – Environmental Protection Agency (United States)

- EPE – Environmental Performance Evaluation
- ES – Education and Support Activities
- EESD - Environmental Education for Sustainable Development
- ETA – Education, Training and Awareness
- FA – Financial Arrangements
- FP – Focal Point
- GCRMN – Global Coral Reef Monitoring Network
- GDP – Gross Domestic Product
- GEF – Global Environment Facility
- GEO – Global Environment Outlook
- GIPME – Global Investigation of Pollution of the Marine Environment
- GIWA – Global International Waters Assessment
- GOOS – Global Ocean Observation System
- GPA – Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities
- HELCOM – Helsinki Commission (Baltic Marine Environment Protection Commission)
- IA – Institutional Arrangements
- IAT – Institutional Analysis Template
- ICM – Integrated Coastal Management
- ICRAN – International Coral Reef Action Network
- ICRI – International Coral Reef Initiative
- IDRC – International Development Research Centre (Canada)
- IGM – Intergovernmental Meeting
- IMA – Land-Based Sources and Activities Regional Activity Centre: Institute of Marine Affairs
- IMO – International Maritime Organization
- ISO – International Standards Organization
- ISTAC – Interim Scientific and Technical Advisory Committee
- IUCN – World Conservation Union

- LA – Legal Arrangements
- LBS – Land-Based Sources and Activities (of Pollution)
- LBS/RAC – Land-Based Sources and Activities Regional Activity Centre
- MAP – Mediterranean Action Plan
- MEDPOL – Co-ordinated Mediterranean Pollution Monitoring and Research Programme
- MON COM – Monitoring Committee
- MOU – Memorandum of Understanding
- MPA – Marine Protected Area
- NEP – National Estuary Program (United States)
- NI – National Institution
- NPA – National Programme of Action for the Protection of the Marine Environment from Land-Based Activities
- OAS – Organization of American States
- OCA/PAC – Oceans and Coastal Programme Activity Centre
- OECS – Organization of Eastern Caribbean States
- OSPAR (Convention) – The Convention for the Protection of the Marine Environment of the North-East Atlantic
- PAME – Protection of the Arctic Marine Environment
- PAP/RAC – Priority Actions Programme / Regional Activity Centre (Mediterranean)
- POPs – Persistent Organic Pollutants
- RAC – Regional Activity Centre
- RAC-REMPEITC/Carib – Regional Marine Pollution Emergency, Information and Training Centre
- RAN – Regional Activity Network
- REB – Research Ethics Board
- RFMO – Regional Fisheries Management Organizations
- RI – Regional Institution
- ROLAC – Regional Office for Latin America and the Caribbean
- RSP – Regional Seas Programme

- SIDA – Swedish International Development Agency
- SIDS – Small Island Developing States
- SIDS-POA – Barbados Programme of Action for Small Island Developing States
- SIWIN – Small Island Water Information Network
- SPAW – Specially Protected Areas and Wildlife
- SPAW-RAC - Regional Activity Centre for the Regional Programme of Specially Protected Areas and Wildlife
- SRI – Subregional Institution
- STAC – Scientific and Technical Advisory Committee
- TOR – Terms of Reference
- UN – United Nations
- UNCED – United Nations Conference on Environment and Development
- UNCHE – United Nations Conference on the Human Environment (Stockholm, 1972)
- UNCLOS – United Nations Convention on the Law of the Sea
- UNEP – United Nations Environment Programme
- UNEP EOU – United Nations Environment Programme Evaluation and Oversight Unit
- UNGA – United Nations General Assembly
- US(A) – United States (of America)
- WCR – Wider Caribbean Region
- WCED – World Commission on Environment and Development
- WISA – West Indies Associated States
- WSSD – World Summit on Sustainable Development (Johannesburg, 2002)
- WW2BW – White Water to Blue Water Initiative

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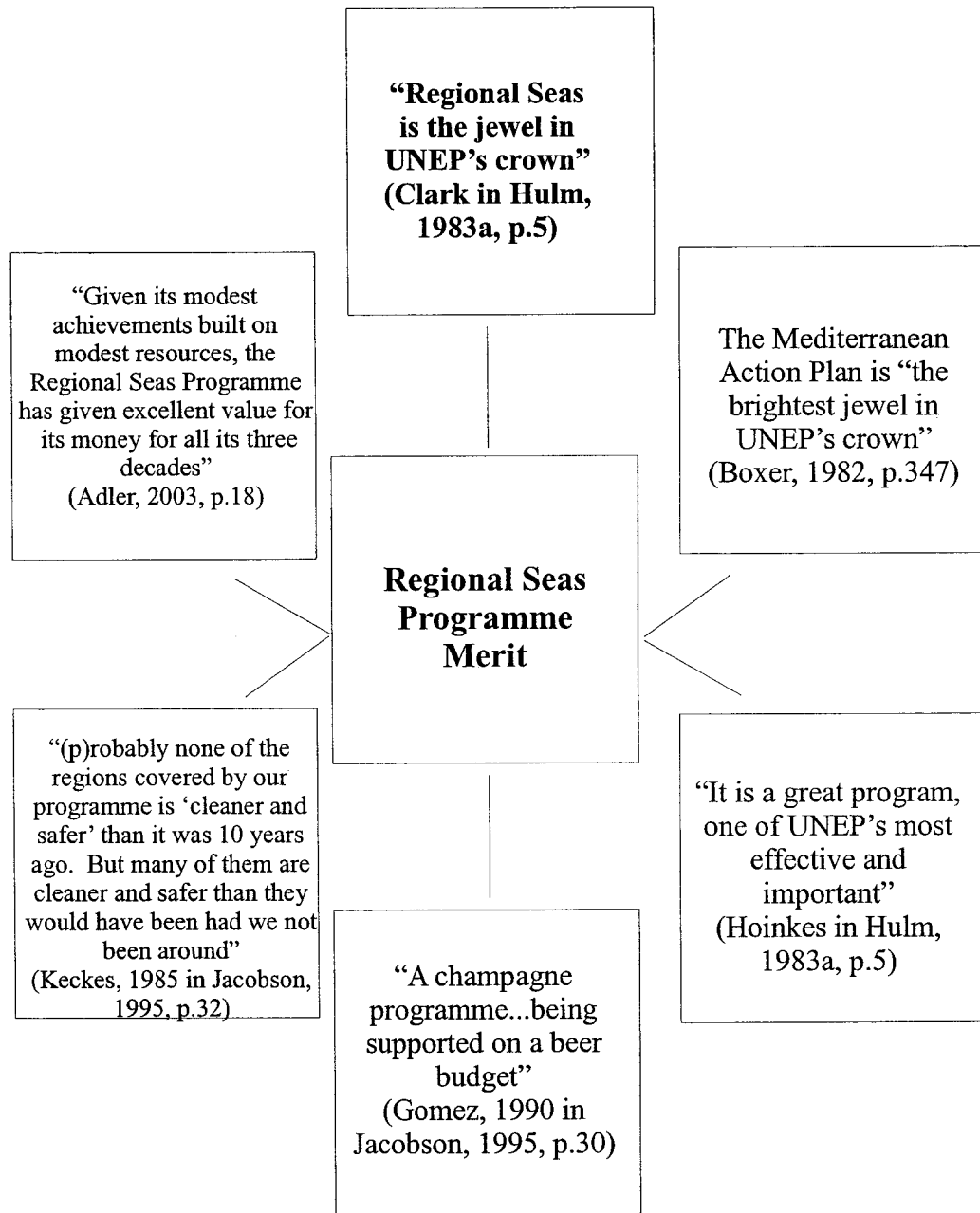
CHAPTER 1: INTRODUCTION AND PURPOSE

THE CLAIM

In 1983, a strong declaration was presented in a respected academic journal, explicitly stating that the Regional Seas Programme (RSP) is “the jewel in the crown” of the United Nations Environment Programme (UNEP) (Hulm, 1983a). An examination of relevant literature has indicated that this is not an isolated claim, as many other authors have made similar assertions of RSP merit over the life cycle of the programme (Figure 1.1). However, the literature has systematically failed to provide any corroborating evidence for these declarations based on fulfillment of the programme’s cardinal goals of marine pollution control and improvement of the coastal and marine environment. Several questions arise from these justification voids, and these questions serve as the research motivation. A review of the literature notes that, across the Regional Seas, inadequate environmental assessment, monitoring, and associated environmental data prohibits the evaluation of programme results in terms of measurable marine and coastal environmental change (Jacobson, 1995). As each regional programme is structured around six common “building blocks” of “Environmental Assessment”, “Environmental Management”, “Legal Arrangements”, “Institutional Arrangements”, “Financial Arrangements” and “Education and Support Activities”, the above finding is cause for alarm. What is – or is not – being done under the identified, programme-wide, Action Plan components to suggest such glaring voids in programme evaluation capacity? It must thus be questioned if the capacity for programme evaluation exists within the Regional Seas Programme framework. If this evaluation capacity is weak, what, if any, faith can be placed in RSP evaluations completed by assessors internal or external to the programme? This leads directly to the Central

Evaluation?

Evaluation?



Evaluation?

Evaluation?

Figure 1.1: Declarations of Programme Merit and the Research Justification

Research Question (CRQ): **Does evidence exist to support the contention that the Regional Seas Programme is indeed the “jewel in UNEP’s crown”?** To address this question, the research approach is focused on the six Regional Seas Programme Action Plan components (Table 1.1), which represent the major areas of capacity building in each regional programme. Associated Research Questions (ARQs) are formulated around each of these components to help ascertain programme capacity for environmental planning and management, and programme capacity for evaluation. Their purpose is to break the CRQ into more manageable tasks. The ARQs are: **What primary goals and objectives have been defined from each Action Plan component? What criteria are currently being used to measure capacity building progress? and What evaluation infrastructure supports the use of these criteria?** (Figure 4.2). The data and information requirements are related to “**component goals and objectives**”, “**evaluation criteria**” and “**evaluation infrastructure**”. The term “**component goals and objectives**” highlights the fact that an efficient evaluation cannot attempt to measure progress in all areas. Such an endeavor may lead to a long and expensive evaluation process that does not yield the most important results. It is hypothesized by the researcher that progress toward primary goals is a better indication of programme success than is the achievement of minor goals. In this context, the primary goal of the “Environmental Assessment” component, for example, may be defined as “the collection of coastal water quality data”. Evaluation criteria under this primary goal could focus on the levels of certain contaminants in the water, or the number of recreational beach closures per year. Fulfillment of this primary goal over time would allow for the establishment of baseline conditions and would facilitate the measurement of positive or negative change in the environment. It is suggested, therefore, that the definition of primary

Component	Function	Activities
ENVIRONMENTAL ASSESSMENT (EA)	Diagnostic element concerned with assessment and evaluation of causes, magnitude and consequences of environmental problems.	▪ Baseline studies ▪ Pollution monitoring ▪ Regional Science Network
ENVIRONMENTAL MANAGEMENT (EM)	Diagnostic element concerned with the capacity of management programmes and structures.	▪ Environmental Impact Assessment (EIA) ▪ Ecosystem management ▪ Pollution control ▪ Contingency planning
LEGAL ARRANGEMENTS (LA)	Prescriptive element concerned with the development of the legal structure of the RSP and supporting domestic legislation.	▪ Regional Convention and Protocols ▪ Supporting National Laws (ex. EIA)
INSTITUTIONAL ARRANGEMENTS (IA)	Prescriptive element concerned with the implementation of the Action Plan and related laws.	▪ Action Plan Secretariat ▪ National Focal Points ▪ Institutional Network ▪ Intergovernmental Meetings
FINANCIAL ARRANGEMENTS (FA)	Prescriptive element concerned with financial capacity and funding levels.	▪ UNEP's "seed money" ▪ Regional Trust Funds ▪ UN and other organization, donor and participating state contributions
EDUCATIONAL AND SUPPORT ACTIVITIES (ES)	Diagnostic and prescriptive element concerned with training and public education and awareness.	▪ Public Workshops ▪ Youth Education Initiatives ▪ Media – Information Sharing

Table 1.1: The Key Action Plan Components

Adapted with Modifications from UNEP, 1984b; Haas, 1991; Jacobson, 1995.

goals be a priority action for programme administrators. The definition of primary goals allows suitable measures of progress toward these goals to be derived. The term “**evaluation criteria**” is specifically related to the Action Plan components and their development. In essence, this research seeks hard evidence that the RSP has well-defined and justified criteria to measure capacity building progress. For example, in the context of the “Environmental Assessment” component, a criterion may be “national participation in a regional science and laboratories network”. In the context of the “Legal Arrangements” component, a criterion may be “national legislation supporting environmental impact assessment (EIA)”. The term “**evaluation infrastructure**” is specifically related to the human, technological, and other programme resources allocated to support sustainable criteria measurement. For example, in the context of the “Financial Arrangements” component and its attached criteria, hard evidence may exist of periodic and systematic national and regional Trust Fund accounting and/or auditing. In the context of the “Education and Support Activities” component and its associated criteria, hard evidence may exist of regional training programmes in EIA or regional workshops on enhancing citizens’ environmental education.

THE CONTEXT

The oceans and coastal domain is closely linked to a myriad of processes and mechanisms directing the known world order, including economic development, military and food security, cultural heritage, and global climate control (UNEP, 1982a; Charnock, 1984; Mensah, 1984; Joyner, 2000; Valencia, 2000). In addition, political or administrative boundaries do not apply to fish, pollution, currents or winds (Borgese, 1986). As such,

virtually every aspect of human use of the world's oceans and coasts is governed under global or regional-level international law. Transcending the many issue-oriented agreements is the broad, global-scale United Nations Convention on the Law of the Sea (UNCLOS), an umbrella agreement providing comprehensive governance of international straits, peaceful uses of the oceans, coastal jurisdiction, marine scientific research, uses of the deep seabed, marine environmental protection, and the high seas (Joyner, 2000). The Regional Seas Programme is but one international regime in existence for the control of marine pollution (Figure 1.2). In fact, the Regional Seas Programme often acts as the vehicle by which international agreements and initiatives are implemented on the regional and national scales (Dight and Scherl, 1997). However, the literature review suggests that the RSP is the one regime attracting sustained and explicit declarations of merit and value. This serves as further motivation to find corroborating evidence for these claims.

THE SUBJECT

The 1972 United Nations Conference on the Human Environment (UNCHE) at Stockholm served as a major catalyst for action in the domain of the global marine environment. A result of increasing environmental concern and awareness during the previous decade, the Stockholm Conference reflected international recognition of the need for global co-operation in addressing environmental problems (Mensah, 1984). UNCHE championed the notion that “the marine environment and all the living organisms which it supports are of vital importance to humanity” and recognized that “proper management is required and measures to prevent and control marine pollution must be regarded as an essential element in this management” (UNEP, 1982a, p.2). “Marine pollution” was



defined by UNCHE as:

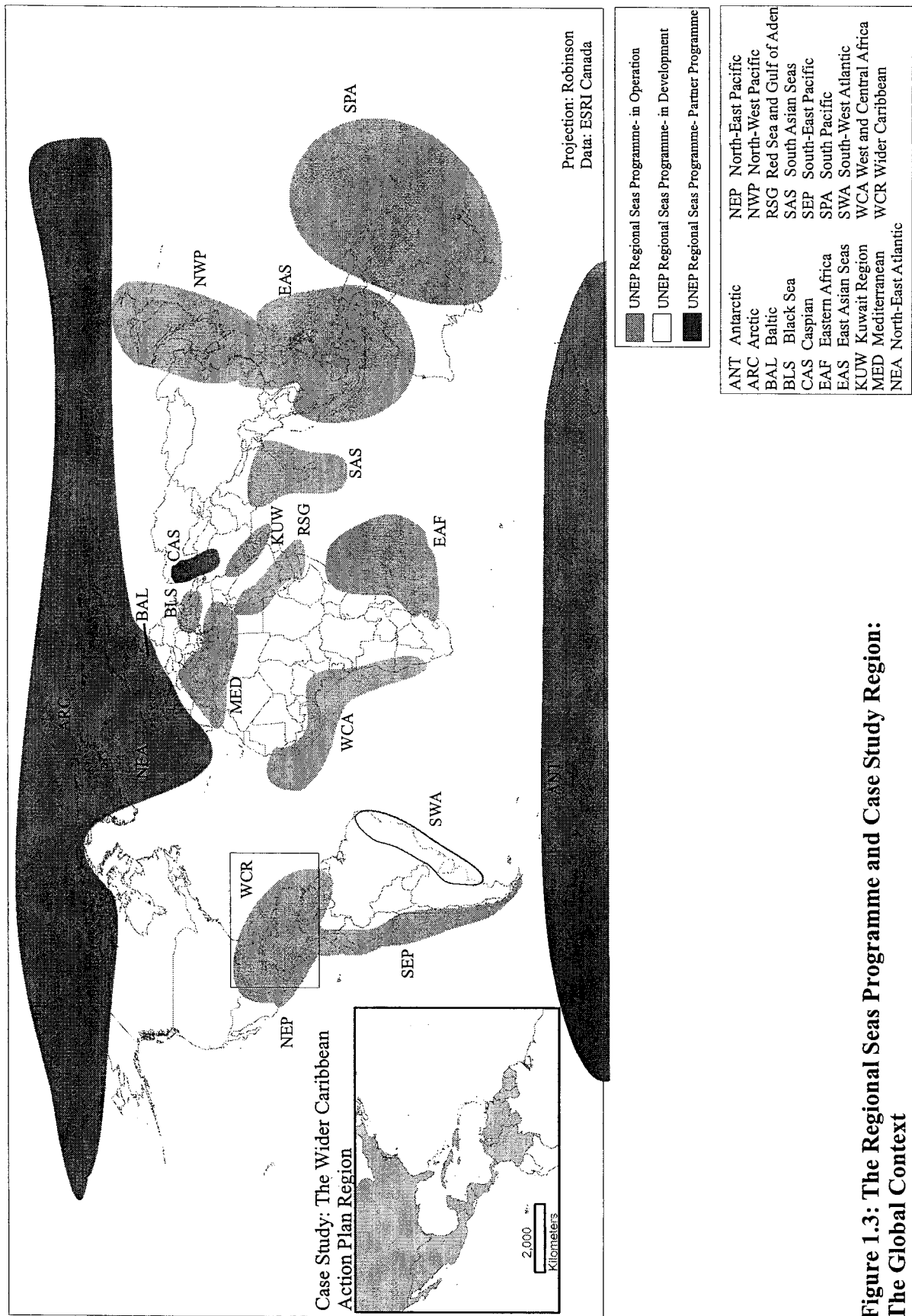
“the introduction by man (*sic*), directly or indirectly, of substances or energy into the marine environment (including estuaries) resulting in such deleterious effects as harm to living resources, hazards to human health, hindrance to marine activities including fishing, impairment of quality for use of sea water, and reduction of amenities” (UNEP, 1983a, p.i).

UNCHE stressed the notion of management and “rational use” of the marine environment, a marked shift from the earlier paradigm desiring the oceans to be preserved without change (UNEP, 1982a; Jedyneck-Copley, 1991). In addition, the Conference recommended that governments “adopt effective national measures for the control of significant sources of marine pollution, including land-based sources, and concert and co-ordinate their actions regionally and appropriate on a wider international basis” (UNEP, 1982a, p.2).

In response to Stockholm Conference recommendations, the United Nations General Assembly (UNGA) established the United Nations Environment Programme (UNEP). It was to “serve as a focal point for environmental action and co-ordination within the United Nations system” (General Assembly Resolution (XXVII) of 15 December 1972), and to execute a “catalytic and co-ordinating role” with respect to international environmental action (UNEP, 1982a; Hulm, 1983a; Jedyneck-Copley, 1991). At the first session of UNEP’s Governing Council, the “oceans” theme was set as one of six priority areas for action (UNEP, 1982a; Hulm, 1983c; Jedyneck-Copley, 1991; Verlaan and Khan, 1996). UNEP endorsed the use of regional approaches in its earliest activities, and stressed the need for the development of “Action Plans” for ocean management in areas without such mechanisms (UNEP, 1982a; Hulm, 1983c; UNEP 1984a; Vallega, 1994; Meith, 2000).

These urgings led to the initiation of UNEP's Regional Seas Programme in 1974. The RSP was established with knowledge that the most urgent problems of marine pollution were concentrated in coastal or geographically enclosed waters and not the open ocean (UNEP, 1982a; Wakefield, 1982; Hulm, 1983a; Haas, 1991; Akiwumi and Melvasalo, 1998; Meith, 2000). It was "conceived as an action oriented programme encompassing a comprehensive, transsectoral approach to marine and coastal areas and to environmental problems concerning not only the consequences, but also the causes of environmental degradation" (UNEP, 1982a, p.2; UNEP, 1984a, p.i; UNEP qtd. in Haas, 1991, p.197; Jedynack-Copley, 1991, p.6; Vallega, 1994, p.19; Akiwumi and Melvasalo, 1998). Thus, the Regional Seas Programme adopted and expanded the approach of the 1974 Helsinki Convention for the Protection of the Marine Environment of the Baltic Sea Area, which is widely recognized as being the first Convention to encompass all sources of pollution around a common sea area (Johnson, 1976; Hulm, 1983a; Needham and Jedynack-Copley, 1989; HELCOM, 2005).

Under the Regional Seas Programme, UNEP acts at the invitation of a region's governments to catalyze action to protect the marine and coastal environment by mobilizing and supplementing regional scientific and technical expertise and providing funds for the initiation of action, with the expectation that the regions' Governments will later assume financial responsibility for the programmes (UNEP, 1982a; Hulm, 1983c; Verlaan and Khan, 1996). The RSP currently encompasses more than 140 nations in 13 regional programmes, 1 region in which a programme is in development, and 5 partner programmes developed externally to UNEP in the Arctic, Antarctic, North Atlantic, Baltic and Caspian Sea regions (Adler, 2003; UNEP-RSP, No Date; Figure 1.3; Table 1.2). The RSP acts to unify otherwise non co-operating states, such as the United States and Cuba in the Wider



**Figure 1.3: The Regional Seas Programme and Case Study Region:
The Global Context**

Region	Year Convention Adopted	Entry into Force	Year Action Plan Adopted	Number of Participating (in Action Plan)	Protocols- Year of Adoption (Number)
Black Sea	1992	1994	1996	6	1992(3)
East Asian Seas	-	-	1981	10	-
Eastern Africa	1985	1996	1985	10	1985(2)*
Kuwait	1978	1979	1978	8	1978(1), 1989(1), 1990(1), 1998(1)*
Mediterranean	1976 (Revised in 1995)	1978 (Revision not yet in force)	1975	22	1976(2): (1) Revised 1995*; 1980(1): Amended 1996*; 1982(1): Revised 1995*; 1994(1)*, 1996(1)*
North-West Pacific	-	-	1994	5	-
North-East Pacific	2002	-	2002	8	-
Red Sea and Gulf of Aden	1982	1985	1982	7**	1985(1)
South Asian Seas	-	-	1995	5	-
South Pacific	1986	1990	1982	19	1986(2)
South-East Pacific	1981	1986	1981	5	1981(1), 1983(2), 1989(2), 1992(1)*
West and Central Africa	1981	1984	1981	21	1981(1)
Wider Caribbean	1983	1986	1981	28	1983(1), 1990(1), 1999(1)*
South-West Atlantic	-	-	-	3	-

*Protocol not yet in force **Palestine is sometimes listed as a participant

Table 1.2: Current Status of the Regional Seas Programmes

Adapted with Modifications from Vallega, 2001, p.412; UNEP-RSP, No Date.

Caribbean Region, and Iran and Iraq in the Kuwait Region, illustrating that shared environmental concerns can transcend entrenched political and ideological feuds (Hulm, 1983a; Keckes in Hulm, 1983b and Jacobson, 1995; Meith, 2000).

UNEP uses a common strategy in each region to address both the causes and consequences of marine and coastal environmental damage. It consists of the development, adoption and implementation of an **Action Plan**, a legally binding regional **Convention** and any number of specific, legally binding technical **Protocols**. In addition, there is the strengthening of existing, and the establishment of new, supporting institutional and financial arrangements – the building of planning and management capacity (Hulm, 1983c; Akiwumi and Melvasalo, 1998; Meith, 2000). The RSP seeks to strengthen existing national institutions rather than creating new ones (Keckes in Hulm, 1983b and Jacobson, 1995). This strategy employs the identification of **Focal Points** (FPs). These are officials appointed by member countries of a region to be responsible for the co-ordination of Action Plan activities at the national level (UNEP, 1983b; MAP, No Date). **National Institutions** (NIs) are appointed by member countries to provide the institutional basis for, and to act as primary executors of, specific activities in the Action Plan (UNEP, 1983b, p.11). NIs combine with **Regional Institutions** (RIs) and **Subregional Institutions** (SRIs) to create a regional institutional network (UNEP, 1983b). Action Plans serve as blueprints for a regional strategy and programme focused on the protection of a common body of water – or, a “regional sea” (Adler, 2003). Action Plans are drafted by UNEP at the request of, and in conjunction with, the governments of a region, and are subsequently adopted via regional intergovernmental meetings (UNEP, 1982b). Action Plans are tailored to each region’s own environmental, political and socio-economic challenges (Meith, 2000; Adler, 2003). In most

cases, the Action Plan is supported by a strong legal framework, consisting of a broad yet binding regional Convention and associated, problem-specific Protocols (Adler, 2003). Each Action Plan usually consists of a number of interdependent, diagnostic and prescriptive components – **Environmental Assessment, Environmental Management, Legal Arrangements, Institutional Arrangements, Financial Arrangements and Educational and Support Activities** (Table 1.1). The components represent strategically important areas of capacity building. In this context, “capacity building” refers broadly to the “tools in the toolbox”. More specifically, capacity building is the accumulated human, financial, legal, political, technological, and informational resources in the arsenal of programme managers to plan, initiate, and execute actions and evaluate the results. In essence, the RSP attempts to develop both national and regional capacity under each of these Action Plan components. Much diagnostic and prescriptive work is done within the Action Plans, Conventions and Protocols to enrich national and regional capacity to address marine and coastal problems.

While the United Nations Conference on the Human Environment may be viewed as a catalyst for movement toward international political consensus in coping with global environmental problems (Strong, 1972), it cannot be viewed in isolation. In 1987, the World Commission on Environment and Development (WCED) produced the famous document *Our Common Future* (“The Brundtland Report”). Widely recognized as the document that introduced to the global community the term “sustainable development” – development that “meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987, p.8), *Our Common Future* recommended that the UNGA “...prepare a universal declaration and a convention on environmental protection and sustainable development” (Haas, Levy, and Parson, 1992,

p.8). Formal preparations began in 1989 for the United Nations Conference on Environment and Development (UNCED), the purpose of which was to “elaborate strategies and measures to halt and reverse the effects of environmental degradation in the context of increased national and international efforts to promote sustainable and environmentally sound development in all countries” (UNGA Resolution 44/228, qtd. in Haas, Levy, and Parson, 1992, p.8). In June 1992, the twentieth anniversary of the Stockholm Conference, UNCED (“The Earth Summit”) was held in Rio de Janeiro, Brazil. The international environmental agenda was again amended ten years later, when in August 2002 the World Summit on Sustainable Development (WSSD) was convened in Johannesburg, South Africa. In addition to revitalizing international environmental interest and action, these Conferences resulted in several initiatives and agreements related to the marine and coastal environment, many with implications for the RSP (Adler, 2003). These will be discussed in the body of the thesis.

THE STUDY AREA

It is not feasible to attempt an analysis of evaluation capacity in each of the thirteen regional programmes and five independent partner programmes encompassing the RSP. A case study region was thus selected in the early stages of research. The use of a case study region serves to make the research task manageable. It must be noted that the results obtained from the application of the case studies approach cannot be generalized to populations or universes (Yin, 2003). In this context, the results from the case study region cannot be used to draw conclusions about the entire RSP. However, it is the intent of this research to develop and test a Generic Model of Evaluation Science and a Template of

Evaluation Science Attributes to gauge programme evaluation capacity in the context of the case study region. These devices may be transferred to other regions for similar evaluation capacity analyses.

The case study region is the Wider Caribbean Region (WCR), defined in the Action Plan as “...the insular and coastal States and Territories of the Caribbean Seas and the Gulf of Mexico, including the Bahamas, Guyana, Suriname and the French Department of Guiana, as well as the waters of the Atlantic Ocean adjacent to these States and Territories” (UNEP, 1983b, p.1). The WCR was selected as the case study region for several reasons, which are comprehensively discussed in Chapters 4 and 5.

THE PROBLEM AND THE NEED: THE STATUS OF PROGRAMME EVALUATION

As there is no single, universally accepted definition of “evaluation”, the literature presents a myriad of possible definitions for the concept (Suchman, 1967; Hoole, 1978). Each of these definitions encompasses the notion of “judging merit” (Weiss, 1972). One such definition is found to summarize the key tenets of evaluation:

“the determination (whether based on opinions, records, subjective or objective data) of the results (whether desirable or undesirable; transient or permanent; immediate or delayed) attained by some activity (whether a program, or part of a program, a drug or therapy, an ongoing or short approach) designed to accomplish some valued goal or objective (whether ultimate, intermediate, or immediate, effort or performance, long or short range)” (Suchman, 1967, pp.31-32).

In short, “evaluation is primarily about trying to figure out how successful a policy (or programme) has been, whether it met its objectives, how far it fell short, and what might be

done to improve its impact” (Pal, 2001, p. 275, parenthesis added). Programme evaluation is thus identified as a tool to promote management transparency and accountability. It is identified as a decision-making aid focused on programme improvement, rather than a fault-finding mission (UNEP EOU, 2003a). As budgets tighten and increasingly educated publics demand accountability, the importance of and need for programme evaluation escalates (Suchman, 1967; Rutman, 1984). The need for programme evaluation thus transcends all public policy jurisdictions – global, national/federal, provincial/state, and municipal.

A review of the literature facilitated the creation of a three-part Model of Evaluation Science: a Typology of Forms and Attributes, a Process Model for Environmental Policy and Programme Evaluation, and a Model of Evaluation Barriers and Challenges. Chapters 2 and 3 provide a detailed description of the evaluation literature and Generic Model derivation and application.

THE CHALLENGE

In the context of the RSP, the need for programme evaluation has been stressed in recent literature. Vallega (2002b) notes that the Regional Seas Programme has reached its maximum spatial extent, encompassing virtually every coastal area on the globe (Figure 1.3). As such, he notes:

“...the next stage of ocean management on the regional scale will be influenced by the shifting from the *explosion phase*, which has marked the diffusion of regional seas programmes, towards an *implosion phase*, which will focus on effectiveness and co-ordination. If such a process arises, the need to set up an adequate monitoring and evaluation apparatuses of this dimension of ocean governance, which has so far been underestimated, will become cardinal” (Vallega, 2002b, p.934).

Initially, the goal of this research was to conduct an evaluation of the successes and failures of the Caribbean Regional Seas Programme in improving the state of the marine and coastal environment. However, as the literature review progressed, it was noted that strong calls for evaluation were juxtaposed by evidence of a serious void in evaluation science application to the RSP. This observation is stressed by the conclusions of Jacobson (1995), who notes that RSP outcomes, in terms of measurable changes in the marine environment (positive or negative), cannot be evaluated due to a lack of environmental monitoring and data collection. As such, only the “organizational process” or administrative aspects of the RSP have been exposed to any semblance of evaluation science (Jacobson, 1995). In this context, a preliminary exercise was conducted to collect and examine the criteria used in completed evaluations of UNEP and the RSP (Appendix 1). This exercise suggested that evaluation criteria used at present defy measurability, lack precision, and are not applied uniformly in spatial or temporal terms. In addition, there was considerable “unknowing” about the evaluation infrastructure that would be needed to support criteria selection and application. Due to strong evidence of both the need for evaluation, and evaluation failures, it was evident that the research should focus on examining the existing capacity within the Regional Seas Programme to evaluate itself.

THE PROCESS

A full description of the research methodology may be found in Chapter 4. In brief, the research employs a diagnostic field study session during the week of 21-28 August, 2004 at the Regional Co-ordinating Unit of the Caribbean Environment Programme (CAR/RCU), located in Kingston, Jamaica. This facility is the principle administrative engine and

Secretariat of the Caribbean Environment Programme (CEP), which is the implementation vehicle of the Caribbean Regional Seas Programme Action Plan, Convention (“The Cartagena Convention”), and legal Protocols. The primary research technique is the conduct of In-Depth Key Informant Interviews. Strategically placed personnel at the CAR/RCU are interviewed to obtain the necessary evidence and testimony to answer the Associated and Central Research Questions.

THESIS ORGANIZATION

The thesis is organized according to nine major chapters. They are:

CHAPTER 2: LITERATURE REVIEW

This chapter presents a review of a comprehensive and multidisciplinary body of literature. This chapter is structured to move from the general to the specific. First, understanding is built on the nature of the global marine pollution problem and the many mechanisms devised to mitigate and manage marine pollution, including the Regional Seas Programme. The analysis provided illustrates the key disciplines contributing to this discourse. Second, evaluation-related literature is collected and examined. This literature enhances understanding of evaluation theory and evaluation applications at various jurisdictional levels. Finally, both internally and externally derived evaluations of the Regional Seas Programme are discussed, with special attention focused on the evaluation criteria used and the voids identified in RSP evaluation capacity and conduct.

CHAPTER 3: A MODEL OF EVALUATION SCIENCE – DEVELOPMENT AND APPLICATION

This chapter presents a Three-Part Generic Model of Evaluation Science created to summarize the basic tenets, or recurring concerns, presented in the “evaluation theory” literature introduced in Chapter 2. This Model includes a typology of evaluation forms, a set of evaluation process steps, and an inventory of key barriers and challenges to conducting evaluation. The Model developed in this chapter serves as an organizational construct for the interview protocol or “Discussion Guide”, and for the presentation of results later in the thesis.

CHAPTER 4: RESEARCH STRATEGY AND METHODOLOGY

This chapter presents a comprehensive review of the methods and techniques employed in this research. Specifically, it details the development of the interview protocol or “Discussion Guide” and describes how the key informant interviews were conducted. It concludes by illustrating data analysis methods used to provide the information necessary to answer the Associated and Central Research Questions.

CHAPTER 5: INSTITUTIONAL ANALYSIS OF THE CARIBBEAN ENVIRONMENT PROGRAMME

This chapter presents a detailed description of the Caribbean Environment Programme. Guided by Mitchell’s (1990 and 2002) Institutional Analysis Template (IAT), this chapter describes the context, legal standing, structures, functions, processes and mechanisms, and the institutional perspectives of the Caribbean Environment Programme.

This understanding is necessary to provide a frame of reference in which to consider the research findings.

CHAPTER 6: PROGRAMME GOALS AND OBJECTIVES – THE EXPECTED VERSUS THE ACTUAL

This chapter presents the evidence and testimony obtained from the key informant interviews related to programme goals and objectives and Part One of the Generic Model of Evaluation Science. The “expected” or ideal conditions are derived from the literature review and the tenets of the Model. They are countered by the “actual” conditions exposed during the diagnostic field study.

CHAPTER 7: PROCESS FOR ENVIRONMENTAL POLICY AND PROGRAMME EVALUATION – THE EXPECTED VERSUS THE ACTUAL

This chapter presents the evidence and testimony obtained from the key informant interviews related to evaluation processes, or Part Two of the Generic Model of Evaluation Science. The “expected” steps to be followed in evaluation planning and implementation are contained in the tenets of the Model. The “actual” evaluation mechanisms in place, namely the criteria and supporting infrastructure identified by programme planners and managers, are compared to these hypotheses.

CHAPTER 8: EVALUATION BARRIERS AND CHALLENGES – THE EXPECTED VERSUS THE ACTUAL

This chapter presents the evidence and testimony obtained from the key informant interviews related to the barriers to conducting evaluation, or Part Three of the Generic Model of Evaluation Science. The “expected” or hypothesized barriers are presented in the Model, and these are countered or supported by the “actual” barriers discovered during the diagnostic field study. Attention is focused on barriers emanating from constraints in the programme’s supporting human, financial, legal, and political resources.

CHAPTER 9: CONCLUSIONS AND RECOMMENDATIONS

This chapter presents a synthesis of the major conclusions reached in Chapters 6-8. The Generic Model of Evaluation Science is used as an organizational device in the presentation of these conclusions. Based on the conclusions reached, answers are provided to the Associated and Central Research Questions. Recommendations to strengthen evaluation capacity in the context of the CEP are issued corresponding to necessary investments in the six Regional Seas Programme Action Plan Components and the Generic Model of Evaluation Science. The thesis concludes by identifying several areas for future research.

CHAPTER 2: LITERATURE REVIEW

PURPOSE

The purpose of this chapter is to provide a sound research justification. This task begins with the collection of a body of literature to build understanding of the global marine pollution problem, including the rationale supporting marine pollution mitigation initiatives on various scales (national – regional – global), and the evolution of initiatives and programmes to control marine pollution. The task progresses with the collection of literature describing and explaining the foundation, theory and process of evaluation. Finally, the literature review culminates with the collection of literature pertaining to the application of evaluation science to marine and coastal pollution control regimes – chiefly, the UNEP Regional Seas Programme.

OVERVIEW

The oceans and coastal domain is inherently complex, as oceans transcend geographic and disciplinary boundaries. As such, the relevant literature exists in a variety of sources and academic disciplines. Following the approach of Jedynack-Copley (1991), the decision was made to include a comprehensive bibliography of the literature consulted, rather than a truncated reference list. The bibliography provided by Jedynack-Copley (1991) was a valuable resource at the outset of this research. However, the period following the United Nations Conference on Environment and Development (UNCED), held in Rio de Janeiro in 1992, and the drafting of the Agenda 21 action plan for environmental sustainability was one of rapid change in the international environmental agenda (Brown, 1997; Seyfang, 2003). Change was also incited in the Regional Seas Programme during this

period. The post-UNCED period is characterized by expansion of both UNEP and extra-UNEP Regional Seas Programmes, and by the increased co-operation and collaboration between states and UN organizations and programmes called for in Agenda 21's Chapter 17 on Oceans (Vallega, 2002b). In the context of the UNEP-based RSPs, this period saw the development of the Bucharest Convention (1992) and Action Plan for the Black Sea (1996); and the drafting of Action Plans for Regional Programmes in the Northwest Pacific (1994) and the South Asian Seas (1995) (Vallega, 2002b). In the context of extra-UNEP RSPs, the former Oslo (1972) and Paris (1974) Conventions for the North-East Atlantic were merged to form the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention, 1992) and Action Plan (1998) (Vallega, 2002b; UNEP-RSP, No Date). A Convention and Action Plan were adopted in 1998 for the Arctic (Protection of the Arctic Marine Environment – PAME) (Vallega, 2002b). An Action Plan was also adopted for the Baltic Sea (The Helsinki Commission or HELCOM) in 1992 (Vallega, 2002b). These are significant advances for the RSP, as they represent Programme expansion throughout Asia (North-West Pacific and South Asian Seas), the incorporation of developed and newly industrializing countries into the RSP (Scandinavia, Iceland, and Canada in the Arctic; Japan in the North-West Pacific; and South Korea in the North-West Pacific), the incorporation of Russia into the RSP (North-West Pacific and Arctic), and RSP expansion into temperate, sub polar and polar boreal latitudes (OSPAR and PAME) (Vallega, 2002b; PAME, No Date; UNEP-RSP, No Date). It was clear to the researcher that it was due time to update the earlier inventory of information sources, and that a bibliography including both the historical-contextual and the recent, post-UNCED literature would be an important resource for other researchers in this domain.

LITERATURE SEARCH STRATEGY

This chapter has been purposefully constructed to move from general to specific themes. The most general literature is that dedicated to problem and research context. This literature is related to the state of the global marine environment, the legal and management regimes of the oceans, and Regional Seas Programme genesis, structure and process. After a solid understanding is built on this “background” subject matter, literature is collected on evaluation theory and applications.

CONTEXTUAL LITERATURE

PROBLEM AND RESEARCH CONTEXT

It was first necessary to collect literature pertaining to the state of the marine environment. In this context, literature focused on the definition of “marine pollution” (Tomczak, 1984), and descriptions of the major environmental problems and sources of marine pollution both globally (Matthews, 1973; Abrams, 1976; Myers and Myers, 1983; Kimball, 1995; Meith, 2000) and regionally (Haas, 1990; Schumacher, Hoagland, and Gaines, 1996; Siung-Chang, 1997; Hinrichsen, 1998; Gerges, 2002). There is debate regarding which management scale (national – regional – global) should be used to cope most effectively with marine pollution problems. In this context, the earliest literature recognizes marine pollution as an international problem (Douglas, 1971; Matthews, 1973; Waldichuk, 1973). The literature argues the benefits and problems of legal and management approaches at various jurisdictional scales (Okidi, 1977). **The regional approach is**

favoured, as it provides co-operative mechanisms on a meaningful scale for effective action (Okidi, 1977; Rana, 1979; Alhéritière, 1982; Vallega, 1994; Vallega, 2002a).

A body of literature is collected on the evolution of the legal regime of the oceans. This regime, pictured in Figure 1.2, includes the broad United Nations Convention on the Law of the Seas (UNCLOS) and various other international law instruments for more specific aspects of ocean management (Waldichuk, 1973; Abrams, 1976; Johnson, 1976; Alhéritière, 1982; Boyle, 1985; Adede, 1992; Boyle, 1992; Sarpong, 1993; Franckx, 1998; Kullenberg, 1999; Joyner, 2000). A distinction is made in the literature between instruments that are legally binding (“hard law”), and those that are voluntary or serve as guidelines for action (“soft law”) (Brown, 1997; Kindred et al., 2000; Currie, 2001). Examples of the former include such international conventions as UNCLOS (Kimball, 1995). Examples of the latter include guidelines such as Agenda 21 (Brown, 1997) and the Global Programme of Action for Pollution from Land-Based Activities (GPA) (Franckx, 1998; Melvasalo, 2000). Further, literature is collected that provides inventories and descriptions of the various United Nations and other international organizations and institutions responsible for aspects of the management and governance of the oceans and coastal domain (Waldichuk, 1973; Wenk, 1973; Sand, 1975-1976 (for the Mediterranean region); Alhéritière, 1982; Charnock, 1984; Mensah, 1984; Kullenberg, 1999).

As contextual understanding of the marine environment and the legal and management regimes of the oceans is built, **changes in the environmental agenda over time become apparent**. There is a significant amount of literature describing the advancement of international environmental awareness and management efforts following UNCHE (Strong, 1972; Waldichuk, 1973; Haas, Levy and Parson, 1992; Kullenberg, 1999).

Some of literature laments inaction, especially a lack of progress and follow-up, in the years after Stockholm (Adede, 1992; Seyfang, 2003). Similarly, literature both praises the potential and achievements of UNCED (Adede, 1992; Kullenberg, 1999; Alder, 2003) and questions its long-term effectiveness (Haas, Levy and Parson, 1992; Brown, 1997; Seyfang, 2003). More contemporary literature views the 2002 World Summit on Sustainable Development (WSSD) in Johannesburg in the same ways (Adler, 2003; Seyfang, 2003). Another message emanating from this literature is the recognition that land-based sources of marine pollution (LBS) are the major problem to be contended with, contributing to up to 80% of global marine pollution (Abrams, 1976; Williams and Davis, 1995; Schumacher, Hoagland and Gaines, 1996; Akiwumi and Melvasalo, 1998; Kullenberg, 1999; Meith, 2000; Melvasalo, 2000). In light of this recognition, **much of the literature calls for a stronger legal regime to control and manage LBS**, often citing UNCLOS' LBS provisions as too weak to be effective and the GPA as difficult to enforce (Abrams, 1976; Boyle, 1985; Boyle, 1992; Williams and Davis, 1995; Franckx, 1998).

The literature on international institutions and legal arrangements for the oceans leads naturally to an examination of international regime theory. The concept of an international regime has many definitions. The basic tenets of these definitions indicate that international regimes are based on patterned state behaviour with respect to particular issues; that they are structures established for consultation, and they seek state consensus in specific issue areas (Haggard and Simmons, 1987; Dieperink, 1998; Syndes, 2001). One comprehensive and widely-adopted definition of "international regimes" is "...implicit or explicit principles, norms, rules, and decision making procedures around which actors' expectations converge in a given area of international relations" (Krasner, 1983, p.2; also

cited in Haggard and Simmons, 1987, p.493 and Hasenclever, Mayer, and Rittberger, 2000, p.3).

Much of the literature related to international regime theory focuses upon the theory of regime formation mechanics (Young, 1982; Haggard and Simmons, 1987; Young, 1989; Young, 1999; Young and Levy, 1999; Valencia, 2000). The regime theory literature is important, as the Regional Seas Programme is but one of many international regimes established in the context of the marine and coastal environment. For example, the literature identifies Regional Fisheries Management Organizations (RFMOs) as international regimes (Syndes, 2001), and draws attention to such “resource regimes” as the 1946 International Convention for the Regulation of Whaling and the International Whaling Commission, and the 1980 Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR) (Young, 1998). An international regime is identified with respect to marine and coastal oil pollution, based on the 1969 International Convention on Civil Liability for Oil Pollution Damage and the 1971 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (Kim, 2003; Mason, 2003).

In the context of the literature relating to the genesis, structures, and processes of the Regional Seas Programme, an effort is made to collect literature relating to the overall programme (Thacher and Meith, 1980; Hulm, 1983a; 1983b; 1983c; Needham and Jedynack-Copley, 1989; Haas, 1991; Jedynack-Copley, 1991; Akiwumi and Melvasalo, 1998; Meith, 2000; Adler, 2003); and also to specific programmes such as the Mediterranean (Sand, 1975-1976; Boxer, 1978; 1982; Haas, 1990; Rose, 1993; Vallega, 1995; Vallega, 1996); the Red Sea and Gulf of Aden (Gerges, 2002); East Asian Seas (Thia-Eng, 1999); West and Central Africa (Sarpong, 1993), the North-West Pacific (Haas, 2000),

and the North-East Atlantic (Skjærseth, 1992). As thesis research progresses and specificity increases, literature is focused on the Wider Caribbean Region (Glassner, 1993; Schumacher, Hoagland, and Gaines, 1996; Charles, 1997; Siung-Chang, 1997; Colmenares and Escobar, 2002; Jayawardena, 2002; Montero, 2002; Jayawardena and Ramajeessingh, 2003). An effort is also made to consult literature from the historical period of UNEP and RSP genesis (Thacher and Meith, 1980; Hulm, 1983a; 1983b; 1983c) to the recent, post-UNCED period (Akiwumi and Melvasalo, 1998; Meith, 2000; Salmona, 2002; Vallega 2002b; Adler, 2003), in order to obtain a comprehensive understanding of the life cycle of the programme.

DISCIPLINARY CAST

As previously suggested, the collection of general, contextual literature is characterized by high complexity. The oceans and coastal domain encompasses a variety of activities and economic sectors, including tourism, international trade, food security, global climate, and national defense (Joyner, 2000). As such, the relevant literature is inherently interdisciplinary. A preliminary analysis of this literature requires an attempt to ascertain the “Disciplinary Cast” – the inventory of disciplines and professions contributing to the study of the oceans and coastal domain and the RSP. Two questions are posed to guide this task. **First**, what are the key contributing disciplines to the research problematique? **Second**, what are the key contributions of each major discipline?

Contextual literature excluded from the “Disciplinary Cast” analysis are documents published by the United Nations or the United Nations Environment Programme. Literature authored by UNEP or Regional Seas Programme personnel is included if published

externally to these institutions, for example, in a peer-reviewed academic journal. Literature that explicitly discusses evaluation application to the RSP is excluded from this preliminary analysis. It is discussed in the later evaluation literature section of this chapter. Further, anonymously authored articles are excluded, as no disciplinary affiliation may be ascertained. Disciplines are determined by author biographies and/or contact information included within the relevant text, or, when this information is not available, by keyword (author name) searches conducted on popular Internet search engines. It must be noted that there is a margin of error in this analysis, due to researcher interpretation of disciplinary affiliation. Further, error is introduced where author affiliation has changed between article publication and the present time.

Fourteen discipline areas are identified in the analysis of ninety-one contextual journal articles, books, book chapters, theses, and published interviews with RSP administrators (Figure 2.1). These disciplines are divided into six “Major Disciplines” and eight “Minor Disciplines”. The “Major Disciplines” are those for which five or more sources were collected. The “Minor Disciplines” are those represented by fewer than five works. The choice to use five sources as the division between “Major” and “Minor” disciplines was made by the researcher when examining the numbers of articles attained for each discipline. Certain disciplines under the broad heading “Minor Disciplines” merit some explanation. “Other” refers to literature authored by consultants or freelance writers for whom no detailed disciplinary affiliation could be ascertained. “Diplomatic” refers to literature authored by persons identified as diplomats or as key figures in international coordination.

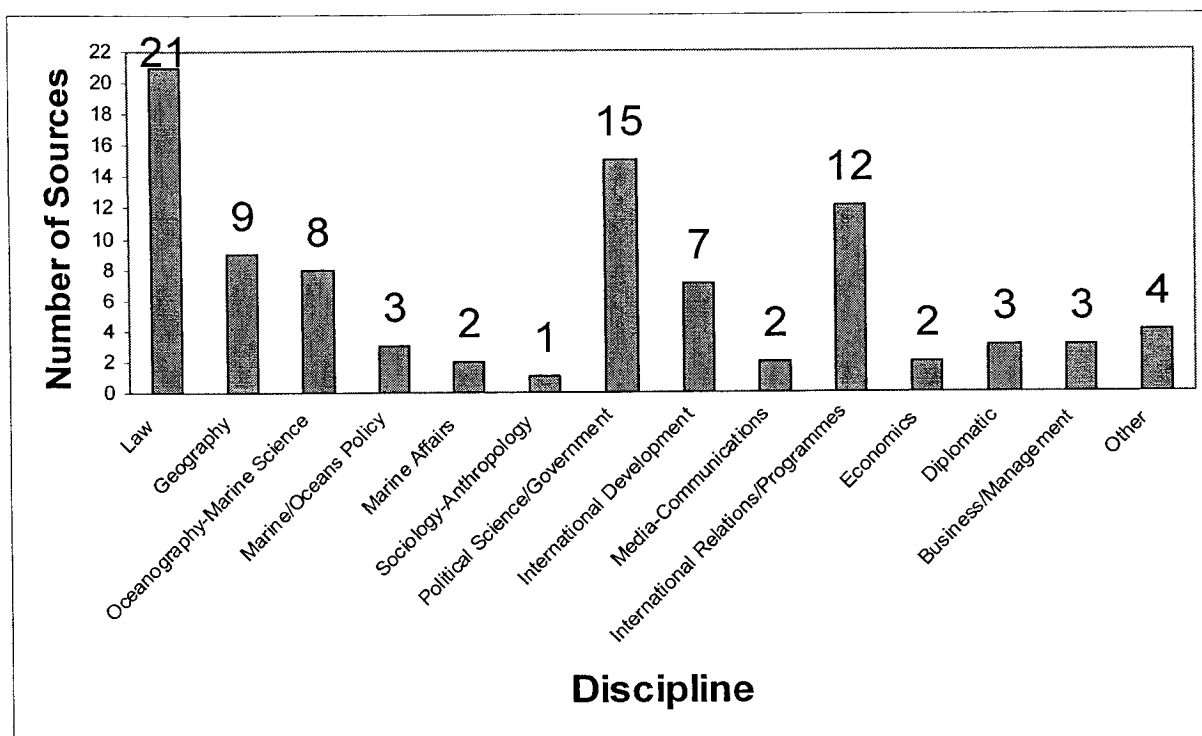


Figure 2.1: The Disciplinary Cast of Contextual Literature

Major Disciplines and Their Key Contributions

The discipline of “law” makes the most visible contribution to the contextual literature. At the most general level, the contribution focuses on international law processes and mechanisms (Kindred et al. 2000; Currie, 2001), and international and regional approaches to coping with and mitigating marine and coastal pollution (Douglas, 1971; Chayes, 1972; and Stein, 1972; Alhéritière, 1982, respectively). At the more specific level, it discusses and provides surveys of the agreements and organizations in place to cope with the marine pollution problem (Sand, 1975-76; Johnson, 1976; Mensah, 1984; Adede, 1992). Dissatisfaction with the legal regime of the oceans is frequently discussed, notably in the context of the shortcomings of UNCLOS in dealing with land-based sources of marine pollution (Abrams, 1976; Boyle, 1985; Boyle, 1992; Franckx, 1998), the incongruency

between international law and domestic laws (Sarpong, 1993), and the financial costs of implementation (Verlaan and Khan, 1996). As such, the key residual message emanating from the discipline of “law” is one of extreme dissatisfaction – **there is a perception that the existing legal regime is inadequate to cope with and mitigate the global marine and coastal pollution problem, especially relating to land-based sources of marine pollution.**

Closely related to the contributions of the legal discipline are the contributions made by the discipline of “political science/government”. Of interest in this regard are Joyner’s (2000) survey of international legal instruments pertaining to the oceans and coastal domain and Rana’s (1979) discussion of regional approaches to cope with marine pollution. The contributions of Elisabeth Mann Borgese are noteworthy in this discipline, as her discussions of ocean governance and management (1986; 1995) and of Regional Seas Programme reform for the twenty-first century (1994) are essential for understanding both the contextual and dynamic aspects of the international agenda for the oceans. **The major contribution of the “political science” discipline is the discussion of international regime theory, including regime formation, purpose, and mechanics** (Young, 1982; Krasner, 1983; Haggard and Simmons, 1987; Young, 1989; Young, 1998; Young, 1999; Young and Levy, 1999; Valencia, 2000). It must be noted that specific regimes are discussed in other disciplines, such as “law” (Kim, 2003), “economics” (Mason, 2003), “marine science” (Syndes, 2001), and “geography” (Dieperink, 1998).

Literature classified under the broad disciplinary heading of “international relations and programmes” is that authored by persons affiliated with various United Nations programmes and international-level initiatives, and published in peer-reviewed, academic

journals. The most general literature from this discipline discusses the need for international co-ordination of marine pollution laws (Matthews, 1973) and provides a survey of existing international initiatives and programmes for mitigating marine and coastal pollution (Kullenberg, 1999). More specific literature discusses global ocean monitoring under the Global Ocean Observation System (GOOS) (Summerhayes, 2002), the efforts of the International Coral Reef Initiative (ICRI) (Dight and Scherl, 1997), integrated coastal management (ICM) initiatives in the East Asian Seas and Caribbean Action Plan areas (Thia-Eng, 1999 and Colmenares and Escobar, 2002, respectively), and the Global Programme of Action for Pollution from Land-Based Activities (GPA) (Akiwumi and Melvasalo, 1998; Melvasalo, 2000). **The key residual message emanating from this body of literature is that the UNEP Regional Seas Programme is an ideal vehicle to implement international initiatives at the regional, subregional, and national scales. RSP reform and modernization is needed to facilitate effective implementation of these recent programmes and initiatives.**

As a geographer, the researcher was excited to see the contribution of the discipline of “geography”. **The majority of the geographical literature is devoted to the description and explanation of Regional Seas Programme structures and processes** (Nelson and Needham, 1985; Needham and Jedynack-Copley, 1989; Jedynack-Copley, 1991; Vallega, 1995). Also of note in this discipline is the **conceptualization of “regionalism”** provided by Vallega (1994; 2002a). In the context of the Wider Caribbean Region, the notion that a **lack of a common cultural heritage and identity is a deterrent to regional co-operation and is a limiting factor in the success of regional programmes** presented by Glassner (1993) is of significant interest.

Early literature from the discipline of “oceanography/marine science” focuses on defining marine pollution (Tomczak, 1984) and presenting inventories or surveys of organizations and efforts of the scientific community to cope with marine pollution (Waldichuk, 1973; Charnock, 1984). The most recent literature from this discipline, by contrast, focuses on marine and coastal management capacity building (Montero, 2002) and the scientific needs of lesser developed countries (Awosika and Marone, 2000). **This body of literature thus suggests a decentralization of marine science, in that attention is increasingly being placed on building and enhancing indigenous scientific capacity in place of top-down management and control.**

The discipline of “international development” encompasses literature authored by persons affiliated with university departments or international organizations focused on international development. This differs from “international relations and programmes” in that these are academic or non-United Nations entities focused on development. **The early literature emanating from this discipline focuses on classifying international environmental problems and the approaches to dealing with them** (Russell and Landsberg, 1971; Okidi, 1977; Myers and Myers, 1983). **More recent literature from this discipline focuses on the barriers to solving international environmental problems, and chiefly on the lack of success of the environmental arrangements and institutions in place.** Specifically, Griffith (1995) discusses implementation difficulties and disillusionment with the Barbados Programme of Action for Small Island Developing States (SIDS-POA); Sandbrook (1999) discusses the need for revitalization of UNEP; and both Brown (1997) and Seyfang (2003) discuss the achievements and disappointments the major international Environmental Conferences such as UNCHE and UNCED. Noting that WSSD

was primarily a re-statement of past Conferences' visions and goals, Seyfang (2003) suggests that it is time for the international community to move beyond the convening of "mega conferences" to focus on real implementation of its promises.

Minor Disciplines and Their Key Contributions

The disciplines identified as making minor contributions to the contextual understanding of the oceans and coastal domain and the Regional Seas Programme are illustrated below. Due to the small number of sources under each of these disciplines, it is not possible to distill an accurate, representative "residual message" from each. Thus, only the major area(s) of focus will be identified for each (Table 2.1).

EVALUATION LITERATURE

OVERVIEW

In the absence of a universally accepted definition of "evaluation", the literature provides several, all of which include the notion of evaluation as a tool to judge merit or worth (Suchman, 1967; Weiss, 1972; Hoole, 1978; Rutman, 1984). The definition of evaluation as "the determination...of the results...attained by some activity...designed to accomplish some valued goal or objective..." (Suchman, 1967, pp. 31-32) presented in Chapter 1 summarizes the key tenets of evaluation. More concisely, as recalled from Chapter 1, "evaluation is primarily about trying to figure out how successful a policy (or programme) has been, whether it met its objectives, how far it fell short, and what might be done to improve its impact" (Pal, 2001, p.275, parenthesis added). While programme

Discipline	Area(s) of Focus	Source(s)
“Other” (consultants)	Survey of environmental investments in the Mediterranean region	Rose, 1993
	International regime for managing land-based sources of marine pollution	Kimball, 1995
	UNEP’s role as catalyst prohibits an accepted long-term role for the organization	Mahsood, 1998
	Marine environmental problems and responses by region	Hinrichsen, 1998
“Marine/Oceans Policy”	Land-based sources of marine pollution	Schumacher, Hoagland and Gaines, 1996 Williams and Davis, 1995
	Revitalization of the Red Sea and Gulf of Aden RSP	Gerges, 2002
“Diplomatic”	Needed linkages between science and politics	Strong, 1972
	The need for international databases, standards and co-ordination	Kennan, 1970
	Chronic under funding prohibits UN effectiveness	Cárdenas, Sersale di Cerisano, and Avasle, 1995
“Business/Management”	Tourism in the Caribbean	Jayawardena and Ramajeessingh, 2003 Jayawardena, 2002 Charles, 1997
“Marine Affairs”	Caribbean marine environmental problems and barriers to remedial action	Siung-Chang, 1997
	International institutions for ocean management (structures and roles)	Wenk, 1973
“Media and Communications”	Regional Seas Programme achievements, shortcomings and future challenges	Hulm, 1983a Hulm, 1983b
“Sociology and Anthropology”	Caribbean culture and environment	Levine, 1981
“Economics”	Tourism in the Caribbean	Beekhuis, 1981

Table 2.1: The Key Areas of Focus of the “Minor” Contributing Disciplines

evaluation began to emerge in the field of public health in the late nineteenth century, strong “demand for critical self appraisal” did not arise until after the First World War (Suchman, 1967, p.14). Evaluation became prominent in the 1960s. Suchman (1967) notes that during this period, social services were becoming “rights” instead of “privileges”, and as such the public was becoming more involved in public policy formation and demanding of proof of policy and programme effectiveness. Already at this time, greater accountability was sought from public agencies in the wake of growing citizen knowledge and reduced financial resources (Suchman, 1967). By the mid-1970s, complaints emerged that evaluation was too expensive, it had little effect on programmes, and its results were being ignored (Patton, 1984). Questions began to arise regarding issues of bias in evaluation (Pal, 1987). This disenchantment, fuelled by the perceived “one-shot” nature of evaluation and the lack of timely results and recommendations for policy/programme modification, resulted in the field of evaluation coming under considerable scrutiny in the 1980s (Rutman, 1984). Evaluation experienced a revival in the mid-1990s, due to the increased incorporation of private sector management practices in government, and increased citizen demand for accountability in governance (Hoole, 1978; Rutman, 1984; Pal, 2001). While evaluation may have expressions in virtually every discipline and profession, the fields of education, health care, social welfare, and corrections (criminal justice) are recognized as the most active in programme evaluation conduct (Suchman, 1967; Weiss, 1972; Hoole, 1978; Scriven, 1991; Babbie, 1992; Binner and Topolski, 1994; Knaap and Kim, 1998; Rossi, Freeman, and Lipsey, 1999; Darabi, 2002). Knaap and Kim (1998) note that evaluation is rare in the context of environmental programmes. Reasons for the evaluation void in the environmental domain are suggested to be the difficulty in isolating causes of environmental

change, the challenges of expressing goals related to environmental quality and ecosystem health in well-defined or quantitative terms, and delays in evaluation due to the fact that many environmental programmes are new enough that the possibility of conducting evaluation is just emerging (Knaap and Kim, 1998).

EVALUATION THEORY

The first broad stream of evaluation literature collected is that related to evaluation theory. This literature describes and explains the theoretical foundations of evaluation, and the general processes and protocols involved in its conduct. **This literature is central to the research at hand, and has led to the creation of a generic Model of Evaluation Science. As such, it demands a dedicated and critical review, which is presented in Chapter 3.**

EVALUATION APPLICATIONS

The second broad stream of evaluation literature collected is related to evaluation applications. This literature describes evaluation application in terms of the different jurisdictional levels of management – the national/state, regional, and global levels.

National/State Level

Evaluation has many expressions at the national or state jurisdictional level. The literature collected is focused on the evaluation of ocean and coastal management initiatives. Vandermeulen (1998) provides insight on the national set of environmental indicators produced by Environment Canada in the context of coastal zone management (CZM).

However, the majority of this literature is produced by American authors in the context of American coastal programmes and initiatives. Ehler (2003) discusses the development of indicators for evaluation of integrated coastal management (ICM) initiatives, specifically marine protected areas (MPAs). He notes that **ocean resources are frequently managed sectorally and not holistically, resulting in horizontal and vertical fragmentation and the loss of important issues between jurisdictional gaps** (Ehler, 2003).

A significant portion of this literature is focused on either the United States' 1972 Coastal Zone Management Act (CZMA) or the Environmental Protection Agency (EPA)'s National Estuary Program (NEP). Related to the CZMA, Englander, Feldmann, and Hershman (1977) note that **an important starting point for evaluation criteria derivation are statements of marine and coastal area problems**. They call for **a stronger link to be made between resource outcome problems and organizational process problems**, arguing that **the evaluation process should attempt to trace the causal chain from environmental problem to policy/programme/process problem** (Englander, Feldmann, and Hershman 1977). Englander, Feldmann, and Hershman (1977) compile a set of perceived "resource outcome" (e.g. loss of coastal habitat) and "organizational process" (e.g. lack of public agency co-ordination) problems reported prior to the passage of the CZMA. It is suggested that these problem statements may be used to evaluate programme development and implementation under the CZMA (Englander, Feldmann, and Hershman, 1977). Also related to the CZMA, Godschalk (1992) provides an inventory of coastal zone management initiatives and evaluations from the passage of the Act (1972) to its twenty-year anniversary. Related to the NEP, Burroughs and Lee (1988) and Colt (1994) discuss evaluation of two programmes under the NEP: Narragansett Bay and Buzzards Bay,

respectively. The work of Colt (1994) focuses upon the potential role of evaluation in the implementation of the Buzzards Bay Comprehensive Conservation and Management Plan (CCMP). He notes that **evaluation criteria must reflect the critical issues identified in the Plan**, and that **the desired outcomes of the plan may serve as a source for evaluation criteria** (Colt, 1994).

Regional Level

The literature also provides examples of regional-scale international regimes and the application of evaluation science related to the marine and coastal environment. Noteworthy in this context are descriptions and evaluations of international river basin accords. These accords are key case studies in environmental management for two reasons: they are ideal examples of the competing values represented in natural resource management, and they are one of the first arrangements devised to address issues of transboundary pollution (Milich and Varady, 1998). The importance of these management regimes may be illustrated by the fact that, globally, more than 300 river basins are shared by two or more nations, and nearly 300 international agreements have been adopted to ease conflicts over water (Milich and Varady, 1998). **The literature notes that although these treaties have been subject to various forms of analysis, comprehensive assessments of international river basin management processes – and the application of evaluation science to international environmental management regimes – is lacking in this domain** (Milich and Varady, 1998).

This literature focuses on the management of transboundary pollution in the Rhine River (Milich and Varady, 1998; Lorenz, Gilbert and Vellinga, 2001) and the Danube River

(Milich and Varady, 1998; Nachtnebel, 2000; McGlade, 2002). **In both of these cases, the tendency of states to address their own environmental concerns in place of basin-wide or regional concerns is noted** (Milich and Varady, 1998). In the context of this research, it is of interest to note the similarities between the Danube River regime and the Caribbean Environment Programme, in that both regimes encompass, and attempt to reconcile, the environment management capabilities of a range of developed and lesser-developed nations (Milich and Varady, 1998).

Other international river basin accords such as the Plan of Action for the Zambezi River in Eastern and Southern Africa (Shela, 2000), the Niger Basin Authority in Western Africa, and the Plata Basin Treaty in South America (Milich and Varady, 1998) are of interest in this literature. **The success of these accords is hampered by political rhetoric (the Niger and Plata) and by adopting overly ambitious mandates (the Zambezi), both of which impede meaningful action** (Milich and Varady, 1998). In the context of this research, it is important to note that **the key constraint in the implementation of the Zambezi River Basin Action Plan is a basin-wide lack of capacity building**, including the lack of common policy, legal and institutional arrangements in the basin (Shela, 2000).

Global Level

The International Standards Organization (ISO) movement may be regarded as a prime example of evaluation consideration at the global level. These are globally recognized production and management standards adopted and implemented at the national level. Though backed by a “vision of proactive environmental management” (Boudouropoulos and Arvanitoyannis, 1999, p.395), critics note that the ISO movement may

be used as an empty label for image building, that it is not a panacea for all environmental management problems, and that there is no provision for “de-certifying” negligent companies (Rondinelli and Vastag, 2000). On the positive side, the ISO movement, and specifically the ISO 14000 series on Environmental Management, provides a strong expression of evaluation application.

Within the ISO 14000 series, ISO 14011 provides guidelines for Environmental Auditing, which require auditors to conduct examinations on-site (Von Zharen, 1996). Another direct relation to evaluation application is found with ISO 14031, Environmental Performance Evaluation (EPE). The definition of EPE as “an internal process and management tool designed to provide management with reliable and verifiable information on an ongoing basis to determine whether an organization’s environmental performance is meeting the criteria set by the management of the organization” (Jasch, 2000, p.79) corresponds to the definitions of “evaluation” provided in the more general literature presented above. Its main emphasis is measurement and evaluation of environmental performance, and the use of evaluation for management decision-making (O’Reilly, Wathey, and Gelber, 2000, p. 269). ISO 14031 “centres on the development of performance indicators that an organization may use to track and report environmental performance” (O’Reilly, Wathey, and Gelber, 2000, p.268). Jasch (2000, p.80) notes that indicators are useful “to depict the vast quantity of environmental data...in a comprehensive and concise manner”. Jasch (2000) presents a set of principles for environmental indicator derivation (Table 2.2). The importance of these principles will be reflected at the conclusion of this chapter.

Principle	Description
Comparability	Must be comparable, and reflective of changes in environmental performance.
Target-Oriented	Must act toward goals that the institution can influence.
Balanced	Must concisely reflect environmental performance, illustrating benefits and problems.
Continuity	Must be comparable – related to each other by time series and units.
Frequency	Must be derived frequently (e.g. monthly, yearly) to allow for action.
Comprehensibility	Must be understandable to the user; must fill the user's information needs. Must focus on priorities.

Table 2.2: Principles for Environmental Indicator Derivation

Adapted with Modifications from Jasch, 2000, p.82

Evaluations of the Regional Seas Programme: Declarations of Merit

“Declarations of merit” have been extracted from both the contextual and evaluation-related Regional Seas Programme literature. Canadian Department of External Affairs’ Legal Operations Division Director Lorne Clark’s declaration that “*Regional Seas is the jewel in UNEP’s crown,*” (qtd. in Hulm, 1983a, p.5) serves as a major motivation in this research. US official Mary Elizabeth Hoinkes is quoted in the same article as stating that Regional Seas “*...is a great program, one of UNEP’s most effective and important,*” (Hulm, 1983a, p.5).

It must be noted that that **it is not immediately clear what criteria are being used to make these judgments.** From Hulm (1983a), it is possible to ascertain the conditions upon which programme success is being measured. First, it is noted that “(i)t is hard to think of another international forum where Libya will sit down with Israel, the US with Cuba or Iran with Iraq, and agree on a common solution to their collective problems” (Hulm, 1983a, p.2). As such, **one criterion determining programme success is suggested**

to be the RSP's ability to unite otherwise polarized nations. Second, Hulm (1983a) states that the RSP's ongoing global expansion indicates a level of programme support not achieved by parallel efforts such as UNCLOS and the UN's Global Investigation of Pollution of the Marine Environment (GIPME), which failed to garner US support and support of nations not already conducting such investigations, respectively. **The RSP's ability to succeed is based upon its consideration of regional interests and its dedication to building the capacity of countries to implement its initiatives** (Hulm, 1983a). A further criterion for RSP success is its mandate to include governments in the early stages of the Action Plan and thus build national political and scientific support (Hulm, 1983a). Finally, **success is gauged according to the regional Programme's ability to address that region's problems.** For example, when oil pollution and LBS were identified as key environmental problems in the Mediterranean region, legal Protocols were adopted to address these (Hulm, 1983a).

Other sweeping declarations of merit have been made, including Gomez's (1990) statement that Regional Seas *"is a champagne program...being supported on a beer budget"* (qtd. in Jacobson, 1995, p.30). Boxer (1982, p.347), in his analysis of the Mediterranean Action Plan Region, again uses the "jewel in the crown" analogy in his statement that *"(b)y the end of 1977, the MAP (Mediterranean Action Plan) had become the brightest jewel in UNEP's crown,"* despite the fact that his earlier attempt to evaluate the MAP stated little more than *"much remains to be done in the Mediterranean..."* (Boxer, 1978, p.589). The "brightest jewel" declaration is based on the Mediterranean Programme's extensive inventory of activities undertaken in its early years, including Protocol development, the establishment of Regional Activity Centres (RACs), and the establishment

of assessment and monitoring activities such as the Co-ordinated Mediterranean Pollution Monitoring and Research Programme (MEDPOL) and the Blue Plan (Boxer, 1982). While Boxer's 1982 claim appears to be based on the fact that "*the success of the MAP through 1977 encouraged UNEP to extend its Action Plan strategy (to other regions)*" (Boxer, 1982, p.347), later literature suggests that "*some of the problems in some of the regions are from using the Mediterranean as the template for all other Action Plans*" (Jacobson, 1995, p.31). This is due to the fact that while the Action Plan structure may be transferable, it is erroneous to assume uniform levels of interest and money to ensure success elsewhere (Jacobson, 1995). Additional confusion arises as the literature systematically calls into question the long-term sustainability of the Regional Seas Programme. The fear that Governments may "*hock the 'crown jewels' for the sake of a short-term financial balancing act*" is noted by Hulm (1983a, p.5), and Jacobson (1995, p.31) stresses that "*there should be serious doubts about the long-term prognosis of the Regional programmes*" due to chronic funding shortages. A number of key questions thus must be posed: **What is the true justification for the accolades granted to the Regional Seas Programme? Does any hard, supporting evidence for these claims exist? How can such declarations of merit be made alongside dim predictions for the RSP's future?** These questions serve to further motivate the research, and inspire a dedicated examination of Regional Seas Programme evaluations.

Evaluations of the Regional Seas Programme: External Evaluations

The externally derived, or academic, evaluations merit first discussion as these are most closely related to the declarations of RSP merit presented above (Table 2.3). **These**

sources both confirmed the need for the research at hand, and provided the insight to modify the research focus from the initial desire to evaluate the Regional Seas Programme to the final focus of examining the capacity of the Regional Seas Programme to be evaluated. The works of Boxer (1982 and 1978), Vallega (1996 and 2002b), and Salmona (2002), are noteworthy, as these authors are identified as geographers. As a researcher in the Department of Geography, the researcher was excited to see these contributions.

Author (year)	Subject
Boxer (1978)	Mediterranean
Boxer (1982)	Mediterranean
Haas (1990)	Mediterranean
Haas (1991)	All Regions
Skjærseth (1992)	North-East Atlantic (Oslo Convention)
Jacobson (1995)	All Regions
Vallega (1996)	Mediterranean
Vallega (2002b)	All Regions
Salmona (2002)	All Regions

Table 2.3: Selected Externally Derived Evaluation Documents

The works of Vallega (2002b), Salmona (2002), and Jacobson (1995) are important. Vallega (2002b), as indicated earlier, expressed the need for the RSP to shift from programme expansion to programme implementation and evaluation. Salmona (2002) presents the need to develop an information system, or “data bank”, to “serve as a basis for assessing, monitoring and evaluating the approach to regional seas” (Salmona, 2002, p.963). Her work confirms that data availability and accessibility are important barriers to RSP evaluation, particularly in the context of data collection and compilation. This concern will be discussed further in Chapters 6-8.

Perhaps the most pivotal source is the work of Jacobson (1995). He provides a concrete example of an organizational process evaluation of the RSP, in which the evaluation criteria are structured according to the six major capacity building Action Plan components. **The article's key contribution is the identification of the impossibility of conducting an outcome evaluation of the RSP based on poor environmental assessment and monitoring, and associated data collection.** At present, only administrative and organizational processes may be evaluated, as no comprehensive impact or outcome data exists in any region (Jacobson, 1995). A caution is issued here regarding reliance on organizational process evaluation. It is suggested that “all of the correct procedures and activities measured for the evaluation may have no actual impact on the problem” (Jacobson, 1995, p.24). **His strong presentation was instrumental in the research decision to focus on RSP evaluation capacity.** In essence, **if the data to conduct an evaluation of programme outcomes does not exist, then it does not appear possible to confirm or deny the “jewel in the crown” label.** It is hypothesized that this lack of data is a failure of the “Environmental Assessment” and “Environmental Management” Action Plan components to fulfill their capacity building goals. If this is the case, it is contended that Regional Seas Programme architects must return to the six diagnostic and prescriptive Action Plan components and invest in an evaluation strategy that combines assessment and monitoring of both “institutional capacity” and “environmental change”.

Evaluations of the Regional Seas Programme: Internal Evaluations

Selected internally derived Annual Performance Evaluations of UNEP directly address evaluation of the Regional Seas Programme. These documents may also provide

relevant information regarding the conduct of evaluation within the broader United Nations Environment Programme or United Nations systems. The Caribbean Environment Programme (CEP) also provides some useful evaluation documents (Table 2.4).

Author (year)	Subject
Yeroulanos (1985)	Mediterranean
UNEP (1989)	Caribbean Action Plan
UNEP (1992a)	Coastal Environmental Quality Criteria
UNEP (1993)	CEP Projects and Activities
UNEP Evaluation and Oversight Unit (1999)	UNEP 1999 Annual Evaluation
United Nations General Assembly (2000)	Use of evaluations in policies and programmes
UNEP Evaluation and Oversight Unit (2000)	UNEP 2000 Annual Evaluation (attention Eastern African RSP)
UNEP Evaluation and Oversight Unit (2002)	UNEP 2001 Annual Evaluation (UNEP Regional Offices and Evaluation Strategy)
Barber, 2003	Mid-term Evaluation of the International Coral Reef Action Network's Action Phase
UNEP Evaluation and Oversight Unit (2003b)	UNEP 2002 Annual Evaluation (attention to ICRAN and the Mediterranean Action Plan's PAP/RAC)

Table 2.4: Selected Internally Derived Evaluation Documents

The Annual Evaluation Reports produced by the United Nations Environment Programme's Evaluation and Oversight Unit (UNEP EOU) highlight the importance that UNEP attaches to evaluation. The 1999 Annual Evaluation declares that UNEP views evaluation as a management tool rather than "a fault-finding exercise" (UNEP EOU, 1999, p.6). Evaluation allows UNEP to comply with the UNGA's and UNEP Governing Council's requirements for "substantive accountability" (UNEP EOU, 2002, p.67), and:

"evaluation plays a strategic role in the continuous effort by UNEP to improve programme delivery, by providing the opportunity for identifying its strengths and weaknesses in the design, management and implementation, monitoring and evaluation of environmental policies, strategies, programmes and projects. Evaluation therefore serves UNEP as a management tool both for meeting compliance requirements and for improving

future policies and strategies in light of the experience gained, for improving future policies and strategies that would have an impact on the environment” (UNEP EOU, 2002, p.67).

Several key residual messages may be extracted from the UNEP Annual Evaluation Reports examined. The Reports attempt to draw attention to UNEP’s successes and shortcomings. With respect to specific subprogrammes and projects relevant to this research, it is noted that the International Coral Reef Action Network (ICRAN) is largely successful, based on strategic planning, its ability to unite global partners and various stakeholders, and its implementation of priority actions previously identified by UNEP (UNEP EOU, 2003b). A recommendation issued for ICRAN is the need to establish a forum for information sharing (UNEP EOU, 2003b). However, it must be noted that an independent evaluation of ICRAN conducted in 2003 produced a different view. Specifically, this independent evaluation noted that ICRAN’s activities are confounded by its lack of clear goals, its complex management structure, its lack of effective leadership, its reliance on funding from the United Nations Foundation, and flaws in its financial planning to survive beyond this funding (Barber, 2003). Further, UNEP’s evaluations indicated that despite its wide mandate and limited capacity and resources, the Mediterranean’s Priority Actions Programme Regional Activity Centre (PAP/RAC) has excelled in the initiatives it has undertaken (UNEP EOU, 2003b); and that successful revitalization of the Eastern African Regional Seas Programme has resulted in 100% ratification of the Convention; however, it is noted that this RSP remains heavily reliant on UNEP for funding, facilities, staff, and resources for Action Plan implementation (UNEP EOU, 2000). More telling are the Reports’ findings on UNEP in general, and its evaluation process. It is noted that “recurring problems are reported every year by subprogramme and in-depth project evaluations and

self-evaluation fact sheets that negate lessons of past evaluations” (UNEP EOU, 2000, p. 69). Noteworthy in this context are persistent gaps in the internalization of evaluation recommendations, the failure of divisions to submit self-evaluations, and the related failure of senior management to enforce compliance (UNEP EOU, 2000, p. 69).

While it is noted that the rate of implementation of evaluation recommendations is increasing, much more work is needed in this regard (UNEP EOU, 2002). With respect to the failure to submit self evaluations, it is noted that “with this limited level of compliance, it would seem that UNEP management is being denied the opportunity of learning from its past and present experience with a view to improving the design and implementation of future programmes and projects” (UNEP EOU, 2002, p.17). **This suggests a lack of policy and programme learning within UNEP due to the large gaps between evaluation conduct and internalization of results, and evaluation mandate and compliance.** In addition, the demand for all UNEP documents far exceeds supply, as cost and logistics prohibit large-scale paper document distribution, and limited computer access in developing countries and the process of digitizing older documents prohibits effective electronic dissemination (UNEP EOU, 2003b, p.14). Several other UNEP shortcomings are noted from these evaluations. These include incongruency between programme and project objectives with institutions and funding, and a lack of targeted capacity building to support programme and project implementation (UNEP EOU, 2000, p.55). In the context of capacity building, it is noted that UNEP’s capacity building initiatives are project-oriented, meaning that institutional structures – national and regional institutions (NIs and RIs) such as government institutions, research and training centres of excellence, and universities – are

not established; **suggesting that UNEP's capacity building is not strategic, sustainable, or focused to the long term** (UNEP EOU, 2002, p.19).

It is noted that national-level UNEP environmental policy implementation support and capacity building are especially weak (UNEP EOU, 2003b, p.15). The Regional Offices of UNEP evaluated in the 2001 Annual Evaluation, including the Regional Office for Latin America and the Caribbean (ROLAC), are characterized as lacking core professional staff and policy guidance from UNEP; their staff are not exposed to the wider UNEP system and need training in fundraising, project development and project management (UNEP EOU, 2002, p.13). The 2001 Annual Evaluation Report also reflects concerns expressed in the 1999 and 2000 Reports that **difficulty in ascertaining the impact of UNEP programmes and policies is due in part to a lack of baseline data from which to measure change, the long-term nature of environmental change that does not correspond to programme/project life cycles, and a lack of impact indicators** (UNEP EOU, 2002, p.38). While all of these shortcomings relate to the Evaluation Barriers and Challenges identified in the Model of Evaluation Science detailed in Chapter 3, this final point truly calls into question the capacity of UNEP to conduct "organizational process" and "outcome" evaluation, confirming the findings of Jacobson (1995).

Derivation and Application of the Criteria Attributes Template

The evaluation criteria brought forward in either an applied sense (used) or an advisory sense (considered) in these external and internal programme evaluations are extracted. They are then categorized by the researcher according to the Action Plan components (Appendix 1). This review exercise yields alarming results. It is found that the

evaluations use different criteria. Thus, criteria are not uniformly applied in spatial or temporal terms, making comparative evaluations impossible. The criteria used are often imprecisely defined. Many of the criteria appear to defy measurability. For example, criteria such as “the nature, magnitude, and quantity of training provided through the Action Plan” and “number of states in the region meeting or surpassing their pledged contribution to the Trust Fund” do not provide contextual scales. What is good or bad, high or low, or acceptable or unacceptable performance? The existing evaluations may thus be characterized as chaotic and complex. The faith one may have in the results of such evaluations must be called into question if the criteria upon which they are based are indeed as muddled as this exercise indicates. These observations result in the creation of a Template of Evaluation Science Attributes. These attributes are hypothesized “rules” to guide evaluation procedure and evaluation criteria definition. These attributes are defined, and working examples from the Environmental Assessment (EA) component are provided to clarify the definitions given (Table 2.5). This template is similar in function and substance to the principles for environmental indicator derivation presented in the context of the ISO movement (Table 2.2).

SUMMARY

The body of literature consulted in preparation for this research is extensive. The contextual literature is derived from a variety of disciplines, each with important contributions to the understanding of the broad oceans and coastal domain. The general evaluation theory and process literature facilitates the development of the three-part Model of Evaluation Science, designed to delineate the general types, processes, and barriers that

Attribute	Definition	Example (EA)	Procedural (P) or Criteria (C)
Continuity	Continuity through time; can be measured from one year to another	EA attached to statutory law	P
Connected	Clear linkages to Action Plan Components and programme goals	Clear definition of goals and priorities	P
Reliable	Quality Assurance – confidence in what is being measured	Scientific and Managerial Peer Review	P
System	Procedure; Replicable; Ingrained in managers	Manuals; Guidance Documents	P
Universal	Consistent across programmes/evaluations	Similar terms of reference for similar projects	C
Simplicity	Number and kind of criteria	Focus on priority measures	C
Precision	In definition and understanding	EIA goals, objectives and expectations	C
Measurable	“How”; Context; Scale; Units	Scientifically derived and supported measures	C

Table 2.5: Template of Evaluation Science Attributes

Adapted from Christie and Needham, 2004b

may be encountered in the conduct of evaluation (Chapter 3). The more specific, applied evaluation literature provides evaluation lessons related to the generic Model from the state/national, regional, and global jurisdictional levels. Evaluation documents pertaining to UNEP and the RSP provide a sound justification for research exploring programme evaluation capacity, as they identify key understanding voids. The Template of Evaluation Science Attributes provides a first step to identifying the causes for the existing evaluation chaos and complexity. It will be used in Chapter 7 to guide a discussion of evaluation criteria and infrastructure in the specific context of the Caribbean Environment Programme. Following this review, the researcher is confident that this research exercise will begin to fill

the gap between the strong calls for evaluation of the Regional Seas Programme and the many obstacles to conducting comprehensive evaluation in this context.

CHAPTER 3: A MODEL OF EVALUATION SCIENCE – DEVELOPMENT AND APPLICATION

PURPOSE

The general evaluation science literature, pertaining to evaluation theory and conduct, is produced by such key authors as Suchman (1967); Weiss (1972; 1984); Banner (1974); Hoole (1978); Rigby (1978); Patton (1984; 2002); Rutman (1984); Pal (1987; 2001); Babbie (1992); and Darabi (2002). Within this body of literature, evaluation is discussed generally, and in the context of such specific fields as public policy (Pal, 1987; 2001) and social services such as education, health care, and social welfare (Suchman, 1967; Weiss, 1972; Hoole, 1978; Babbie, 1992; Binner and Topolski, 1994; Knaap and Kim, 1998; Rossi, Freeman, and Lipsey, 1999; Darabi, 2002). There are frequently common lessons emerging from these various policy fields. The complexity of this literature requires that the key residual messages from the best sources and authors be distilled. **In essence, the high volume of detailed information on evaluation types, application processes, and barriers presented necessitated the development of a generic, three-part Model that summarizes the recurring concerns presented by these key authors.** This Model is by no means an exhaustive list of evaluation science attributes, as it must be noted that most disciplines have their own specific and unique evaluation forms. However, it captures the essential attributes of evaluation that transcend the many institutional, jurisdictional and disciplinary contexts to which evaluation science may be applied. The Model is thus “generic” in that it is not content-specific and may be applied to any type of programme (Darabi, 2002). The Model’s first part describes “a typology of evaluation forms and attributes”. The second part

describes key evaluation process elements and stages. The third part identifies and describes barriers and challenges to the implementation of the evaluation process.

GENERIC MODEL OF EVALUATION SCIENCE PART ONE: A TYPOLOGY OF EVALUATION FORMS AND ATTRIBUTES

There are many kinds of policies and programmes, with such varying attributes as subject matter domain, scope, financial size, duration, and complexity of goals (Weiss, 1972). As such, “the all-purpose evaluation is a myth” (Weiss, 1972, p.15). This Typology attempts to capture the generic evaluation types that may be applied to policies and programmes (Figures 3.1 and 3.2). It is organized in terms of four central questions: **What** is the purpose of the evaluation? **When** is the evaluation conducted? **Who** is responsible for evaluation conduction? And, **why** is the evaluation conducted? It is important to note that all evaluation exercises should address the what, when, who, and why questions in a transparent fashion.

More specifically, behind each question is a rationale for its inclusion. It is first necessary to ascertain **what is being evaluated**. Major evaluation types, such as “Process Evaluation” – the monitoring of management processes; “Impact Evaluation” – evaluation of programme outcomes; “Efficiency Evaluation” – an examination of the relationship between expenditure and results; “Empirical Evaluation” – the examination of policy/programme efficiency and effectiveness (Pal, 1987; Scriven, 1991); and “Metaevaluation” – the evaluation of evaluation (Scriven, 1991; Patton, 2002) are identified. In addition, combinatorial types are identified. For example, “Empirical Evaluation” may be a measure of congruency between policy/programme goals and pre-existing values

"WHAT"- What is the purpose of the evaluation?

PROCESS EVALUATION

To examine planning and management processes; particularly implementation and operations in terms of efficiency and effectiveness, and strengths and weaknesses.

IMPACT

To examine the impact of policies and programmes in terms of intended and unintended outcomes; strong relation to the "causal theory" and "explanation." In the environmental domain, has advanced to include environmental assessment and the consideration of alternative courses of action.

EFFICIENCY

To examine the relation between the cost of policy and programme delivery and the benefits that result. Most widely known and used by economists, and often expressed as a form of benefit-cost analysis.

LOGICAL

To examine the degree of internal rigour among problem definition and policy content (goals, objectives, instruments). The measurement of consistency is the fundamental task.

ETHICAL

To examine policies in relation to pre-existing value systems and stated preferences.

EMPIRICAL

To examine the efficiency and effectiveness of policy through the application of technical, quantitative (and qualitative) indicators or criteria.

PLANNING AND NEEDS

To examine the pattern of changing client needs, and to assist in the forecasting of future demands for policy and programme inputs and outputs.

META-EVALUATION

To examine the processes and procedures in place that facilitate policy and programme evaluation. Most often considered a form of "capacity determination"; the "evaluation of evaluation"

"WHEN"- When is the evaluation conducted?

FORMATIVE

To provide continuous or regular feedback on all aspects of planning and management, including policy development implementation. Facilitates corrective actions, adjustments, and amendments at stages early enough to effect and improve procedural performance. Change in direction or emphasis may be possible.

MID-TERM

To provide mid-cycle and mid-term assessments that facilitate some corrective actions, adjustments, amendments, and limited change in direction or emphasis.

INTERIM

To provide periodic progress reports and facilitate decision making confidence in moving to more advanced policy and programme phases--phases that reflect a strong commitment and less maneuvering room.

SUMMATIVE

To provide "completion" assessments of policies, programmes and projects. Strong assumptions about the quality of data and information and the evidence to pass judgment on goals attainment soon after "end" or "termination" dates.

EX-ANTE

To provide a "forward-looking" assessment of likely outcomes and effects of new policies and programmes when antecedent experience is rare. Conducted in the planning phase.

EX-POST

To provide a "backward looking" assessment or a "retrospective" evaluation of policies, programmes, and projects some 2-5 years after completion dates. Potentially more comprehensive and analytical. Conducted in termination and transition phases.

SPOT CHECKS

To provide regular and unscheduled reviews. Usually in the context of suspected, recent process failures or weaknesses, or the administrative desire for "preventative action" in advance of significant difficulties.

Figure 3.1: Generic Model of Evaluation Science Part One: A Typology of Evaluation Forms and Attributes

Christie and Needham, 2004a

“WHO”- Who is responsible for evaluation conduction?

EXTERNAL OR OUTSIDE AGENCIES/ACTORS

Facilitates objectivity and independence. Facilitates consideration of alternative interpretations and perspectives. Facilitates acceptance and consideration of results.

EXTERNAL OR OUTSIDE ACTORS AND AGENCIES THAT ARE “CONTRACTED”

Facilitates evaluation process control. Facilitates quality control because participants and products are known.

INTERNAL OR INSIDE AGENCIES AND ACTORS (DEDICATED RESPONSIBILITY)

Facilitates institutional stability and the status quo. Facilitates evaluation cost reductions. Facilitates the control of consequences. Facilitates the protection of sensitive data and information. Facilitates political control.

PARTNERSHIPS AND OTHER JOINT AGENCY AND ACTOR ARRANGEMENTS

Facilitates data and information exchanges. Facilitates the pooling of resources (Human, Financial, Technological, Informational). Facilitates the sharing of costs, benefits, rewards, risks. Facilitates co-operation, co-ordination, and communication with the broader policy domain.

INDIVIDUAL OR RESPONSIBLE AGENCIES AND ACTORS

Facilitates maximum control of process and product attached to evaluation exercise. Facilitates preservation of the “narrow” institutional view. Facilitates evaluation efficiency and expediency.

“WHY”- Why is the evaluation conducted?

ADVERSE RESPONSIBILITY (Advocacy)

COERCIVE RESPONSIBILITY (Compelled)

COMPULSORY RESPONSIBILITY (Required)

CONTRACTUAL RESPONSIBILITY (Stipulated)

DISCRETIONARY RESPONSIBILITY (Authority)

ETHICAL RESPONSIBILITY (Social Values Based)

PROFESSIONAL RESPONSIBILITY (Expected)

RECOGNIZED AND WILLING RESPONSIBILITY (Enlightened/Benefitted)

STATUTORY OR LEGISLATIVE RESPONSIBILITY (Mandated)

VOLUNTARY RESPONSIBILITY (Intuitive)

Figure 3.1: Generic Model of Evaluation Science Part One: A Typology of Evaluation Forms and Attributes Cont'd

Christie and Needham, 2004a

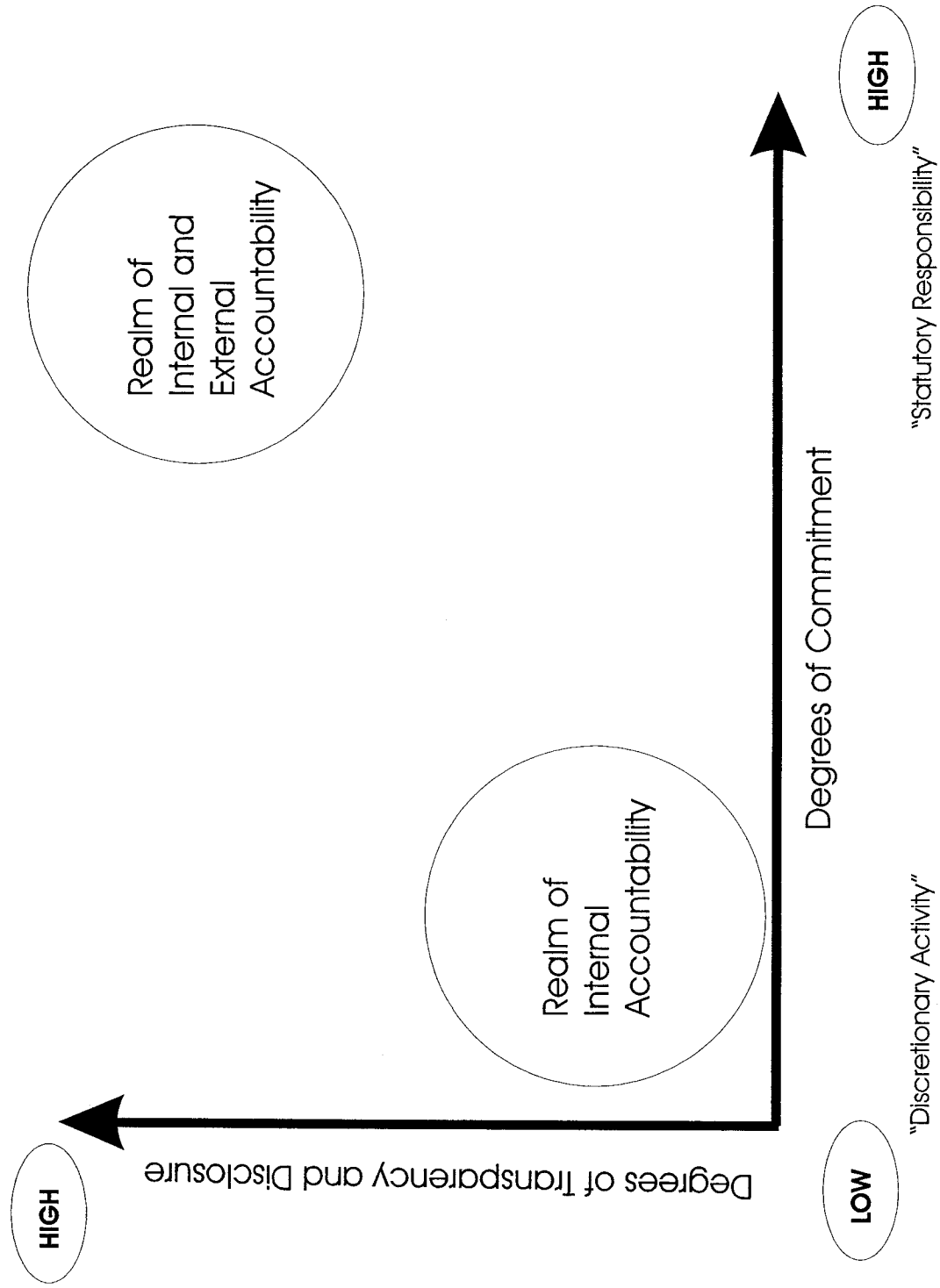


Figure 3.2: Evaluation Research- Motivations and Obligations

Christie and Needham, 2004a

(“Ethical Evaluation”), an examination of policy/programme internal rigour and consistency (“Logical Evaluation”), or the forecasting of future needs for policy/programme inputs and outputs (“Planning and Needs Evaluation”) (Pal, 1987).

Often the purpose of the evaluation – the “what” – can help determine the timing – the “when” – of evaluation. To clarify, if the purpose of the evaluation is to measure programme results, the evaluation may be conducted following the completion of the programme. In this context, evaluation may be “summative” – a final assessment of policy/programme effectiveness (Weiss, 1972; Hoole, 1978; Pal, 1987; Scriven, 1991), or “ex-post” – a retrospective evaluation conducted some time after policy/programme completion (European Environment Agency, No Date; UNEP EOU, 2003a). If the purpose of the evaluation is to provide information for programme modifications, the evaluation will likely be conducted prior to or during policy/programme/project implementation. In this context, evaluation may be “formative” – where information is fed back during policy/programme development for improvement (Weiss, 1972; Hoole, 1978; Pal, 1987; Scriven, 1991), or “ex-ante” – a forward-looking appraisal of the likely effects of policies/programmes (European Environment Agency, No Date). The evaluation may be conducted during the policy/programme life cycle: for example, mid-term or interim – conducted while the intervention is in progress, or as a “spot check” – a brief evaluation that is often done where there is evidence that things are not going well (UNEP EOU, 2003a).

The question of “**who**” conducts the evaluation is noteworthy. This Model notes the negative and positive consequences associated with both “external” and “internal” or “in house” evaluators. Weiss (1972) suggests that there is no clear-cut advantage to either. While evaluations conducted externally to the institution in question may be more likely to

be objective and independent, outside evaluators may be regarded as “too remote” from institutional realities (Weiss, 1972, p.20). Outside evaluators may be prone to bias induced by the desire to be re-hired, but are less likely than internal evaluators to be bound by the institutional status quo (Weiss, 1972). Evaluations conducted “in house” may be prone to political or management control or censorship; however, internal evaluators may possess a stronger understanding of the programme and the issues affecting the institution (Weiss, 1972; Rigby, 1978).

Related to the consideration of “who” is the question of “**why**” the evaluation is conducted. Figure 3.2 suggests that if evaluation is conducted due to statutory obligation or mandate, there will be higher commitment and transparency attached to the evaluation exercise than if evaluation is conducted on discretionary or ad hoc basis. The Federal Auditor General’s reporting process is most representative of this case (Department of Justice Canada, 2004). However, the caution is issued that evaluation may be conducted in response to a funding or managerial requirement without practical meaning – a routine without the true intent to apply the results or recommendations issued (Weiss, 1972; Rutman, 1984; Weiss, 1984; Grudens-Schuck, 2003).

GENERIC MODEL OF EVALUATION SCIENCE PART TWO: PROCESS MODEL FOR ENVIRONMENTAL POLICY AND PROGRAMME EVALUATION

This part illustrates the generic steps to be followed in the process of conducting an evaluation. It is organized into four thematic boxes, aligned in sequence (Figure 3.3). It progresses from “Institutional Setting and Subject Matter”, to “Design and Infrastructure”,

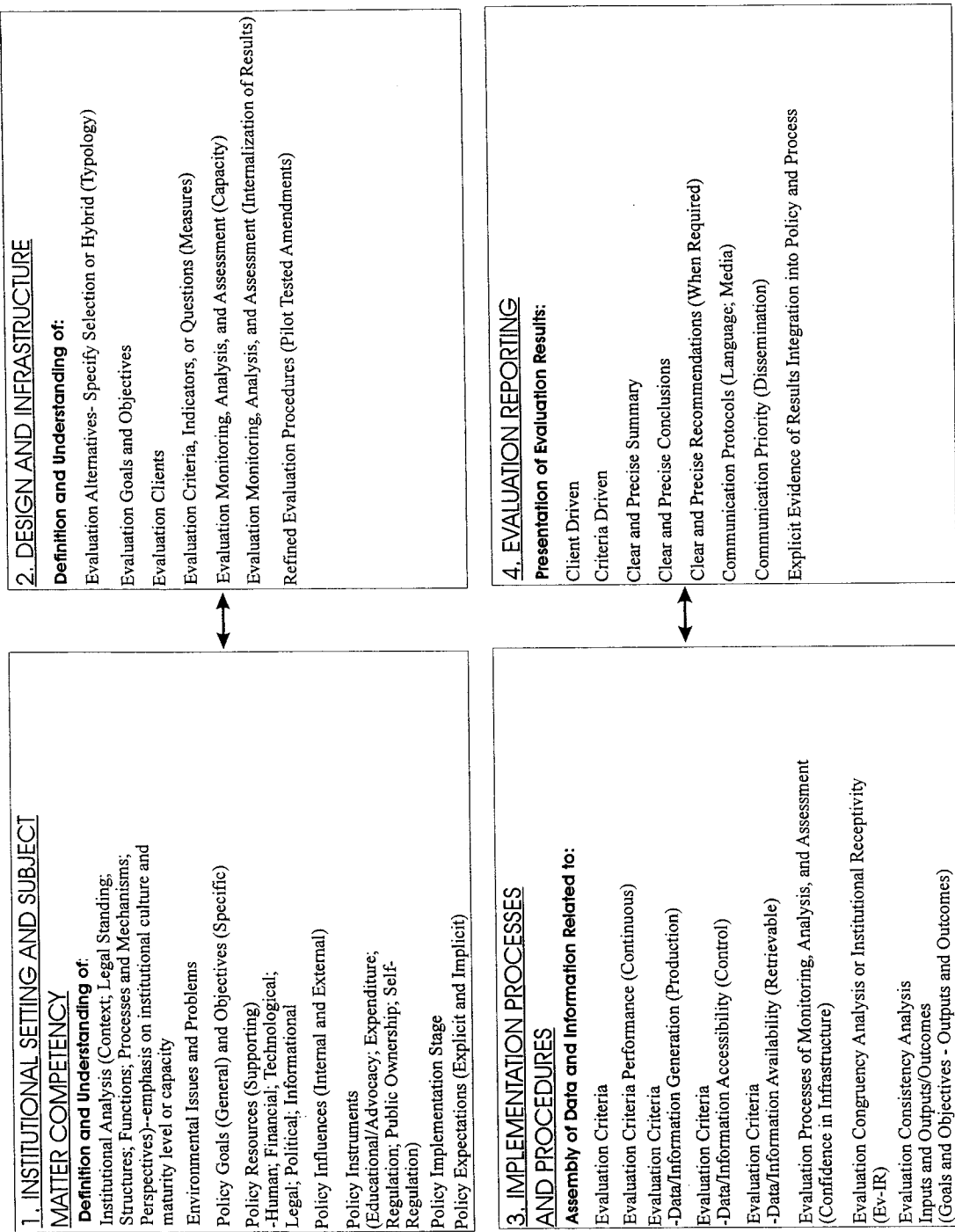


Figure 3.3: Generic Model of Evaluation Science Part Two: Process Model For Environmental Policy and Programme Evaluation

Christie and Needham, 2004a

to “Implementation Processes and Procedures” and “Evaluation Reporting”. General “evaluation steps” related to learning about the programme, planning for evaluation, initiating the evaluation, and using evaluation results underline this order (Conner, 1984). These boxes also closely approximate the major components of other evaluation models (for example, that of Darabi, 2002). It is hypothesized that a mature evaluation process would have evidence of evaluation capacity in each of the four boxes. A paucity of evidence related to the boxes’ content would indicate a less mature evaluation process.

BOX 1: INSTITUTIONAL SETTING AND SUBJECT MATTER COMPETENCY

The evaluation process must begin with a clear definition and understanding of the institution in question and of the environmental problems and issues at hand. This also refers to understanding the relationships between and among institutions involved in programme delivery (Patavalis and Aravossis, 2004). In essence, “one must be able to determine the existing state of affairs before the programme activity is initiated and then to define what the desired change is to be. Thus, before one can evaluate the success of an action program(me), one must be able to diagnose the presence or absence of a...problem and to define goals indicative of progress in ameliorating that condition” (Suchman, 1967, p.39, parenthesis added). Rutman (1984) reiterates the necessity of understanding “antecedent conditions” prior to evaluation commencing. This need to understand the broad context reflects that factors internal and external to an institution and its programmes may influence the outcomes attained (Patavalis and Aravossis, 2004). In essence, sound diagnostic work needs to be done in advance and during evaluation exercises.

A recurring message is that evaluation requires that policy and programme goals and objectives be clearly and specifically defined (Suchman, 1967; Weiss, 1972; Banner, 1974; Horst et al. 1974; Hoole, 1978; Rigby, 1978; Rutman, 1984; Pal, 1987; Babbie, 1992; Darabi, 2002; Patavalis and Aravossis, 2004). In addition, it is essential to consider the manner in which a policy/programme is implemented in order to assess the possible reasons for its success or failure (Rutman, 1984). An understanding of internal and external policy influences is also required. Pal (1987) notes that decision makers are not neutral, and are propelled by political and/or institutional interests. Weiss (1972) and Patavalis and Aravossis (2004) stress that the organizational setting in which the programme is embedded will have consequences for programme and evaluation outcomes, and many of the outcomes will be related to the institution's capacity to evaluate.

BOX 2: DESIGN AND INFRASTRUCTURE

It is important at this juncture to define the evaluation goals (Rutman, 1984; Conner, 1984) and clients (Rutman, 1984). This is the stage at which evaluation criteria – criteria by which progress toward goal achievement may be gauged – are first addressed (Suchman, 1967; Weiss, 1972). These criteria should be clearly linked to the defined programme goals and objectives (Banner, 1974; Rigby, 1978; Patavalis and Aravossis, 2004). The evaluation design itself should be flexible, as evaluation plans and measurement methods cannot remain rigid in an action setting. Further, flexibility extends to the notion of applying different evaluation types and forms to different programme components (Darabi, 2002). The development of evaluation criteria requires an examination of evaluation capacity – the ability to conduct monitoring, assessment, and analysis. This capacity will allow

institutional “self correcting” (Binner and Topolski, 1994). Related to evaluation capacity, Suchman (1967), Banner (1974), and Taut and Alkin (2003) note the importance of trained evaluation personnel and dedicated resources, including time, finances and technological support, for evaluation. The need for ongoing measurement systems and regular measurement of indicators in order to build baseline and time series data is noted (Rutman, 1984; Pal, 1987). In addition, at this stage the evaluator may conduct pilot tests, or modeling of measures and policy/programme alternatives prior to their implementation (Conner, 1984; Pal, 1987).

BOX 3: IMPLEMENTATION PROCESSES AND PROCEDURES

This Box closely follows the above discussion of criteria development. As previously noted, criteria are used to measure progress toward goal achievement, and ideally, they should be measured continuously. In the context of implementation, several authors note that evaluation is simple in the abstract, but is complicated by the fact that it is applied in a dynamic action setting, where the researcher may easily lose control of conditions (Suchman, 1967; Weiss, 1972; Banner, 1974; Hoole, 1978; Pal, 1987). Simply, the accessibility and availability of needed data are frequently less than ideal in the applied setting, due to a range of factors from weak measurement instruments to uncooperative institutions (Pal, 1987). These matters will be discussed further in the context of “Evaluation Barriers and Challenges”.

BOX 4: EVALUATION REPORTING

Evaluation results have no impact if not used as tool for management and/or policy

decision making (Horst et al. 1974; Hoole, 1978). In order for evaluation to be used, “evaluation results must be communicated” (Weiss, 1972, p.122). The dissemination and utilization of evaluation results represents the intersection of the “research world” and the “practical world” (Weiss, 1984). Effective communication of results, leading to increased likelihood of use, requires short and understandable evaluation reports (Weiss, 1972). More frequent publication of results in academic or professional journals would greatly increase the audience and availability of evaluation (Weiss, 1972). However, it is noted that the internalization of evaluation results cannot rely solely on the communication of results (Weiss, 1984). Effective use of evaluation results requires that the evaluation be planned and designed with use in mind, so that the most salient issues for policy/programme improvement and modification are addressed by the evaluation (Rutman, 1984; Conner, 1984).

GENERIC MODEL OF EVALUATION SCIENCE PART THREE: EVALUATION BARRIERS AND CHALLENGES

The barriers and challenges to conducting evaluation are inextricably linked to the evaluation process steps described above (Figure 3.4). In essence, every evaluation process step has been shown to be related to a set of barriers and challenges; and evaluation barriers are linked to management barriers (Taut and Alkin, 2003). These barriers are frequently obstacles that exist outside the realm of researcher or evaluator control (Horst et al. 1974). Further, barriers and challenges in one part of the process can cause and magnify the barriers and challenges at another process stage. There is thus a negative synergy among these barriers and challenges. This part of the Model is designed to illustrate a theoretical range of

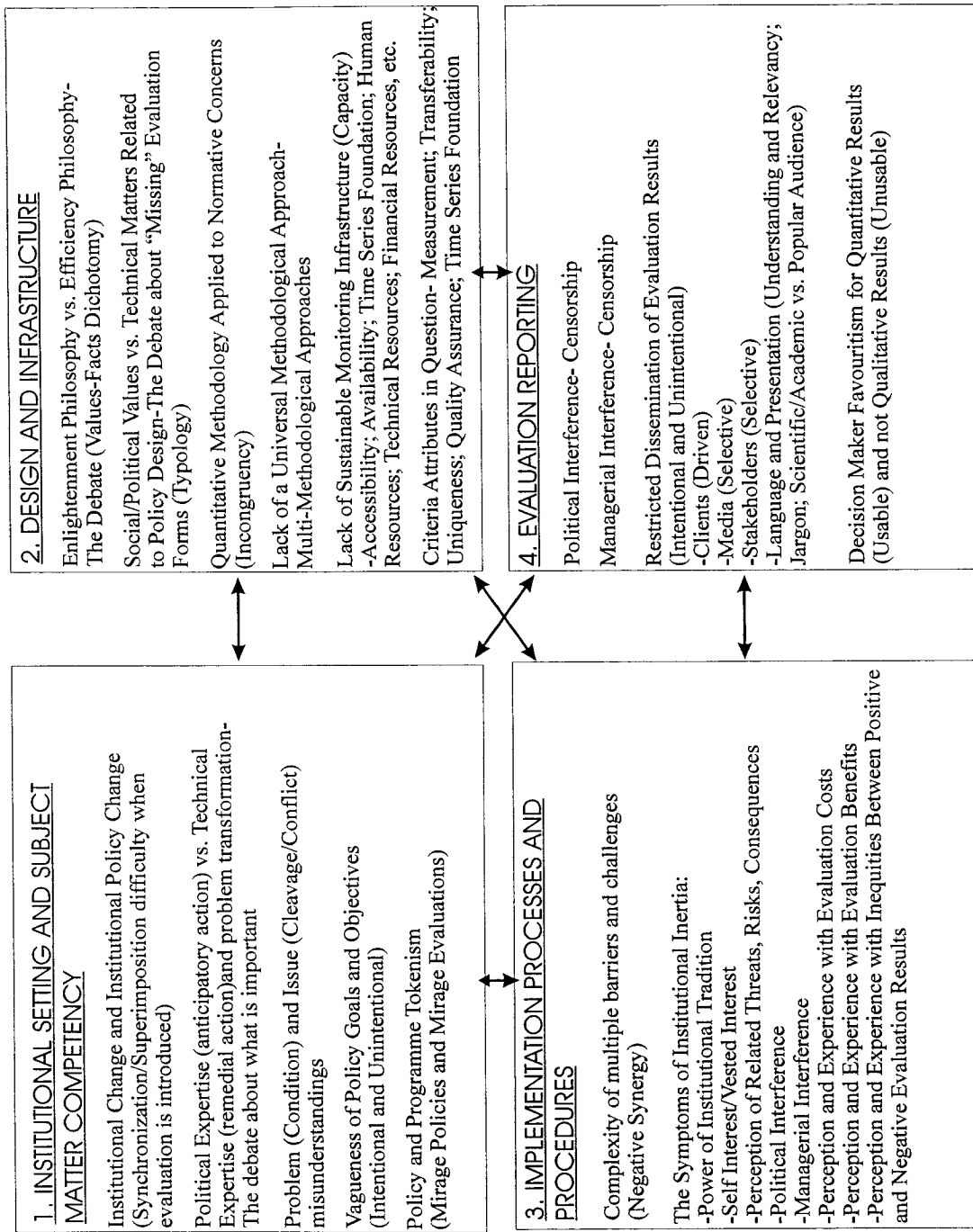


Figure 3.4: Generic Model of Evaluation Science Part Three: Evaluation Research Barriers and Challenges
Christie and Needham, 2004a

barriers to evaluation. The research is interested in ascertaining the actual range of barriers in the context of the Caribbean Environment Programme.

BOX 1: INSTITUTIONAL SETTING AND SUBJECT MATTER COMPETENCY

A key consideration is that “programmes have a habit of changing” (Rutman, 1984, p.15). Institutional change and institutional policy change present a challenge to evaluation, as the dynamic setting in which evaluation science is applied means that change is constant (Suchman, 1967; Weiss, 1972; Banner, 1974; Hoole, 1978; Babbie, 1992). This is compounded by the fact that, in reality, “every effect has multiple causes” (Pal, 1987). It is thus nearly impossible to determine the extent to which the intervention in question is responsible for the observed changes (Suchman, 1967; Rutman, 1984; Pal, 1987).

A recurring barrier to evaluation is the vague definition of policy/programme goals and objectives (Suchman, 1967; Weiss, 1972; Banner, 1974; Horst et al. 1974; Rigby, 1978; Rutman, 1984; Pal, 1987; Babbie, 1992). This vagueness may be unintentional, for example, related to the tendency of managers to approach programmes intuitively and not analytically (Weiss, 1972). However, it may be intentional, related to the desire to obscure failures and/or to satisfy a greater number of interests to garner support (Weiss, 1972; Banner, 1974; Horst et al. 1974; Rigby, 1978). Suchman perhaps states this barrier best (1967, p. 38, parenthesis added): “Given the basic importance of a clear statement of program(me) objectives to be evaluated, it is not difficult to understand why so many evaluative studies which fail to define these objectives prove unproductive. This is tantamount to undertaking a basic research project without first formulating one’s hypotheses” and research questions.

A key barrier in this context is policy/programme and tokenism, which refers to the lack of true intent behind the creation of policies/programmes and the conduct of evaluation. In the context of the former, policy/programme goals and objectives may be stated as “pious platitudes” that are difficult or impossible to actually reach (Weiss, 1972). An important consideration here is that evaluation based on such insincere goals is worthless (Banner, 1974; Rigby, 1978). In the context of the latter, evaluation may be conducted to pacify stakeholders (Pal, 1987), to “whitewash” programmes to make them look good (Suchman, 1967; Rutman, 1984; Weiss, 1984); to avoid action (Weiss, 1972; Rutman, 1984); to gain recognition for existing programmes “known” to be successful (Banner, 1974; Weiss, 1984); to unjustly remove staff or programmes (Grudens-Shuck, 2003), or to fulfill managerial or funding agency requirements for evaluation (Weiss, 1972; Rutman, 1984; Weiss, 1984).

BOX 2: DESIGN AND INFRASTRUCTURE

The lack of a universal methodological approach, or an accepted methodology with similar rigour to those of other sciences, is a recurring barrier to the conduct and acceptance of evaluation science (Suchman, 1967; Horst et al. 1974; Rigby, 1978; Rutman, 1984; Patton, 1984; Pal, 1987). There is frequently no common framework uniting or facilitating comparison between projects under a single programme (Horst et al. 1974). The key barrier noted in the context of “Design and Infrastructure” is related to criteria measurement and monitoring capacity and infrastructure. A major constraint is inadequate data systems (Taut and Alkin, 2003). It is noted that continuous and regular measurement of criteria are needed to establish baseline and time series data for trend analysis and comparability (Pal, 1987; Rutman, 1984). However, it is noted that information is frequently faulty or

nonexistent, and measuring instruments weak and imprecise (Banner, 1974; Pal, 1987). Time series research design in evaluation may be especially problematic, as it is not possible to isolate the effects of the intervention being evaluated from other variables causing change (Babbie, 1992). The data used is frequently “secondary data”, collected for other purposes but employed to fulfill evaluation criteria (Pal, 1987). Organizational records, from which data may be extracted, are often incomplete and/or inaccurate (Weiss, 1972). Further, what appears to be satisfactory from a document analysis is frequently confounded by applying the notion of “measurability” (Horst et al. 1974). Evaluation is hampered by a lack of dedicated personnel, facilities and funds (Suchman, 1967; Rutman, 1984). These barriers may be summarized with the statement “the field of evaluation research is notable for its lack of comparability and cumulativeness of findings. Different results obtained for different purposes for different methods and based on different criteria lead to confusion...” (Suchman, 1967, p.27). Others echo this: “the piecemeal nature of most evaluations limits the continuity of research and the culmination of knowledge” (Weiss, 1984, p.170).

BOX 3: IMPLEMENTATION PROCESSES AND PROCEDURES

The key barrier noted in this context is that of institutional inertia. The “suspicion and antagonism” that greets evaluation is often born of the fact that evaluation, conducted alongside daily programme operation, disrupts ongoing activities (Suchman, 1967, p.22). The literature notes the “incredible strength of an entrenched bureaucracy” (Banner, 1974), the “remarkable resistance of organizations to unwanted information – and unwanted change” (Weiss, 1972, p.3), and the “resistance of bureaucracies to systematic evaluation and its implied change (Hoole, 1978, p.124). This resistance is due to several factors. Very

simply, it is based on familiar and ingrained ideas and methods among programme administrators (Banner, 1974; Grudens-Shuck, 2003) and the need to establish trust and rapport between programme and evaluation personnel (Taut and Alkin, 2003). Organizations are primarily interested in their own survival (Suchman, 1967; Weiss, 1972; Binner and Topolski, 1994). Evaluation may threaten vested interests; moreover, independent evaluation may be seen as a threat to programmes and jobs (Banner, 1974; Babbie, 1992). Change can be expensive, it can threaten institutional stability, and it may cause conflicts with funding agencies and clients (Weiss, 1972). In addition, there is resistance to alterations in the status quo and set allegiances and assumptions (Suchman, 1967; Weiss, 1972; Banner, 1974; Hoole, 1978). While positive evaluation may lead to programme expansion and/or continuance, negative evaluations may lead to programme modification or even termination (Weiss, 1972). Simply stated, “evaluation is by nature unpopular – who wants to be told their programme is a failure?” (Pal, 1987, p.43).

BOX 4: EVALUATION REPORTING

In practice, there is little evidence that evaluation results in improved policies, programmes, or processes (Banner, 1974; Horst et al. 1974). Non-use of results is a common complaint among evaluators (Rigby, 1978). Evaluation reports are frequently ignored due to their tendency to be long, and laden with jargon and complicated mathematics (Weiss, 1984). They are seldom published in professional journals or distributed in understandable forms (Weiss, 1972). Results are frequently presented in ways that may only be understood by researchers (Babbie, 1992), and, unfortunately, oftentimes in forms not useable by programme planners and managers. In addition, the academic

orientation of most evaluations means that many stop short of drawing conclusions or issuing recommendations (Weiss, 1972), limiting their usefulness to programme administrators. The reasons for the failure of evaluation reports to reach appropriate users range from simple failure to transmit reports to late completion of reports or high staff turnover leading to indifference (Weiss, 1984).

Frequently, barriers to the internalization of evaluation results are institutional, not informational. Should the evaluation contain negative findings, it may be censored or ignored (Weiss, 1972; Banner, 1974). Should this censorship happen, the likelihood of tokenism in evaluation is increased. Evaluation may become merely “a ritualistic ceremony to reinforce the image that top management is openly and actively supportive of scientific evaluations” (Banner, 1974, p.768). Evaluation findings may contradict entrenched beliefs and official points of view (Babbie, 1992). As such, the status quo is a major impediment to change (Banner, 1974; Weiss, 1984; Babbie, 1992). Decision making authority may be fragmented, so that the process of implementing evaluation results is hampered by protocol and consensus building (Weiss, 1984). In addition, the act of implementing evaluation results may be beyond the capacities of organizations with limited human and financial resources (Weiss, 1984).

MODEL APPLICATION

The three-part Model of Evaluation Science is central to research. The tenets of the Model – namely the need to clearly define programme goals and objectives, the need to define evaluation criteria that are congruent with these goals and objectives, the need to establish and maintain infrastructure supporting these criteria, the need for institutional

receptivity to evaluation, and the need to internalize evaluation results – form the thematic foundations for the construction of the research instrument or “Discussion Guide” used in field studies. More is said about this interrelationship shortly. These tenets are also used as a template for coding the interview transcripts and as an organizational template for the results and analysis sections of the thesis. As the Model represents the hypothesized or “expected” conditions, it is used to communicate and contrast the observed or “actual” state of evaluation science in the context of the Regional Seas Programme in the Wider Caribbean.

CHAPTER 4: RESEARCH STRATEGY AND METHODOLOGY

PURPOSE

The purpose of this chapter is to describe how the Model of Evaluation Science is operationalized in order to obtain the evidence and testimony needed to address the Central Research Question. It presents the research strategy and its associated methodology. The research strategy is divided into two components, the “preparatory stage” and the “evaluation stage”. The former sets the agenda for the research. The latter is dedicated to addressing the set of Associated Research Questions. Answers to the Associated Research Questions will provide and support the development of a response to the Central Research Question. The research methodology component of this chapter describes the attributes and specific applications of the appropriate methods and techniques. The chapter concludes with an explanation of the data analysis processes and procedures employed.

RESEARCH STRATEGY

THE PREPARATORY STAGE

The preparatory research stage is focused on two complementary entities: the **research** and the **researcher** (Figure 4.1). The former refers to “subject matter competency”. This is the understanding of the complex context, institutions, and legal arrangements composing the UNEP Regional Seas Programme in the selected case study region of the Wider Caribbean. This includes understanding the processes and institutional culture of the United Nations system, in which the RSP is embedded. The latter refers to

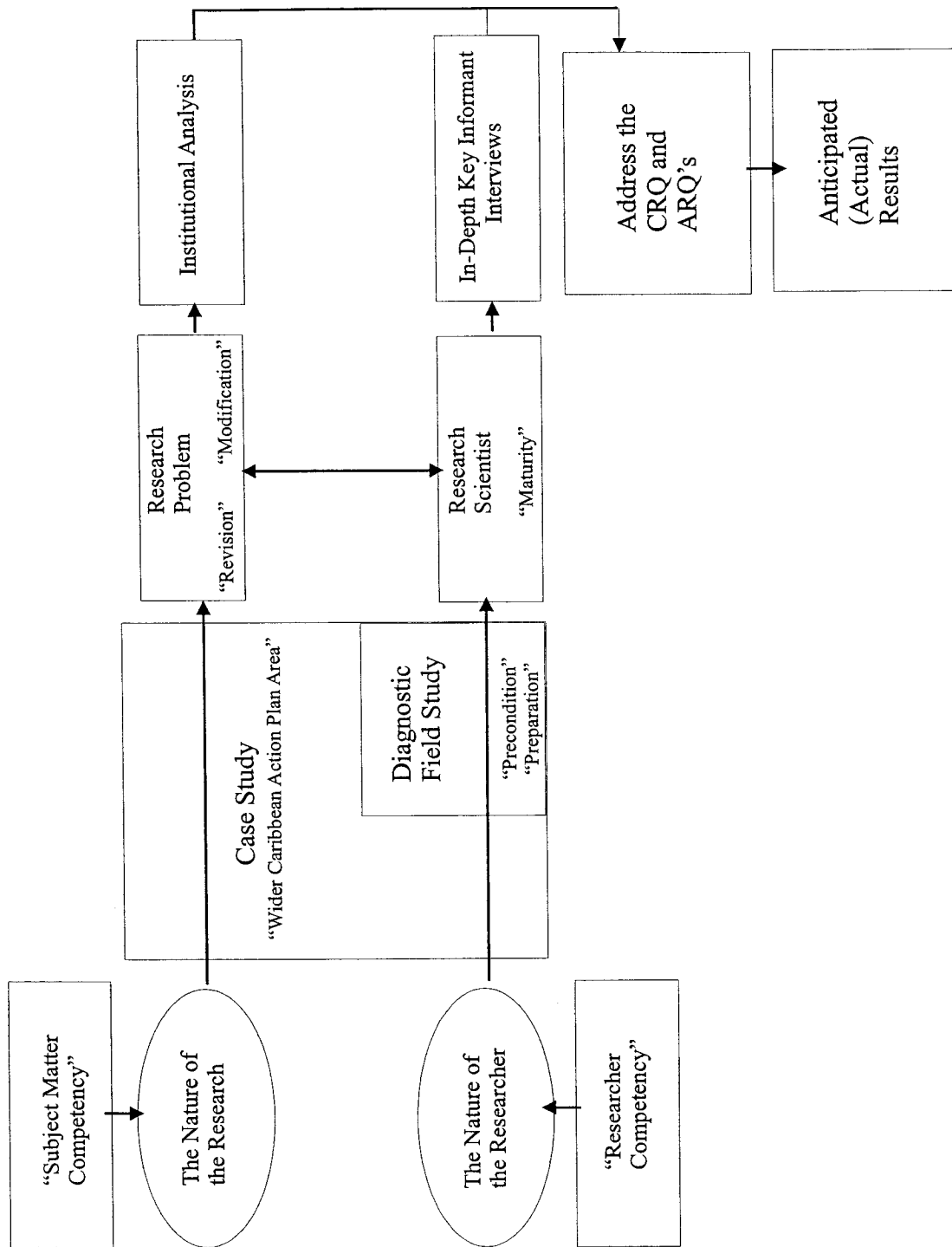


Figure 4.1: The Preparatory Stage of Research

“researcher competency”. The researcher must navigate a steep learning curve. Much of this navigation requires diagnostic field study in different cultures, both institutional – the United Nations system, and environmental – the Wider Caribbean Region.

THE EVALUATION STAGE

The evaluation stage is focused on addressing the set of Associated Research Questions (ARQs) in support of the Central Research Question (CRQ). ARQs have been formulated for each of the six Action Plan components that ultimately determine programme capacity to plan, manage, and to conduct evaluation (Figure 4.2). ARQs have specific data and information requirements and methodological obligations. This is illustrated for the “Environmental Assessment” Action Plan component in Figure 4.3, and similar graphics may be derived for each of the components. The data and information requirements and methodological obligations are related to “programme goals and objectives”, “evaluation criteria”, and “evaluation infrastructure”. The researcher seeks to identify programme goals and objectives related to the six Action Plan components. In essence, this serves to corroborate the notion that these six components are central to RSP capacity building efforts. For example, in the context of the Legal Arrangements component, a goal or objective might be to promote ratification of specific legal Protocol. In the context of the Education and Support Activities component, a specific goal or objective might be to increase the number of regional training workshops or seminars hosted to promote environmental awareness and management. The term “evaluation criteria” is specifically related to the Action Plan components and their development. In essence, the researcher is

Does Evidence Exist to Support the Claim that the RSP is the “jewel in UNEP’s crown”?

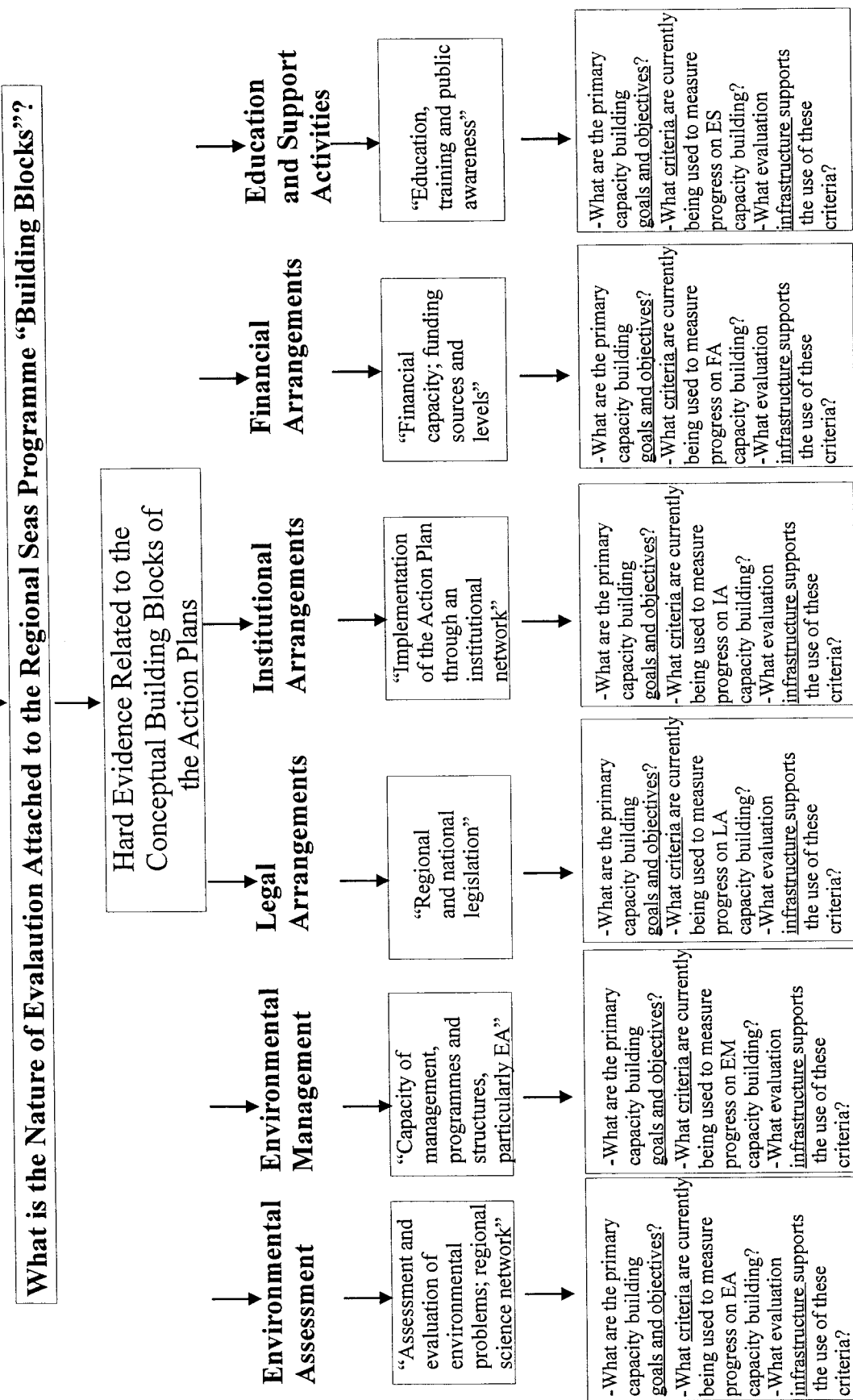


Figure 4.2: The Evaluation Stage of Research

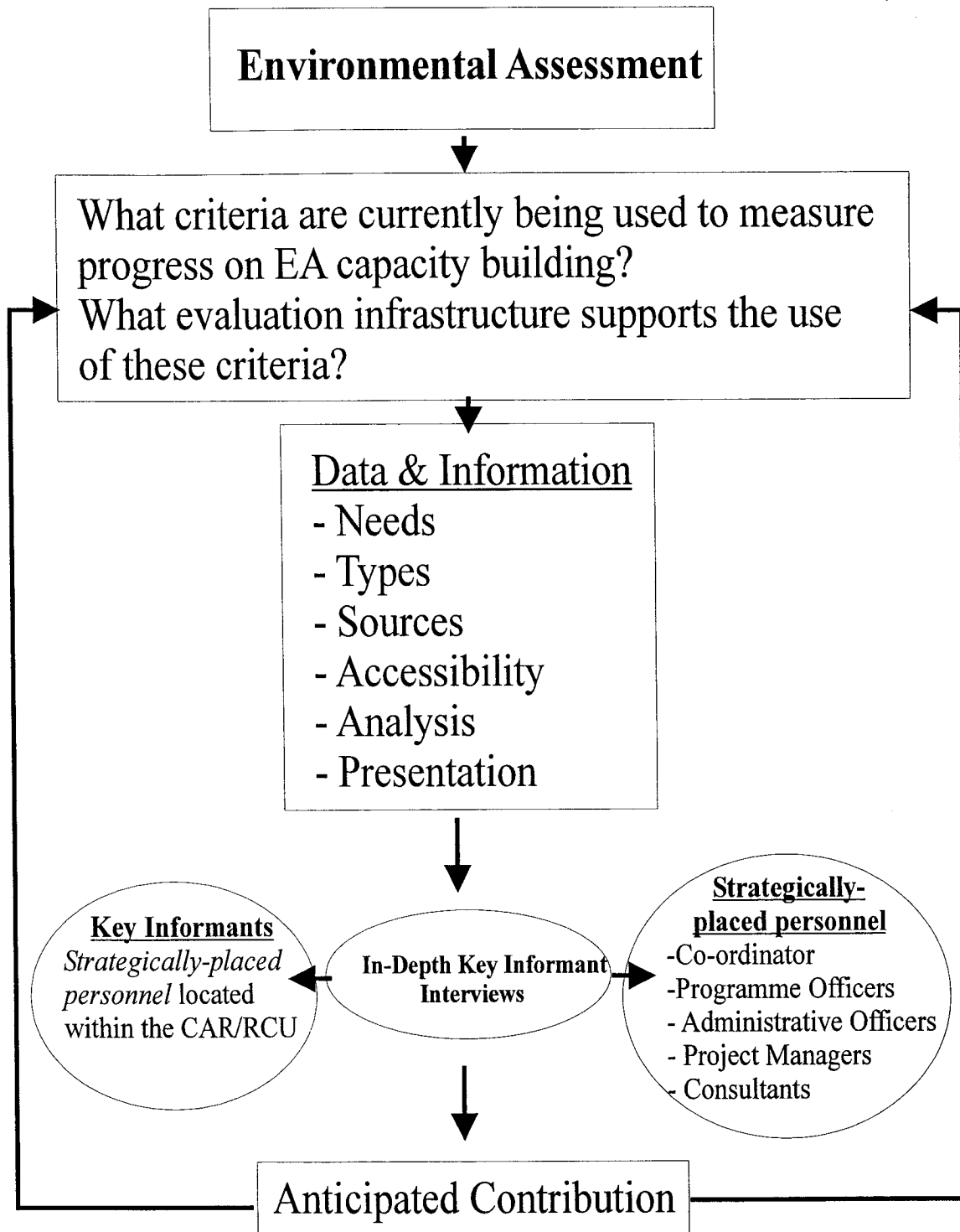


Figure 4.3 Associated Research Question Method and Technique - Environmental Assessment Component

seeking hard evidence that the RSP has well-defined and justified criteria to measure capacity building progress. This progress must be made in order to achieve success related to the regional Convention and attached Protocols. In the context of the Legal Arrangements component, a criterion may be “national legislation supporting environmental impact assessment”. The term “evaluation infrastructure” is specifically related to the human, technological, and other programme resources allocated to support sustainable criteria measurement. For example, in the context of the “Financial Arrangements” component and its attached criteria, hard evidence may exist of periodic and systemic national and regional environmental trust accounting/auditing. This includes assessments and disclosures of the financial health of the Caribbean Environment Programme.

These graphics (Figures 4.2 and 4.3) were hypotheses constructed prior to the conduct of the diagnostic field study. They represent the “expected” conditions, and were derived from the critical literature review. However, as will be demonstrated in the remainder of the thesis, these hypotheses have been tested and challenged.

RESEARCH METHODOLOGY

The use of multiple methods and data sources (research participants or informants) strengthens the research as it permits triangulation (Baxter and Eyles, 1997; Patton, 2002). Triangulation is an important mechanism to increase the rigour of qualitative research (Baxter and Eyles, 1997). It is a method that intends to “support a finding by showing that independent measures of it agree with it or, at least, do not contradict it” (Miles and Huberman, 1994, p.266). In essence, it seeks convergence among findings from multiple methods and sources (Baxter and Eyles, 1997).

THE CASE STUDIES APPROACH: DEFINITION OF THE STUDY SCOPE AND BOUNDARIES

The case studies approach uses many of the same techniques as a history, but adds direct observation of the phenomena under study and interviews with people involved in the phenomena (Yin, 2003). The case studies approach may be executed as a single case study (single experiment) or multiple case studies (comparative research) (Yin, 2003). The strength of using a case studies approach lies in the approach's ability to cope simultaneously with numerous types of evidence, both qualitative and quantitative, including documents, archives, direct observation, participant observation and interviews (Hamel, Dufour, and Fortin, 1993 in Patton, 2002; Yin, 2003). The methodology of participant observation is most often executed as a case study, yet not all case studies involve participant observation (Jorgensen, 1989). Similar to experiments, case studies yield results that may expand and generalize theories, but which cannot be generalized to populations or universes (Yin, 2003).

In this context, it was recognized early in the research that the study scope and boundaries needed to be defined. A study of the entire Regional Seas Programme would not be possible. It was thus necessary to select a representative Action Plan area to serve as a case study region. The Wider Caribbean Region (WCR) was selected as this case study region for several reasons. First, the Caribbean Action Plan was adopted in 1981, and its Convention and first Protocol were adopted in 1983. Vallega (2002b) categorizes the period from the late 1970s to 1992 (UNCED) as the RSP's "take-off stage". Most of the RSP Action Plans were adopted during this period (Table 1.1). This means that the Caribbean Action Plan's development and evolution has likely been influenced by the development and

evolution of other Action Plans. In addition, the Caribbean Action Plan has been in existence for over 20 years. The hypothesis that there should be mature evaluation capacity and evidence of programme results is thus justified. In fact, Sabatier and Jenkins-Smith (1993) argue that at least a 10-year period is needed for programme evaluation. Second, the Wider Caribbean Region is, geographically, the closest RSP to the researcher's "home base" of Ottawa, Ontario, Canada. This relative proximity facilitates field study, as travel is not cost-prohibitive. Third, the relative proximity of the WCR means that it has an American (North-Central-South) contextual setting. During the field study session the researcher will not likely be totally overwhelmed by cultural or linguistic differences, as English is the primary working language. Fourth, there is the opportunity to examine Canadian influence and contribution to the RSP.

CONTENT ANALYSIS METHODOLOGY

Content analysis has broad applications, as it is an unobtrusive and non-reactive method of inquiry and analysis (Holsti, 1969; Krippendorff, 1980). Content analysis is broadly defined as "...any technique for making inferences by objectively and systematically identifying specified characteristics of messages" (Holsti, 1969, p.14). It involves coding of oral, written, or other types of communications and categorizing them according to some conceptual framework (Babbie, 1992). Content analysis describes the characteristics of text by asking *what* and *how* something is said; *to whom* it is said; *why* it is said; and *with what effects* (Holsti, 1969 in Krippendorff, 1980).

Content analysis may be *manifest* – concerning the surface content of text, or *latent* – concerning the underlying meaning of a communication (Babbie, 1992). An example of the

former would be counting the number of times a word appears. An example of the latter would be reading an entire text and then making an overall assessment of its meaning, or looking at implicit representations of text (Babbie, 1992). In the context of this research, both methods were used. Manifest content analysis was employed in the comprehensive literature review. Here, the surface content, namely the authors' disciplinary affiliations and the main findings communicated by the literature were extracted. This surface content permits the creation of an inventory of key residual messages emanating from major academic disciplines. This analysis serves to reduce the complexity of the large, interdisciplinary body of literature relevant to the marine and coastal environment. However, it may be argued that some elements of latent content analysis were used in the extraction of these messages. Latent content analysis applies here in that broad disciplinary affiliations and detailed findings were reduced by the researcher into more simple categories of "discipline" and "key message". Manifest content analysis was also employed in the process of extracting the criteria identified in internally and externally derived evaluations of the Regional Seas Programme and the Caribbean Environment Programme, and in the gathering of information for the Institutional Analysis (Chapter 5).

DIAGNOSTIC FIELD STUDIES

As previously suggested, the researcher was faced with a steep learning curve. This was related to being a new researcher who had not previously conducted research in a different cultural context. The research required accessing and interviewing strategically placed personnel in the administrative centre of the Caribbean Regional Seas Programme, the Regional Co-ordinating Unit of the Caribbean Environment Programme (CAR/RCU) in

Kingston, Jamaica. No previous analyses of Regional Seas Programme evaluation capacity in the Caribbean were found, and as such the “new researcher” was taking on “new research”. The research endeavor was thus experimental and diagnostic. Further, the literature simultaneously suggested a high standard of programme performance (the declarations of merit presented in Hulm, 1983a) and serious deficiencies in programme evaluation (Jacobson, 1995). The diagnostic field study was necessary to build understanding of the institution and its processes, to speak with and gain insights from strategically placed programme planners and managers, and to apply the Generic Model of Evaluation Science to the institution itself in the institutional milieu.

A diagnostic field study, such as the one conducted here, is a valuable approach in research. Similar to other forms of field research, it subjects the researcher to such symptoms as stress, isolation, and “argot” – exposure to specialized, institutional terminology and language (Neuman, 1993). However, there are many positive aspects to diagnostic field study. The “diagnostic” element allows the researcher to enter the setting as an “acceptable incompetent”, a non-threatening outsider with desire, and need, to be taught by insiders (Neuman, 1993). It increases experiential knowledge by allowing researcher immersion in the institution under examination. It allows for participant observation and the conduct of face-to-face interviews. Direct exposure with strategically placed planners and managers facilitates the establishment of trust (Neuman, 1993). It allows the researcher to identify the hierarchy of institutional participants (“the participant tree”) and information gatekeepers (those with formal or informal authority to control site and information access) (Neuman, 1993). Importantly, being in the field allows the researcher to observe differences between the “public face” – the hierarchy and gatekeepers presented to outsiders, and the

“private face” – the actual inner workings of the institution. By placing the researcher in the milieu of the institution and phenomena being studied, diagnostic field study can mitigate false assumptions about the perceptions, attitudes and values of the participants, political culture, social organization, economic structure, environmental state, networks, and participation trees in the research domain which may be made at a distance.

During the earliest stages of the research (Summer and Fall 2003), a list of staff contacts at the CAR/RCU was located on the Caribbean Environment Programme (CEP) website. In September 2003, initial contact was made via e-mail with the Co-ordinator of the CAR/RCU. E-mail correspondence continued with CAR/RCU personnel regarding the possibility of conducting a diagnostic field study at the CAR/RCU (Appendix 3). This field study was conducted from 21-28 August 2004. It allowed for the simultaneous conduct of such methods as participant observation, institutional analysis, and key informant interviews. The theory and applications of these methods are discussed below.

PARTICIPANT OBSERVATION TECHNIQUE

Participant observation is “research characterized by a prolonged period of intense social interaction, between the researcher and the subjects, in the milieu of the latter, during which time data, in the form of field notes, are unobtrusively and systematically collected” (Bogdan, 1972, p.3). It requires the researcher to become involved as an observer and a participant in the lives of the subjects (Bogdan, 1972; Jorgensen, 1989). In essence, the methodology of participant observation operates on the belief that often the only way for one to truly understand a phenomenon is to immerse oneself in it (Bogdan, 1972). The goals of participant observation are to produce commentary on the phenomena being observed

(Laurier, 2003) and to see the world as the subjects see it (Bogdan, 1972). The methodology of participant observation is usually practiced as a form of case study (Jorgensen, 1989). This is the situation in this research exercise.

Full participant observation, in the context of the “prolonged period of intense social interaction” noted above, was not possible due to time and cost constraints. However, the use of elements of this method was important to enhance the researcher’s understanding of the institution and its processes. In this context, elements of participant observation were used simultaneously with other research methods during the diagnostic field study. Participant observation supplemented such techniques as key informant interviews to increase understanding of individuals’ roles, the “participant tree” or personnel hierarchy within the CAR/RCU, institutional culture, and institutional perceptions, attitudes and values. During the diagnostic field study period, the researcher was given an office in the CAR/RCU. As staff members worked, the researcher observed and took notes on their work patterns and mannerisms, consulted materials from the on-site library, conducted research on-line, prepared for the day’s scheduled interviews, and processed the notes taken from previous interviews and observations. Observation of the interview respondents in their work environment allowed the researcher to note that the hierarchal “participant tree” reproduced in Appendix 2 is itself not rigid, as all personnel interact in a friendly manner and appear to have equal – though different – workloads. Simply, this observation allowed the researcher to conclude that the CAR/RCU operates no differently than any other office, despite its different cultural setting and its international scope.

INSTITUTIONAL ANALYSIS

The Institutional Analysis Template (IAT) is a six-part framework described by Mitchell (1990 and 2002). Developed to examine and assess institutions in integrated resource management, and specifically integrated water resource management, the IAT framework is transferable to other sectors and domains (Mitchell, 2002). The template guides a systematic examination of all of an institution's components to facilitate understanding of the genesis, operations and motivations of the institution. It is both descriptive (concentrating attention on agencies, actors and decisions) and prescriptive (providing insight on possible changes or modifications needed to improve management processes) (Mitchell, 1990). The six elements of the IAT are defined in Table 4.1.

The IAT is applied to the Caribbean Environment Programme. This involves a general analysis of the broader Regional Seas Programme and a specific analysis of its Caribbean Programme. This Institutional Analysis, conducted through both the literature review and the diagnostic field study, is presented in Chapter 5.

IN-DEPTH KEY INFORMANT INTERVIEWS

The key informant interview was selected as the primary data gathering mechanism for this research due to the experimental and diagnostic nature of the research. In the absence of data and information related to programme evaluation capacity, it was necessary to interview programme planners and managers. This was done to ascertain the current state of evaluation science and the overall capacity to conduct programme evaluation. Face-to-face interviews, often conducted in the respondents' home or workplace, are one of the most flexible strategies (Sheskin, 1985; McLafferty, 2003). As it is more difficult to reject

Context	The historical, cultural, economic, and institutional dimensions; the state of the biophysical environment.
Legal Standing ("Legitimation", "Legitimacy", "Credibility")	The political commitment, statute, and financial/administrative support necessary for policy/programme implementation. Directly proportional to the number of supporting measures.
Structures	Number and type (centralized/ decentralized) of organizations responsible for management functions.
Functions	Decision-making and role responsibilities attached to the structures. May be generic (planning, regulation) or substantive (management, control).
Processes and Mechanisms	Strategies designed to address overlap of functions between and among the structures (public participation, working groups).
Perspectives ("Organizational Culture")	Variables including culture, perceptions, attitudes, values, bias, philosophies, that guide and influence goals, objectives, commitment, implementation, and effectiveness.

Table 4.1: The Institutional Analysis Template

Adapted with Modifications from Mitchell, 2002, pp.310-311

someone in front of you than it is to do so over the phone or by mail, and as personal contact permits respondents to ask for clarification of questions, face-to-face interviews can increase response rates and increase respondents' understanding of questions and interview intent (Sheskin, 1985; McLafferty, 2003). In addition, it can ensure more truthful answers as a level of rapport is established (Sheskin, 1985; McLafferty, 2003).

The interview process requires asking the questions of "who", "how", "what" and "when" (Miller and Crabtree, 1999a). In the context of "who", it was known that interviews would be administered to **individuals** in the CAR/RCU rather than to groups of individuals. This is due to the fact that different individuals have different capacity building goals and responsibilities, and different reflections on the quality of programme evaluation processes and mechanisms in place. The question of "how" refers to the degree of structure in the

interview process (Miller and Crabtree, 1999a). This refers to whether or not the interviews are rigid, with identical questions posed to each key informant in the same order. A **semi-structured interview** process was selected. This encompasses “guided, concentrated, focused, and open-ended communication events...(that) occur outside the stream of everyday life” (Miller and Crabtree, 1999a, p.19). In essence, the interviews were structured around “questions, probes and prompts...written in the form of a **flexible interview guide**” (Miller and Crabtree, 1999a, p.19, emphasis added). Specifically, the interview protocol created was referred to as the “Discussion Guide”. It consisted of several open-ended questions to steer the direction of the interview. However, it was not necessary that the questions be asked in a particular order, and certain key informants focused more attention on specific subject areas within the Discussion Guide due to their experiences and expertise.

The question of “what” refers to the type of semi-structured interview, which is dependent upon the information being sought (Miller and Crabtree, 1999a). In the context of this research, the **In-Depth Key Informant Interview** was selected as the most appropriate type. Depth interviews are important qualitative research tools, for use when the research focus is specific or narrow (Miller and Crabtree, 1999b). They are organized “around an interview guide consisting of some relatively closed identifying questions and a few (one to six) open ended ‘grand tour’ questions, with associated prompts, probes and follow up questions” (Miller and Crabtree, 1999b, p.96). The interviews conducted qualify as depth interviews, as they are focused on ascertaining information about the key informants, followed by information about elements of capacity building and programme evaluation. The Discussion Guide, to be detailed below, is structured in this way. Key informant interviews involve the element of “when”, as they require that the researcher and

informant develop a relationship over time (Miller and Crabtree, 1999a; Gilchrist and Williams, 1999). This relationship was developed in this research through **electronic mail correspondence over the period of one year prior to the field study**. Key informants are “people who possess special knowledge, status or communication skills, who are willing to share their knowledge and skills with the researcher, and who have access to perspectives or observations denied (to) the researcher through other means” (Goetz and LeCompte, 1984 in Gilchrist and Williams, 1999, p.73). Key informants are active members within their culture (Gilchrist and Williams, 1999). In the context of this research, the key informants are planners and managers working at the CAR/RCU. Each has his or her own unique mandate to implement in the domain of the larger Action Plan and Convention, and in the more specific subprogramme area of which he or she is a part. As such, each key informant has both broad and specific knowledge of capacity building and programme evaluation. The key informants are identified in Table 4.2. More comprehensive profiles of the key informants are presented in Appendix 2. The key informants serve as interview respondents, as interpreters of institutional structures, processes and mechanisms, and as teachers when they ask questions of the researcher, for example regarding possible areas of future research and recommendations to improve programme evaluation (Gilchrist and Williams, 1999).

The limitations of key informant interviews should be noted (Gilchrist and Williams, 1999). Chiefly, key informants are not communicating freely, but are directed by the questions that are asked. These questions, and the interpretation of their responses, are influenced by the cultural assumptions of the researcher. The questions may not open all subject areas relevant to the discussion. In addition, the key informant may not fully disclose all needed information, or the researcher may not recognize important information

Name	Position
Nelson Andrade Colmenares	Co-ordinator, Caribbean Environment Programme
Luc St-Pierre	Programme Officer, Information Systems for the Management of Marine and Coastal Resources (CEPNET)
Alessandra Vanzella-Khoury	Programme Officer, Specially Protected Areas and Wildlife (SPAW)
Heidi Savelli-Söderberg	Junior Professional Officer, Specially Protected Areas and Wildlife (SPAW)
Malden Miller	Project Manager, International Coral Reef Action Network (ICRAN)
Franklin McDonald	Advisor to the Caribbean Environment Programme (Consultant)

Table 4.2: Key Informants at the CAR/RCU

when it is offered. However, key informant interviews remain an important tool in this research despite their limitations (Gilchrist and Williams, 1999).

Selection of a Sample

Qualitative and quantitative research differ greatly in the logics underpinning their associated sampling strategies (Patton, 2002). Specifically, “qualitative inquiry typically focuses in depth on relatively small samples, even single cases (n=1), selected *purposefully*” (Patton, 1990 in Kuzel, 1999, p, 33; Patton, 2002, p.230). This differs from quantitative research, which involves the use of larger samples, selected randomly, that are representative of a population and are used for making generalizations (Kuzel, 1999; Patton, 2002). The use of purposeful sampling in qualitative research relies not on randomness and generalization, but seeks **information-rich cases** (Baxter and Eyles, 1997; Patton, 1990 in Kuzel, 1999; Patton, 2002). Information-rich cases are “those from which one can learn a great deal about issues of central importance to the purpose of the inquiry...(this) yields insights and in-depth understanding rather than empirical generalization” (Patton, 2002, p.230). In purposeful sampling, also called judgment or purposive sampling, “...you decide

the purpose you want the informants...to serve, and you go out to find some” (Bernard, 2000, p. 176 in Patton, 2002, p.230). As such, purposeful sampling involves non-probability sampling, in the strategic (or “purposeful”) selection of a small number of key informants (Sheskin, 1985; Gilchrist and Williams, 1999). In the context of this research, the broad group of potential key informants was defined by the researcher as being staff of the CAR/RCU. More specifically, this preliminary definition focused on programme planners and managers who would be likely to have professional roles and responsibilities related to capacity building and programme evaluation. This preliminary definition of the potential key informants excluded technical and support staff of the CAR/RCU. As such, potential key informants were identified in advance of the diagnostic field study. This identification was based on the researcher’s derived knowledge of CAR/RCU’s key planners and managers. This knowledge was based on access to the staff contact list, and specifically the identification of the Co-ordinator and Programme Officers, published on the CEP website.

This identification of key informants was supplemented by **Snowball** or **Chain Sampling** in the field. This approach involves asking strategically placed people to identify others with critical knowledge and information on specific subjects (Sheskin, 1985; Patton, 2002). Specifically, due to the researcher’s affiliation with a Canadian university and her status as a geographer, her initial inquiry (August 2003) was forwarded by the CEP Co-ordinator to a Canadian geographer currently holding the position of Programme Officer of Information Systems for the Management of Marine and Coastal Resources (CEPNET) at the CAR/RCU. Numerous electronic communications with this individual resulted in his identification of several potential key informants, through “cc’s” on messages and direct mention of the people (Appendix 3). In addition, snowball sampling continued during the

diagnostic field study. During the field visit, the Programme Consultant/Advisor was introduced to the researcher as a potential key informant regarding RSP and CEP context. This information led to the scheduling of a dedicated interview with this individual. Furthermore, during his interview, the CEP Co-ordinator identified certain individuals as having expertise in certain specific areas, identifying them as key informants for such specific themes as the transfer of lessons and practices from one country or community to another, or information and expertise exchange among the various Regional Seas Programmes (Andrade, 2004, Personal Communication). As such, the final list of key informants was determined only after the researcher arrived at the CAR/RCU.

For this research, six interviews were conducted (n=6). It is important recall that “there are no rules for sample size in qualitative inquiry” (Patton, 2002, p.244). While there is a tendency to equate small sample sizes in qualitative research with the dangers of small sample sizes in quantitative research, it must be remembered that “the validity, meaningfulness, and insights generated from qualitative inquiry have more to do with the information richness of the cases selected and the observational/analytical capabilities of the researcher than with the sample size” (Patton, 2002, p.245).

Development of the Discussion Guide

The questionnaire, or “Discussion Guide”, was developed to steer the interview process rather than to serve as a rigid interview protocol (Appendix 4). The Discussion Guide design process employed a four-step method of inquiry: literature review, cultural review, questionnaire design, and implementation and analysis (McCracken, 1988; Miller and Crabtree, 1999b). First, the comprehensive literature review defined problems and

permitted an assessment of the existing data and information (Chapter 2). Second, preliminary Institutional Analysis facilitated understanding of the institutional culture of the Regional Seas Programme and the Caribbean Environment Programme (Chapter 5). These literature and cultural reviews provided a sound foundation from which to design the Discussion Guide.

The third step of the method of inquiry was the actual construction of the Discussion Guide and its questions. The Discussion Guide begins with a set of simple biographical questions to establish understanding of key informants' profiles and roles. These biographical questions serve as a gradual start to the interview process, facilitating rapport and trust between the interviewer and the key informant (Miller and Crabtree, 1999b). In addition, they allow the responses to be placed in context according to the key informant's position and background (McCracken, 1998). The remainder of the Discussion Guide is designed to obtain evidence and testimony from programme planners and managers in two broad subject areas: capacity building and programme evaluation. These questions are classified as broad, "grand tour" questions. These are based on the categories determined by the literature and cultural reviews above (Miller and Crabtree, 1999b). They are to be broad, clearly defined, and free of jargon or "loaded" words (Fowler, 1993; Miller and Crabtree, 1999b; McLafferty, 2003).

Questions on capacity building are focused on ascertaining key informants' roles and responsibilities within the CEP and their specific work area. Central to this line of inquiry is how the six Regional Seas Programme Action Plan components are incorporated into their larger mandates, and more specifically, their daily work activities. Specifically, it is of interest to note if each component is considered to be of equal weight, or if certain

components are considered to be of higher priority on the ground. Questions on programme evaluation are focused on obtaining evidence and testimony related to the three-part Model of Evaluation Science. These questions range from seeking information on how evaluation is conducted, when it is conducted, and by whom. Other questions attempt to ascertain what evaluation criteria are in place to measure progress under each of the six Action Plan components, and what infrastructure is in place to support the use of these criteria. Questions also seek insights on the barriers to conducting evaluation in the context of the RSP and the CEP.

The Discussion Guide continues with questions pertaining to learning from, and improvement of, evaluation. The question “Are you concerned with the level to which evaluation results are used/internalized?” was used to guide a discussion of how – and if – evaluations of the CEP and its projects lead to learning and change for programme and project improvement. The question set “Does the CEP benefit from the evaluation experiences and lessons from the larger RSP (evaluations of other regions)?” and, “In what ways?” was used to elicit information regarding the level and nature of information exchange between and among the diverse regions participating in the RSP. The question set “In which areas do you think evaluation is mature – and least mature – and why?” is closely linked to the quest to find barriers to evaluation. Responses allowed the researcher to ascertain what practitioners perceive as the “best” and “worst” forms and aspects of evaluation in the context of the CEP and its projects. The Discussion Guide concludes by asking the key informants for additional insights. These insights are requested by asking the key informants what, if anything, they feel was “missed” during the interview that is

relevant to the researcher's understanding of capacity building, programme evaluation, and programme evaluation capacity.

Organization of Logistical Issues

The main logistical issues that needed to be resolved were the scheduling of the diagnostic field study and the attainment of Ethics approval to conduct the study (Sheskin, 1985). The diagnostic field study was organized and scheduled in a series of electronic mail correspondences (Appendix 3).

Conducting research with human subjects requires considerations of cultures and research ethics. In general, research ethics protect the rights of individuals, communities and environments involved in the research, and may assure a favourable environment for further research by building trust (Hay, 2003). When research is conducted in another cultural setting, ethical research must acknowledge and respect other groups' ethical expectations (Hay, 2003). All geographical research conducted in a different culture is subject to the requirement of sensitivity "to local attitudes and customs in a manner that respects the culture as well as the physical environments encountered" (Smith, 2003, p.180). The consideration of ethics applies to obtaining informed participant consent, providing full disclosure of the study's purposes, ensuring voluntary participation and "no harm" to participants, and considering cultural awareness and the dissemination of results and feedback to participants (Babbie, 1992; Gilchrist and Williams, 1999; Miller and Crabtree, 1999b; Hay, 2003).

In the context of this research, the protocols specified by the Research Ethics Board (REB) of the University of Ottawa were observed. The research project, Discussion Guide

and key informant consent forms received formal Ethics approval from the University of Ottawa on 4 August 2004 (Appendix 5).

Pilot Study

As was previously noted, some basic principles of conducting interviews include the need to define terms clearly and the need to use simple wording that has a consistent meaning for all respondents (Fowler, 1993; Miller and Crabtree, 1999b; McLafferty, 2003). In addition, it has been noted that responses are limited by the questions that elicit them (Gilchrist and Williams, 1999). To ensure that the questions drafted were understandable and complete, an informal “pilot study” was conducted by the researcher and the research supervisor prior to the field study period. The Discussion Guide was piloted with the research supervisor as it was not practical to pilot one (or more) of the key informants due to the already small sample size. The pilot test conducted involved testing and modifying the Discussion Guide, and refining the oral interview technique, in several “mock interviews”. Further, the first interview conducted in the field served as a sort of pilot test, in that the researcher’s interview technique and the usefulness of the questions were tested on a key informant for the first time. Although no major modifications were required to the Discussion Guide, this first interview experience reinforced the need for the researcher to be flexible in the order of questions asked, and the need to clarify the intent and meaning of certain questions. It should be noted that different modifications were required in each interview, due to the different roles, professional and cultural backgrounds, and linguistic profiles of the different key informants.

Interview Implementation

The six interviews were conducted over a period of three days on the premises of the CAR/RCU. Each key informant was interviewed in his or her office. The interviews each took between thirty minutes and one hour. While each interview was audio taped for later transcription, manual notes were also taken by the interviewer in order to ensure the retention of important information. The taking of notes did not interfere with the flow of the discussion or the level of rapport between the researcher and the key informant. These notes were largely limited to short “memory triggers” to assist with the transcription process (Neuman, 1993).

DATA ANALYSIS

NOTES AND TRANSCRIPTS

The data analysis process began with the systematic examination and re-writing of the notes taken by the interviewer during each interview session. Notes were examined and “cleaned up” immediately following the interviews. They were rewritten and entered into a word processor in the weeks following the field study exercise. The data analysis process then focused on the transcription of the interview tapes. The transcription process was done manually using a word processor. The literature notes that manual transcription typically requires 4-6 hours for every hour of interview (Miller and Crabtree, 1999b). However, the transcription process often took longer in this research due to various accents of the informants and frequently poor (muffled or very quiet) recordings. This process continued for approximately two months following the field study period, in Autumn 2004. The

protocols of the University of Ottawa's REB were followed during the transcription process, in that only the researcher and her supervisor had access to the interview materials and the tapes and transcripts were stored in a secure location.

Manual transcription invites the likelihood of many errors. Several measures were employed to increase the validity and rigour of the findings. One such measure was "member checking", in which analytic categories, hypotheses, and interpretations are recycled back to key informants (Baxter and Eyles, 1997; Gilchrist and Williams, 1999). In this context, any statements that were not immediately clear to the researcher during transcription were flagged in the transcript. Upon completion, the transcripts were sent to the appropriate key informants for review. Each had the opportunity at this time to edit and/or clarify his or her responses. Only two of the six key informants replied with revisions to their transcripts. A third left the CAR/RCU shortly after the transcripts were sent by the researcher. Rigour was also ensured by the use of multiple methods and sources (triangulation) (Baxter and Eyles, 1997). This allowed the researcher to find areas where findings from different methods or key informants converged – with this convergence being an indication of consensus in, or accuracy of, the findings. A final measure employed to ensure the rigour of the results presented is the inclusion of direct quotations from the various key informants (Baxter and Eyles, 1997). Permission to quote the key informants was obtained on the consent forms. These help to enhance the rigour of qualitative research findings as they present information directly from the respondents', and not the researcher's, point of view (Baxter and Eyles, 1997).

CODING

The volume of the interview transcripts necessitated the use of a simplifying or organizational process by which to extract the most pertinent insights related to the Central and Associated Research Questions. A coding process was employed to fulfill this requirement.

Reading the interview transcripts, it became apparent that most key insights fit into anticipated categories – those that could be derived directly from the Associated Research Questions and the Discussion Guide. These anticipated categories are “Key Informant Role/Profile”, “Programme Goals and Objectives”, “Evaluation Processes”, “Evaluation Criteria”, “Evaluation Infrastructure”, “Barriers to Evaluation”, and “Internalization of Evaluation Results”. Initially, a category was created and labeled “Miscellaneous”. This category contained statements and insights from various key informants that were considered by the researcher to be largely unanticipated and very interesting. Upon further examination of these “Miscellaneous” items, it was noted that many of them focused upon the growing role of tourism in the Wider Caribbean, and the motivation for environmental protection stemming from this trend. As such, the “Miscellaneous” category was renamed “Tourism”. Certain other categories needed to be modified due to the volume and diversity of the relevant information provided by the key informants. First, the “Evaluation Processes” category was broken down into two different categories: “Evaluation – General” and “Evaluation – Mechanisms”. The former refers to the key informants’ professional and personal opinions and attitudes regarding the current state of evaluation conduct in the Caribbean Environment Programme. This includes judgments of the value and adequacy of what is done, and suggestions of what ideally should be done. The latter refers to

descriptions of what is currently done – how evaluation is conducted at the CEP – from the local (project) to the international (Regional Seas Programme and UNEP) levels. Second, the category of “Barriers to Evaluation” was divided into “Barriers” and “Conditions”. “Barriers” relates explicitly to constraints in human, financial, legal, political, technological, and informational resources. “Conditions” refers to what is actually happening in the current evaluation processes, related to the four boxes of the Processes and Barriers and Challenges parts of the Model of Evaluation Science. Third, the “Internalization of Evaluation Results” category was divided into two distinct categories: “Internalization of Evaluation Results” and “Information Exchange Among RSPs”. The former refers specifically to lessons learned from evaluations conducted. The latter refers to information sharing mechanisms among the regional programmes. This latter category was created due to the frequently mentioned tendency for Regional Seas Programmes to share information regarding projects and the creation and implementation of Legal Protocols, but to fall short of sharing evaluation-based information or lessons. Finally, corresponding to the structure of the Discussion Guide, the “Evaluation Infrastructure” category is organized according to infrastructure pertaining to human, financial, legal, technological, and informational resources. The full list of categories used in the interview transcript coding process is presented in Table 4.3.

The interview transcripts were initially coded using a word processor (Microsoft Word). During this process, a separate document was created for each category. Information was copied and pasted from the interview transcripts into the appropriate document. In some cases, the same quotation or insight was copied into more than one category. This was done to avoid missing potentially valuable information in a specific context (category).

Initial Categories	Final Categories
Role/Profile	Role/Profile
Six Action Plan Components (Use of): EA, EM, LA, IA, FA, ES	Six Action Plan Components (Use of): EA, EM, LA, IA, FA, ES
Programme Goals and Objectives	Programme Goals and Objectives
Evaluation Criteria	Evaluation Criteria
Evaluation Infrastructure	Evaluation Infrastructure
Evaluation Barriers	Evaluation Barriers (expressed as Human, Legal, Financial, Technological, and Informational Resource Constraints)
	Conditions (what is actually happening)
Internalization of Evaluation Results	Internalization of Evaluation Results
	Information Exchange Among Regional Seas Programmes
Evaluation Processes	Evaluation: General
	Evaluation: Mechanisms
Miscellaneous	Tourism

Table 4.3: Coding of Interview Transcript Data: Categories for Initial Analysis

Further analyses were done by converting these Word files to Rich Text Files, which were imported into the qualitative data analysis programme QSR NVivo. The use of this software programme facilitated rapid coding, and was especially useful for organizing and visualizing patterns in such complex and active data categories as “The Six Action Plan Components”, “Evaluation Criteria”, and “Evaluation Infrastructure” (Appendix 6). These three categories encompassed the data and information most salient to the Associated Research Questions (ARQs). The categories “Evaluation Criteria” and “Evaluation Infrastructure” were subject to even further analysis. A manual coding process was used to indicate which insights and quotations fit under which box in the “Processes” and “Barriers” parts of the Generic Model. The three-part Model of Evaluation Science is used as an organizational tool for the presentation of this data and information in the Results chapters (Chapters 6-8).

CHAPTER 5: INSTITUTIONAL ANALYSIS OF THE CARIBBEAN ENVIRONMENT PROGRAMME

PURPOSE

The purpose of this chapter is to provide a comprehensive profile of the Wider Caribbean case study region and the institutions of the Caribbean Environment Programme. It provides understanding of the context, legal standing, structures, functions, processes and mechanisms, and the institutional perspectives of the Regional Seas Programme in the Wider Caribbean. This fundamental understanding is needed prior to a discussion of Regional Seas Programme evaluation. The Institutional Analysis Template, which includes the elements listed above and in Table 4.1, provides the framework by which this chapter is organized (Mitchell 1990 and 2002). This diagnostic overview is the most complex and comprehensive section of the thesis.

CONTEXT

GEOGRAPHY

The Wider Caribbean Region (WCR) is defined by UNEP as “the Caribbean Sea, Gulf of Mexico, and all of their littoral States and areas south of 30°N, including such outliers as El Salvador, the Bahamas, and the Guianas” (Glassner, 1993, p.64). The WCR is a semi-enclosed sea area composed of deep basins separated by ridges (Glassner, 1993; Rodriguez, 1981), with a surface area of over 4 million km² and a drainage area of approximately 7.5 million km² (Rodriguez, 1981; Hinrichsen, 1998). In addition to the two

large basins of the Caribbean Sea and the Gulf of Mexico, the Caribbean Region is influenced by eight major river systems (Hinrichsen, 1998). Noteworthy in this context are the direct influences on the Caribbean of two of the world's largest rivers, the Mississippi River flowing through the United States of America, and Orinoco River from Venezuela (Rodriguez, 1981; Hinrichsen, 1998). The massive discharge of the Amazon River also has some influence on the Caribbean Region, albeit less direct than the Mississippi and the Orinoco (Rodriguez, 1981). While these rivers carry nutrients, they also carry sediments and land-based pollutants (Rodriguez, 1981; Hinrichsen, 1998; Glassner, 1993).

The Caribbean is characterized by small continental shelves, with an average breadth of 10-15 nautical miles (Glassner, 1993). The average depth of waters in the Caribbean Basin is 2,200 metres (Hinrichsen, 1998), with a mean water temperature of 27°C (Glassner, 1993). While the Caribbean Region is recognized as being "an archipelago of sunny, tropical islands naturally decorated with exotic flora and fauna" (Jayawardena, 2002, p.88), including many endemic marine species, uniformly deep, warm waters and the lack of extensive continental shelves translates to limited upwelling and thus very nutrient-poor waters throughout the region (Rodriguez, 1981; Glassner, 1993; Hinrichsen, 1998). As such, the existence and health of such marine and coastal ecosystems as coral reefs, mangrove forests, and seagrass beds as habitat for fish and shellfish is vital (Hinrichsen, 1998).

SOCIETY, ECONOMY AND ENVIRONMENT

In the Wider Caribbean, issues and problems related to society and the economy are inextricably linked to regional environmental issues and problems. The WCR is a region of

entrenched poverty, in which attempts at economic development have been thwarted by a region-wide lack of jobs, skills, expertise, infrastructure and investments (Hinrichsen, 1998). Some of the region's most significant environmental problems are the result of this poverty and the traditional industries, such as export agriculture (CEP, 2003) and oil production (Hinrichsen, 1998), upon which the region's economy depends.

The WCR is a region of high population and rapid urbanization, and its cities are frequently in coastal areas. Infrastructure development, especially sewage treatment facilities, has not kept pace with urban population growth. This is due in large part to the fact that sewage treatment plants require massive capital investment for installation and management, and so multilateral lending agencies have traditionally favoured the more cost-efficient construction of sewage outfalls without primary or secondary treatment (Siung-Chang, 1997). As such, more than 70% of the 80 million people in the Caribbean live in coastal cities, which do not have functional, or adequately functioning, sewage treatment facilities (CEP, 2003). Including Central America, not more than 10% of the wastes generated by the Basin's 200 million people receives any treatment (Siung-Chang, 1997; Hinrichsen, 1998). Tourism compounds this problem. It is reported that only 25% of the sewage and wastewater treatment plants operated by Caribbean hotels and resort complexes are in good condition (CEP, 2003). A large percentage of the wastes generated by tourists are discharged into the coastal and marine environment without adequate treatment (van't Hof, 2001). Indeed, sewage is regarded as the most widespread environmental problem in the Caribbean (Siung-Chang, 1997). In addition, most industries, including food processing and sugar refining, discharge wastewater directly into the sea without any prior treatment

(Siung-Chang, 1997; CEP, No Date). The waters of the WCR are also subject to pollution from other traditional economic activities, namely, oil production and agriculture.

The WCR has the potential to be one of the world's largest oil producers (Rodriguez, 1981), and is home to many oil and gas refining and processing activities (Hinrichsen, 1998). Approximately 5 million barrels of oil are exported daily; and on an annual basis, about 7 million barrels are dumped into the Caribbean Sea through waste and bilge water discharges, tanker slops, and offshore and exploratory drilling (Hinrichsen, 1998). There are even more dramatic means by which the WCR's waters may become polluted by oil. The Caribbean was the site of one of the worst oil spills in history, the environmental impacts of which were never assessed (Jernelöv and Lindén, 1981; Hinrichsen, 1998). This spill occurred in June 1979, when the Ixtoc I exploratory well blew out in the Bay of Campeche, Gulf of Mexico (Jernelöv and Lindén, 1981). When the well was capped in March 1980, after 290 days, approximately 475,000 metric tons of oil had been discharged into the Gulf of Mexico (Jernelöv and Lindén, 1981).

Agriculture has traditionally been a staple of the Caribbean's economy (CEP, No Date), with many Caribbean states relying on one or two export commodities (Hinrichsen, 1998). The WCR is the producer of approximately 60% of the global supply of coffee, 40% of the world's bananas, 25% of its beans, 20% of its cocoa and large amounts of other crops, including sugar, corn and vanilla (CEP, 2003). The reliance on export commodities has led to two key problems. First, the scope of economic diversification and the creation of linkages between economic sectors have been limited (Jayawardena and Ramajeessingh, 2003). Second, there is a proliferation of large monocrop plantations, which require large inputs of fertilizers and pesticides (Rodriguez, 1981; CEP, No Date). Agricultural chemicals

enter the Caribbean's waters not only from runoff from adjacent lands, but from inland via major river systems. This (over) use of agricultural chemicals has led to the release of persistent organic pollutants (POPs) into the marine environment, which accumulate in sediments and organisms (Hinrichsen, 1998). As lands are deforested to increase the area under agricultural production, erosion becomes problematic. Increased sediment loads in coastal areas smother and kill coral reefs, mangroves, and seagrass beds, which are key habitats for commercially viable, and many endemic, species (Hinrichsen, 1998).

LEGAL STANDING

The creation of the Caribbean Environment Programme (CEP) followed the same complex consultative process as other Regional Seas Programmes (Figure 5.1). In 1976, shortly after the birth of the UNEP Regional Seas Programme, several Caribbean governments approached UNEP for assistance in the assessment and creation of environmental criteria related to the regional development process (UNEP, 2002a). Following this request, UNEP and the Economic Commission for Latin America (ECLA) began work in 1977 to create an Action Plan for the management of the Caribbean environment (UNEP, 1983b; UNEP, 2002a). The broad objectives of the Action Plan were to assist the region's governments in reducing environmental problems and to develop a framework of regional co-operation to enhance capacity to develop on a sustainable basis (UNEP, 1983b). The Action Plan for the Caribbean Environment Programme was adopted in Montego Bay, Jamaica in 1981. For nearly three years following its adoption, the Action Plan remained only a diplomatic vision, as the limited financial resources of the Caribbean Trust Fund (CTF) prohibited action (Hinrichsen, 1998). The Action Plan led to the 1983

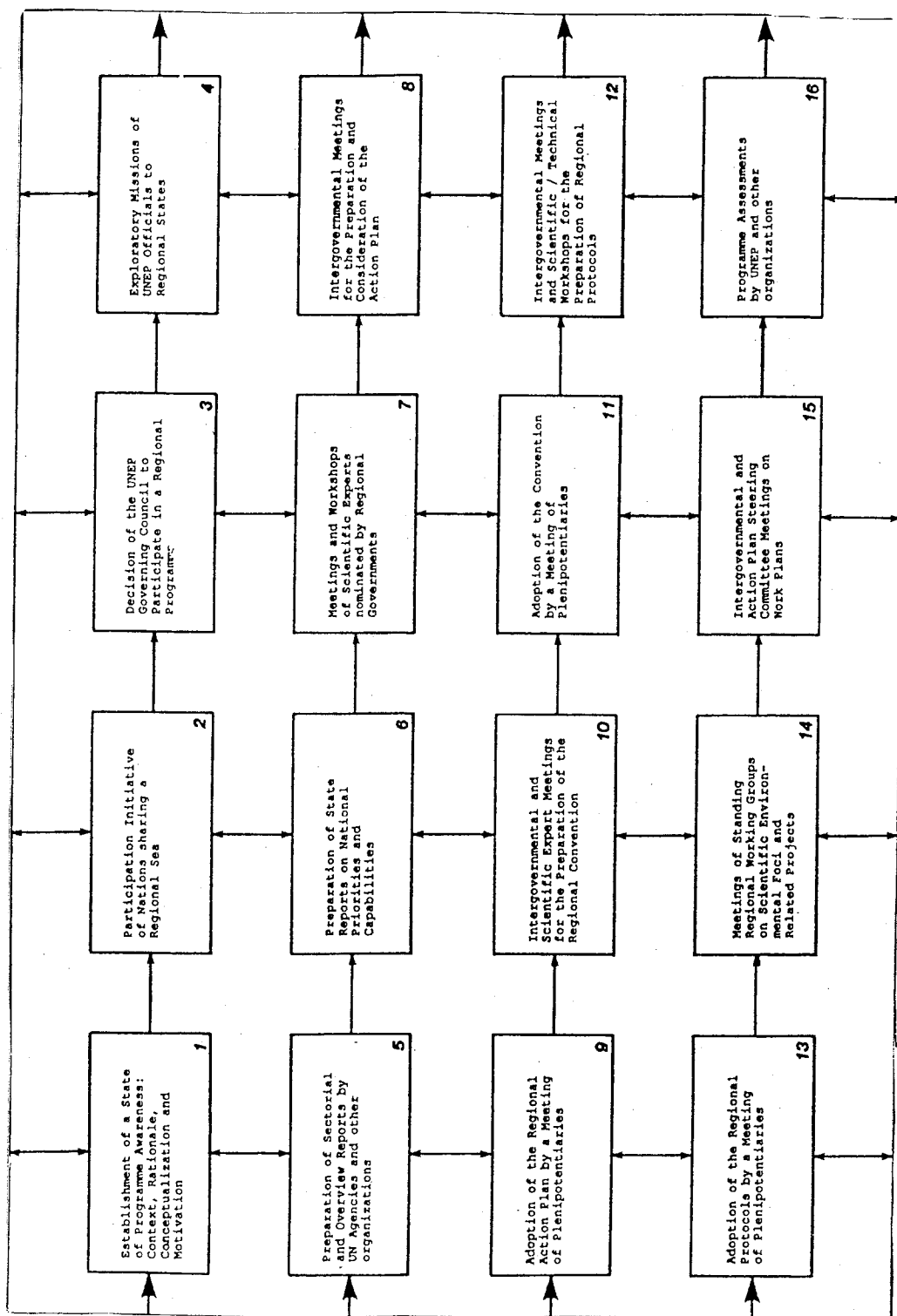


Figure 5.1: Regional Seas Programme Development Steps
 Jedynack-Copley, 1991, p. 135

adoption of the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region at Cartagena de Indias, Colombia (“The Cartagena Convention”). The Protocol Concerning Co-operation in Combating Oil Spills in the Wider Caribbean Region (“Oil Spills Protocol”) was adopted simultaneously. Both instruments came into legal force in 1986. Two additional Protocols to the Cartagena Convention have since been created: The Protocol Concerning Specially Protected Areas and Wildlife (“The SPAW Protocol”), which was adopted in 1990 and entered into force in 2000, and The Protocol Concerning Pollution from Land-Based Sources and Activities (“The LBS Protocol”), which was adopted in 1999 and has yet to enter into legal force (Figure 5.2). There are at present 28 member States and Territories composing the CEP: Antigua and Barbuda, Bahamas, Barbados, Belize, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, France, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, the Kingdom of the Netherlands, Nicaragua, Panama, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, the United Kingdom of Great Britain and Northern Ireland, the United States of America, and Venezuela (CEP, 2003). The status of the various legal instruments of the CEP is illustrated in Table 5.1.

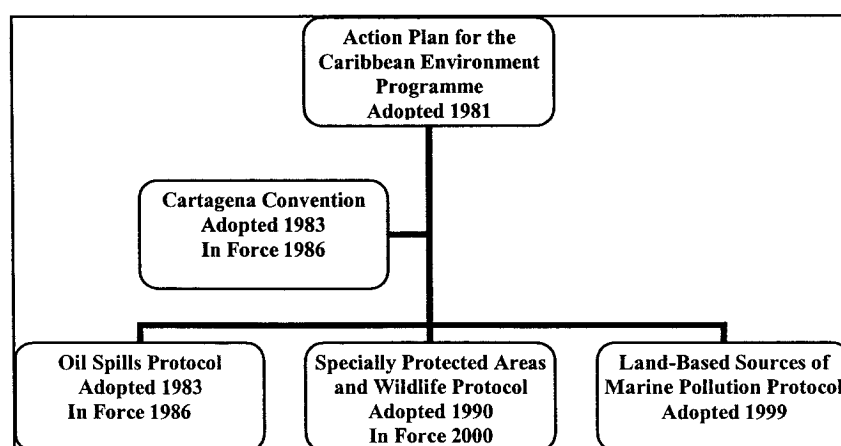


Figure 5.2: The Legal Framework of the Caribbean Environment Programme
Adapted with Modifications from CEP, 2003

The Cartagena Convention			The Oil Spills Protocol		The SPAW Protocol		The LBS Protocol	
State	Date of Signature	Ratified / Acceded	Date of Signature	Ratified / Acceded	Date of Signature	Ratified / Acceded	Date of Signature	Ratified / Acceded
Antigua and Barbuda		11-Sep-86		11-Sep-86	18-Jan-90			
Bahamas								
Barbados	5-Mar-84	28-May-85	5-Mar-84	28-May-85		2-Nov		
Belize		22-Sep-99		22-Sep-99				
Colombia	24-Mar-83	3-Mar-88	24-Mar-83	3-Mar-88	18-Jan-90	5-Jan-98	2-Oct-00	
Costa Rica		1-Aug-91		1-Aug-91			6-Oct-99	
Cuba		15-Sep-88		15-Sep-88	18-Jan-90	4-Aug-98		
Dominica		5-Oct-90		5-Oct-90				
Dominican Republic		24-Nov-98		24-Nov-98		24-Nov-98	3-Aug-00	
France	24-Mar-83	13-Nov-85	24-Mar-83	13-Nov-85	18-Jan-90	5-Apr-02	6-Oct-99	
Grenada	24-Mar-83	17-Aug-87	24-Mar-83	17-Aug-87				
Guatemala	5-Jul-83	18-Dec-89	5-Jul-83	18-Dec-89	18-Jan-90			
Guyana								
Haiti								
Honduras	24-Mar-83		24-Mar-83					
Jamaica	24-Mar-83	1-Apr-87	24-Mar-83	1-Apr-87	18-Jan-90			
Mexico	24-Mar-83	11-Apr-85	24-Mar-83	11-Apr-85	18-Jan-90			
Netherlands	24-Mar-83	16-Apr-84	24-Mar-83	16-Apr-84	18-Jan-90	2-Mar-92	6-Oct-99	
Nicaragua	24-Mar-83		24-Mar-83					
Panama	24-Mar-83	7-Nov-87	24-Mar-83	7-Nov-87	16-Jan-91	27-Sep-96		9-Jul-03
St. Kitts and Nevis								
Saint Lucia	24-Mar-83	20-Nov-84	24-Mar-83	20-Nov-84	18-Jan-90	25-Apr-00		
St. Vincent and the Grenadines		11-Jul-90		11-Jul-90	26-Jul-91	26-Jul-91		
Suriname								
Trinidad and Tobago		24-Jan-86		24-Jan-86	18-Jan-90	10-Aug-99		28-Mar-03
United Kingdom	24-Mar-83	28-Feb-86	24-Mar-83	28-Feb-86	18-Jan-90			
USA	24-Mar-83	31-Oct-84	24-Mar-83	31-Oct-84	18-Jan-90	16-Apr-03	6-Oct-99	
Venezuela	24-Mar-83	18-Dec-86	24-Mar-83	18-Dec-86	18-Jan-90	28-Jan-97		
EEC (EU)	24-Mar-83							

Table 5.1: Status of the Legal Instruments of the Caribbean Environment Programme by Member Country
CEP, No Date

STRUCTURES AND FUNCTIONS

The institutional framework of the CEP is composed of several key structures, each with unique functions in the management process. They are considered here in an order that reflects their decision-making standing.

THE UNEP WATER BRANCH

The CEP is embedded in the structure of the UNEP system. It, along with the other Regional Seas Programmes, is administered by the UNEP Water Branch in Nairobi, Kenya. The Water Branch was established in 1996, a result of the consolidation of the former UNEP Freshwater Unit and the former Oceans and Coastal Programme Activity Centre (OCA/PAC) (SIWIN, No Date). Similar to other Regional Seas Programmes, the CEP belongs to UNEP's Division of Environmental Conventions (DEC). It also exists under the umbrella of the 1995 Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA), another UNEP guided initiative (Andrade, 2004, Personal Communication). As such, the CAR/RCU, along with the other RSP Regional Secretariats, reports to UNEP's headquarters in Nairobi, Kenya, and is co-ordinated by the GPA Co-ordinating Office in The Hague (Andrade, 2004, Personal Communication).

INTERGOVERNMENTAL MEETING (IGM)

The governments participating in the Action Plan for the Caribbean Environment Programme meet every two years in the forum of the Intergovernmental Meeting (IGM) (UNEP, 2002a; St-Pierre, 2004a, Personal Communication). The IGM is held concurrently

with the Conference of Parties (COP) to the Cartagena Convention, and together this is the highest-level decision making body of the CEP (UNEP, 2002a). At the IGM, everything from budgets to project status reports are discussed.

MONITORING COMMITTEE (MON COM) AND THE BUREAU OF THE CONTRACTING PARTIES

Concurrent with the adoption of the Action Plan in 1981, the Monitoring Committee (MON COM) was established (UNEP, 2002a). The MON COM is composed of nine members, elected each biennium, from the governments participating in the CEP Action Plan (UNEP, 2002a; CEP, No Date). It is a decision making board (St-Pierre, 2004a, Personal Communication), which oversees the implementation of the CEP (UNEP, 2002a) and “monitor(s) the progress of priority projects and ensure(s) their implementation” (UNEP, 1983b, parenthesis added).

Members of the Bureau of the Contracting Parties are elected each biennium from the parties to the Cartagena Convention (CEP, No Date). The Bureau serves as the “supervisory policy body” of the Contracting Parties (UNEP, 2002a, p.2). A common chairperson is elected to lead both the MON COM and the Bureau (CEP, No Date).

THE REGIONAL CO-ORDINATING UNIT FOR THE CARIBBEAN ENVIRONMENT PROGRAMME (CAR/RCU)

The Action Plan for the Caribbean Environment Programme called for the establishment of the Regional Co-ordinating Unit for the Caribbean Environment Programme (CAR/RCU) to implement the Action Plan and the subsequent Convention and

Protocols (UNEP, 1983b; CEP, 2003). The CAR/RCU opened in Kingston, Jamaica in 1986 (CEP, 2003). It is physically located in the Jamaica Conference Centre complex, adjacent to Kingston Harbour. Due to Kingston's high crime rates, this Conference Centre is rarely used. Rather, governments elect to meet in areas of Jamaica perceived to be safer, such as Montego Bay (St-Pierre, 2004a, Personal Communication). CAR/RCU is a unit "of a reduced size" (UNEP, 1983b), in that governments prefer concrete units with well-defined mandates and not large bureaucratic institutions within the RSP (Andrade, 2005, Personal Communication). It is staffed by personnel recruited from the Action Plan's member States and Territories (UNEP, 1983b).

The CAR/RCU is the Secretariat for the CEP, the Cartagena Convention and its Protocols (CEP, 2003). It has a technical function: the development and co-ordination of institutions and projects (UNEP, 1983b; CEP, 2003). It does not conduct research or implement projects itself, rather, it co-ordinates them and facilitates collection, analysis, and dissemination of studies, publications and the results of CEP's work to all contracting parties to the Convention and other interested stakeholders (UNEP, 1983b; CEP, 2003).

Each Regional Seas Action Plan has specified six prescriptive and diagnostic components around which regional capacity is to be built: Environmental Assessment, Environmental Management, Legal Arrangements, Institutional Arrangements, Financial Arrangements, and Education and Support Activities. However, it is important, and curious, to note that the CEP is not operationally structured around these elements. Rather, the CEP's work programme, and the personnel framework of the CAR/RCU, are structured around four major subprogrammes: Assessment and Management of Environmental Pollution (AMEP), Specially Protected Areas and Wildlife (SPA), Information Systems

for the Management of Marine and Coastal Resources (CEPNET), and Education, Training and Awareness (ETA). These subprogrammes are reflective of the CEP's own legal framework and information needs rather than the harmonized RSP Action Plan structure, and are the result of evolution and restructuring of the CEP since its inception (UNEP, 2002a; Figure 5.3). It must be noted that many other RSPs are operationally structured around their own legal and activity frameworks and do not correspond to the "universal" Action Plan components.

The personnel of the CAR/RCU are organized in a structural hierarchy (Appendix 2). The CEP Co-ordinator exercises a broad oversight role for all subprogrammes and projects, and acts as the liaison between the CAR/RCU, the United Nations' system and partner organizations, the member governments, Focal Points, donor agencies, and, increasingly, the private sector and civil society (Andrade, 2004, Personal Communication). It is intended that each subprogramme have a Programme Officer, or an individual to manage and co-ordinate its activities.

ASSESSMENT AND MANAGEMENT OF ENVIRONMENTAL POLLUTION (AMEP)

The AMEP subprogramme facilitates the implementation of the Oil Spills and LBS Protocols, and facilitates the regional-level implementation of such global agreements as the GPA, Agenda 21, and the 1989 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (CEP, 2003; UNEP, 2004a). Some of the key projects under which AMEP has recently co-ordinated activities are: "Reducing Pesticide Run-off to the Caribbean Sea"; "Planning of Rehabilitation, Environmental

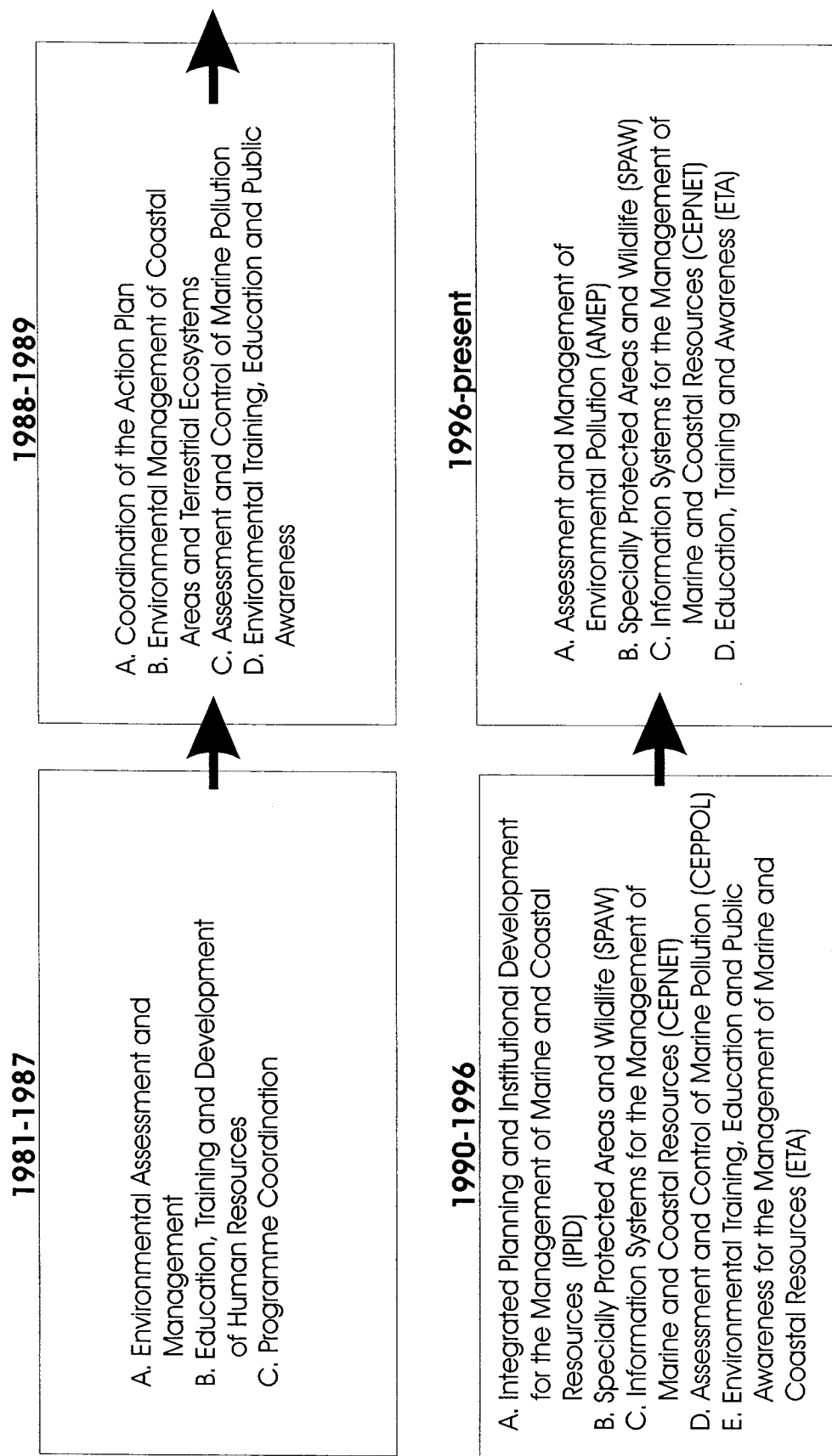


Figure 5.3: The Evolution of the CEP Organizational and Programme Structure
Adapted with Modifications from UNEP, 2002a

Management and Coastal Development in Nicaragua, Honduras and Guatemala in the Wake of Hurricane Mitch”; “Sewage Collection and Treatment: Implementing Annex III of the LBS Protocol”; and the Global Environment Facility (GEF) projects “Integrating Management of Watersheds and Coastal Areas in Small Island Developing States” and “Training for Rehabilitation of Contaminated Bays with Cuba and Jamaica” (UNEP, 2004b). In addition, AMEP works to establish Memoranda of Understanding (MOUs) with various countries in the region. The goal is to create a National Programme of Action (NPA) in each country for pollution from land-based sources and activities (UNEP, 2004a; UNEP, 2004b).

SPECIALLY PROTECTED AREAS AND WILDLIFE (SPAW)

The SPAW subprogramme acts as the Secretariat for the implementation of the SPAW Protocol (St-Pierre, 2004b, Personal Communication). It is responsible for the regional implementation of such global agreements and initiatives as the 1992 Convention on Biological Diversity (CBD), the 1973 Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the 1971 Ramsar Convention on Wetlands, the International Coral Reef Initiative (ICRI), and the Global Coral Reef Monitoring Network (GCRMN) (CEP, 2003).

One of the major work areas of SPAW is co-ordinating activities for Marine Protected Areas (MPAs), in support of the Marine Protected Areas Managers Network (CaMPAM) – a network of national marine protected area and park managers and staff (UNEP, 2004b). In this context, SPAW co-ordinates the Small Grants Fund and the Training of Trainers Programme to strengthen MPA management capacity (UNEP-CEP,

2000; UNEP, 2004b). In addition, SPAW is involved with initiatives for the conservation of threatened and endangered species, focusing on sea turtles, the West Indian manatee, and migratory birds (Vanzella-Khoury, 2004, Personal Communication).

INTERNATIONAL CORAL REEF ACTION NETWORK (ICRAN)

A major area of activity for the SPAW subprogramme in recent years has been the management of coral reefs (Vanzella-Khoury, 2004, Personal Communication). Much of this work is done through the Caribbean component of the International Coral Reef Action Network (ICRAN). In fact, most of the conservation and sustainable use of coastal and marine ecosystems work of SPAW is implemented through ICRAN (UNEP, 2004b). Established in 2000, ICRAN stems from the International Coral Reef Initiative (ICRI), a global partnership that got its start at UNCED in 1992, and serves as the ‘action arm’ of ICRI (Miller, 2004, Personal Communication; ICRAN, No Date). The broad goal of ICRAN is “to reverse the decline in coral reef health” (Miller, 2004, Personal Communication). ICRAN is composed of three components that work together toward this goal: management, including capacity building, monitoring and assessment, and information dissemination (Miller, 2004, Personal Communication; ICRAN, No Date).

At the management and action level, ICRAN is visible in the designation of “Demonstration Sites” and “Target Sites”. Several established criteria are used in the designation of sites as “demonstration” or “target” locations (Miller, 2004, Personal Communication). “Demonstration Sites” are physical locations with high-level management structures and a management plan (Miller, 2004, Personal Communication). They have proven, effective coral reef management regimes, which share knowledge and best practices

with other sites (ICRAN, No Date). “Target Sites” are candidates for the application of management lessons learned from demonstration sites (ICRAN, No Date). Their management is generally less structured than Demonstration Sites, but their managers aspire to move up into that category (Miller, 2004, Personal Communication). In the Wider Caribbean Region, there are four Demonstration Sites: Hol Chan Marine Reserve (Belize), Bonaire Marine Park (Bonaire, Netherlands Antilles), Sian Ka’an Biosphere Reserve (Mexico), and Soufriere Marine Management Area (St. Lucia) (Miller, 2004, Personal Communication; ICRAN, No Date). In addition, there are numerous Target Sites, in Colombia, Cuba, Dominican Republic, Jamaica, Tobago and Venezuela (Miller, 2004, Personal Communication; ICRAN, No Date).

INFORMATION SYSTEMS FOR THE MANAGEMENT OF MARINE AND COASTAL RESOURCES (CEPNET)

CEPNET began as a project of the CEP, and has evolved into a subprogramme (UNEP, 2004a). CEPNET does not act as a facilitator or Secretariat of its own legal Protocol, and as such its mandate is less clear than that of AMEP or SPAW (St-Pierre, 2004b, Personal Communication). The goals of CEPNET are to improve access to environmental information by the CEP Secretariat (CAR/RCU), to facilitate the development of networks for the sharing of environmental information, to improve information management capacity at the CAR/RCU, including computer training for personnel, and to facilitate communication among member states and between member states and the CAR/RCU, including the establishment of e-groups and listserves, and maintenance of the CEP website (St-Pierre, 2004b, Personal Communication). In

accordance with these goals, CEPNET provides technical assistance to the other CEP subprogrammes (UNEP, 2004b; St-Pierre, 2004b, Personal Communication). Noteworthy in this context are the development of a Clearinghouse Node for Pollution from Land-Based Activities for AMEP (UNEP, 2004a), and an updated Caribbean Marine Protected Areas Managers Network (CaMPAM) database for SPAW (UNEP, 2004a; St-Pierre, 2004b, Personal Communication; Vanzella-Khoury, 2004, Personal Communication). CEPNET is responsible for the creation of the clearinghouse or partnerships website for the White Water to Blue Water Initiative (WW2BW) (UNEP, 2004a; St-Pierre, 2004b, Personal Communication). CEPNET also provides support, namely in facilitating information dissemination and analysis, to global and regional projects, such as UNEP/GEF's Global International Waters Assessment (GIWA) (UNEP, 2004a; St-Pierre, 2004b, Personal Communication).

EDUCATION, TRAINING AND AWARENESS (ETA)

The Education, Training and Awareness subprogramme includes, broadly, the environmental education of governments, decision makers, industries and the general public. This may be done by means of community workshops, programmes for school children, training of trainers, the publication and dissemination of posters and brochures, or through television, radio, or Internet media. This subprogramme, also a Regional Seas Action Plan component, is widely recognized as being extremely important in regional planning and management capacity building. Simply stated, "one of the ways in which you rapidly improve environmental health is by sharing information" (McDonald, 2004, Personal Communication).

ETA is integrated into each of the CEP's work areas of AMEP, SPAW, ICRAN and CEPNET. The CAR/RCU itself responds to numerous inquiries about the CEP's activities, publishes and distributes information brochures, and prepares reports and presentations for international meetings (UNEP, 2004a). In the context of the AMEP and SPAW Programmes, the CAR/RCU participated in the Caribbean Blue Flag Workshops in 2002 and 2003 to assist with the development of criteria for beach water quality consistent with the guidelines of the LBS and SPAW legal Protocols (UNEP, 2004a). The SPAW Programme undertakes ETA activities by disseminating information to Marine Protected Area (MPA) managers and staff through the CaMPAM network and the CEP website (UNEP, 2004a). In addition, SPAW and ICRAN implement the Training of Trainers Programme for MPA managers and staff (UNEP, 2004a; Miller, 2004, Personal Communication; Vanzella-Khoury, 2004, Personal Communication). These programmes are so successful that the CEP shares its Train the Trainer manuals with interested parties in other global and regional programmes (Miller, 2004, Personal Communication). ICRAN also supports ETA through its Demonstration Sites, an example of which is the implementation of an environmental education outreach project for Hol Chan Marine Reserve (Belize) and its surrounding communities (UNEP, 2004a). CEPNET's ETA activities include computer training for CAR/RCU personnel, the facilitation of communication, and the dissemination of and access to CEP reports and data through electronic media such as the Internet (UNEP, 2004a; St-Pierre, 2004b, Personal Communication).

However, as a subprogramme, there is some stated concern about the success of ETA (McDonald, 2004, Personal Communication; Savelli-Söderberg, 2004, Personal Communication; St-Pierre, 2004b, Personal Communication). The member governments of

the Wider Caribbean Region have never viewed ETA as a priority subprogramme, and as such have never approved the allocation of funds for an ETA Programme Officer (UNEP, 2004a; McDonald, 2004, Personal Communication; Savelli-Söderberg, 2004, Personal Communication; St-Pierre, 2004b, Personal Communication). As such, the other Programme Officers and other CAR/RCU personnel must incorporate additional ETA work into their mandates to compensate for this perpetual vacancy (Savelli-Söderberg, 2004, Personal Communication; St-Pierre, 2004b, Personal Communication).

REGIONAL ACTIVITY NETWORKS (RANS) AND REGIONAL ACTIVITY CENTRES (RACS)

The original intent of the CAR/RCU was that it would operate at a reduced size to minimize bureaucracy and institutional complexity (UNEP, 1983b; UNEP, 1992b). However, as the institution began to mature, some restructuring was required. As the number of CEP responsibilities and activities increased, it became evident that some tasks would need to be delegated to other regional institutions. However, there were concerns that programme and project implementation would be fragmented and poorly co-ordinated (UNEP, 1992b). The RAC and RAN concepts were introduced to co-ordinate the implementation of Action Plan activities in a systematic manner (UNEP, 1992b; UNEP, 1994).

Regional Activity Networks (RANs) are a set of linked national and regional environmental, resource management, academic, scientific or non-governmental organization (NGO) institutions that form a network of co-ordinating institutions for the implementation of Action Plan activities (UNEP, 1992b). One institution in a network, with

noteworthy expertise or infrastructure, will be designated as the Regional Activity Centre (RAC) for that network (UNEP, 1992b). The RAC will co-ordinate the implementation of the relevant activities by providing technical guidance for the inputs from institutions forming the RAN (UNEP, 1992b). Thus, while the CAR/RCU executes a role of programme and project development, co-ordination and administration, the RANs and RACs provide an institutional and technical framework to enhance regional capacity to implement the Action Plan in the region and in individual countries (UNEP, 1992b).

The CEP currently has four RACs. These are the Regional Marine Pollution Emergency, Information and Training Centre (RAC-REMPEITC/Carib) in Curaçao, Netherlands Antilles for the Oil Spills Protocol; the RAC for the Regional Programme of Specially Protected Areas and Wildlife (SPA-W-RAC) in Guadeloupe, and for the LBS Protocol, the LBS/RAC Centro de Ingeniería y Manejo Ambiental de Bahías y Costas (CIMAB) in Cuba and the Institute of Marine Affairs (IMA) in Trinidad and Tobago (UNEP, 2002a; UNEP, 2004b; CAR-SPA-W-RAC, No Date).

FOCAL POINTS (FPs)

Focal Points (FPs) are officials appointed by the member governments of a region to co-ordinate and facilitate Regional Seas Programme activities on the national level (MAP, No Date). In the context of the CEP, each member government has appointed a number of such individuals, including LBS, Legal, National, SPAW and Technical Focal Points (UNEP, 2004c).

THE CARIBBEAN ENVIRONMENT PROGRAMME'S CANADIAN PARTNERS

The CEP has many partner organizations at the national, regional, and global levels. As the researcher is Canadian, the Canadian agencies and institutions that support the CEP are of special interest. These merit some discussion. The agencies and institutions presented below are not intended to represent an exhaustive list of Canadian assistance to the CEP; however, they provide insight into the range of support offered by Canada.

The CEP receives funding from Canadian agencies and international organizations of which Canada is a part. Among these are the Canadian International Development Agency (CIDA), The Global Environment Facility (GEF), the Organization of American States (OAS), and The World Bank (CEP, No Date). Funds from CIDA, the Government of Jamaica, and the World Conservation Union (IUCN) were recently used to support a joint CEP and Government of Jamaica regional workshop on Environmental Education for Sustainable Development (EESD) (CEP, No Date). The CEP is also supported by several governmental organizations with which Canada is affiliated. Among these are the Canada's International Development Research Centre (IDRC), and the Commonwealth Secretariat (CEP, No Date).

Further, Canadian educational institutions also participate in and support CEP activities. The Ocean Studies Programme at Dalhousie University in Halifax, Nova Scotia, has provided studies and recommendations to assist the efforts of the West Indies Associated States (WISA) and, later, the Organization of Eastern Caribbean States (OECS) (Glassner, 1993). McGill University in Montreal, Québec operates a research and teaching laboratory, the Bellairs Research Institute, in Holetown, St. James, Barbados (McGill University, 2005). Established in 1954, the Bellairs Institute hosts field courses, research projects, and

workshops for scientists and students from around the world; and frequently collaborates with researchers from the University of the West Indies' Cave Hill Campus (McGill University, 2005).

PROCESSES AND MECHANISMS

Processes and mechanisms are the means and instruments by which co-ordination and co-operation may be attained by the various institutional structures and their often over- or under-lapping functions (Mitchell, 2002). An understanding of their role should assist in understanding the internal evaluation capacity of the programme. In essence, those processes and mechanisms may at least offer opportunities for the communication of evaluation reports.

REGIONAL SEAS PROGRAMME MEETING

Every year, the Co-ordinators of each Regional Seas Programme meet to discuss progress on the implementation of Action Plans and Conventions, and the development and execution of legal Protocols (Andrade, 2004, Personal Communication). These meetings provide the opportunity to create and learn about new RSP partnerships, to discuss possible collaboration among regions, and to share lessons and experiences (Savelli-Söderberg, 2004, Personal Communication; Vanzella-Khoury, 2004, Personal Communication).

INTERGOVERNMENTAL MEETING (IGM)

The IGM process provides “the primary mechanism for providing policy guidance, providing overall oversight to CEP implementation, designing institutional arrangements,

defining common interests and issues, approving the biennial workplan and budgets, and Programme evaluation” (UNEP, 2002a, p.2). In the context of Programme evaluation, it is important to note that the IGM is the key mechanism by which the CAR/RCU can report to the member governments on the progress and success/failure of projects, programmes, and the implementation of regional and international environmental law (Andrade, 2004, Personal Communication). In fact, the IGM has been identified as the best programme evaluation mechanism within the CEP (Vanzella-Khoury, 2004, personal communication). One may hypothesize that this forum would be very sensitive to programme and project evaluation of all types.

As previously noted, the IGM is convened concurrently with the Conference of Parties (COP) to the Cartagena Convention. It must be noted that the Conference of Parties (COP) to the SPAW Protocol also meets at this time, to review the status of current and completed projects and to plan new activities for the upcoming biennium (Vanzella-Khoury, 2004, Personal Communication; CEP, No Date).

MEETING OF THE MONITORING COMMITTEE (MON COM) AND THE BUREAU OF THE CONTRACTING PARTIES

The MON COM and the Bureau of Contracting parties, previously identified, meet jointly every two years on the alternating years of the IGM (UNEP, 2002a; St-Pierre, 2004a, Personal Communication). These meetings oversee the progress of the CEP workplan, manage financial arrangements, review project requests, provide policy and operational guidance to the CAR/RCU for the implementation of the Action Plan and Convention, assist in the preparation of the agenda for the next IGM, and serve to maintain contact among

experts and institutions between IGMs (UNEP, 1983b; CEP, No Date). The recommendations resulting from this joint meeting are reported to the IGM for approval (UNEP, 2002a).

MEETINGS OF THE SCIENTIFIC AND TECHNICAL ADVISORY COMMITTEES (STAC) AND INTERIM SCIENTIFIC AND TECHNICAL ADVISORY COMMITTEES (ISTAC)

The provisions of both the SPAW and LBS Protocols require scientific and technical meetings to provide advice to their Contracting parties (UNEP, 2002a). As the SPAW Protocol has entered into legal force, it has established a Scientific and Technical Advisory Committee (STAC) for this purpose (UNEP, 2002a; St-Pierre, 2004a, Personal Communication). The SPAW STAC meets every two years, on alternate years of the Meeting of the Parties, and reports to the contracting parties to the SPAW Protocol (St-Pierre, 2004a, Personal Communication; Vanzella-Khoury, 2004, Personal Communication). The LBS Protocol, not yet in legal force, has created an Interim Scientific and Technical Advisory Committee (ISTAC) that will evolve into a STAC once the Protocol is in force (UNEP, 2002a; St-Pierre, 2004a, Personal Communication). The LBS ISTAC reports to the IGM, as the Protocol will not have formal “Contracting Parties” until it has entered into legal force (St-Pierre, 2004a, Personal Communication).

CARIBBEAN TRUST FUND (CTF)

The Caribbean Trust Fund (CTF) was created at the first IGM, concomitant with the adoption of the Action Plan and the establishment of the Monitoring Committee (UNEP,

2002a). The CTF became operational in September 1983 (UNEP, 2002a). It was established to cover the common costs and activities of the implementation of the Action Plan (UNEP, 2002b).

Similar to all Regional Seas Programmes, the CEP was initially supported by UNEP's Environment Fund, but was developed with the goal of eventual financial self-sufficiency (CEP, 2003). The CTF is administered by UNEP's headquarters in Nairobi, Kenya, and is supplied by annual, voluntary contributions by the Caribbean member governments (UNEP, 2002b; CEP, 2003). The "common costs and activities of implementation" and the amounts to be contributed by each member government are determined at the IGM (UNEP, 2002b; CEP, 2003). These voluntary contributions cover the basic costs of the Programme – that is, if all contributions are met, then the CAR/RCU can be run efficiently and effectively (CEP, 2003; Andrade, 2004, Personal Communication). For several years, the United States did not contribute to the CTF due to its reluctance to provide benefits to Cuba (Hinrichsen, 1998). The United States has now joined France as one of the greatest contributors to the CTF (Andrade, 2004, Personal Communication; CEP, No Date). It must be noted that some of the smallest and poorest member governments, such as Monserrat and Haiti, also contribute to the CTF (Andrade, 2004b, Personal Communication; CEP, No Date). The voluntary contributions for the 2004-2005 biennium agreed by the member states at the 2004 IGM are shown in Table 5.2. However, despite the fact that these contributions are voluntary, it is often the case that the full amount expected is not received – on time or at all (Verlaan and Khan, 1996; Andrade, 2004, Personal Communication). In addition, despite the paid contributions of the member

Country	Voluntary Contribution for 2004* (US\$)	Voluntary Contribution for 2005** (US\$)
Anguilla	10,068.00	10,571.00
Antigua/Barbuda	10,068.00	10,571.00
Aruba	9,180.00	9,639.00
Bahamas	10,068.00	10,571.00
Barbados	10,068.00	10,571.00
Belize	9,180.00	9,630.00
British Virgin Islands	5,940.00	6,237.00
Cayman Islands	5,589.00	5,868.00
Colombia***	18,937.00	18,937.00
Costa Rica	10,954.00	11,501.00
Cuba	18,937.00	19,883.00
Dominica, Commonwealth	10,068.00	10,571.00
Dominican Republic	11,841.00	12,433.00
France	229,514.00	240,989.00
Grenada	10,068.00	10,571.00
Guatemala	10,954.00	11,502.00
Guyana	10,068.00	10,571.00
Haiti	10,068.00	10,571.00
Honduras	10,068.00	10,571.00
Jamaica***	15,301.00	15,301.00
Mexico	40,000.00	40,000.00
Montserrat	2,700.00	2,835.00
Netherlands Antilles	10,068.00	10,571.00
Nicaragua	10,068.00	10,571.00
Panama	10,954.00	11,502.00
St. Kitts-Nevis	2,700.00	2,835.00
Saint Lucia	9,180.00	9,639.00
St. Vincent & the Grenadines	9,180.00	9,639.00
Suriname	10,068.00	10,571.00
Trinidad & Tobago	11,841.00	12,433.00
Turks & Caicos Islands	4,860.00	5,103.00
United States of America***	205,200.00	205,200.00
Venezuela***	140,768.00	140,768.00

* Same contribution as of 2003

** Increase of 5% over contributions of 2004 as of Decision VI of the 11th IGM

***Member States that have indicated pledge levels different from the 5% proposed increase in 2005

Table 5.2: Member State Contributions to the CTF Pledged at the 2004 Intergovernmental Meeting
CEP, No Date

states, the CEP has not yet attained full financial self-sufficiency. In fact, none of the RSP Trust Funds “can truly be considered as fully self-supporting” (Verlaan and Khan, 1996, p.90). For the decade 1990-2000, UNEP’s Environment Fund (11%) remained one of the three sources of funds to the CTF, behind the member governments (43%) and donor agencies (46%) (CEP, 2003). The literature laments the fact that UNEP has continued to support its Regional Seas Programmes long past its intended obligations, stating that this has distorted perceptions of the RSPs’ long-term viability (Verlaan and Khan, 1996).

PERSPECTIVES

“Perspectives” refer to the organizational culture and the overall attitudes of participants, which serve as a measure of institutional values and receptivity (Mitchell, 2002). Within the CEP, there are several indications of positive perspectives regarding the rehabilitation and protection of the marine and coastal environment. The mere fact that so much has been invested in institution building is a sure indication that the member governments feel that the CEP is positively influencing regional capacity and environmental quality (Andrade, 2004, Personal Communication). There is recognition of the need for co-operation among nations to cope with transboundary pollution (Andrade, 2004, Personal Communication). In addition, many member states recognize a cost-benefit ratio that their monetary contributions to the CTF result in improved environmental conditions (Andrade, 2004, Personal Communication). The most compelling evidence of environmentally positive perspectives comes from the stated acknowledgement of the linkages between economic sustainability and environmental sustainability in the case of Caribbean tourism (Andrade, 2004, Personal Communication).

Tourism worldwide, including the Caribbean, took off after World War II and has increased dramatically in the half-century since (Jayawardena, 2002). It has now become the world's largest industry (Jayawardena, 2002). The Caribbean's classic images of exotic species and "sun, sea, and sand" appeal to a variety of market niches (Charles, 1997). At present, the Caribbean ranks sixth in terms of tourist receipts, attracting approximately 3% of the world's tourist arrivals (Jayawardena, 2002; Jayawardena and Ramajeessingh, 2003). As an economic sector, tourism has risen to prominence in the Caribbean region due to the persistent stagnation of other sectors (Jayawardena, 2002). This prominence translates to characterize the Caribbean as the most tourism-dependent region in the world – one in which tourism revenues account for approximately 25% of the gross domestic product (GDP) region-wide (Jayawardena, 2002). Reliance on tourism is most pronounced in Small Island Developing States (SIDS), which in correlation with their small size have low human resource and technical capacity pools (Jayawardena and Ramajeessingh, 2003). In fact, in SIDS such as Anguilla and Antigua and Barbuda, visitor expenditure accounted for over 90% of the GDP in 1994 (Charles, 1997). As such, it is noted that many Caribbean islands are now economically over dependent on tourism (Jayawardena and Ramajeessingh, 2003).

Reliance on the tourism sector presents an interesting paradox in the Wider Caribbean Region. It is difficult to argue, from an economic perspective, that dependence on a single sector is beneficial. However, it may be argued that, from an environmental perspective, this reliance has a net positive effect. Tourists are attracted to high-quality products and experiences, both of which require a clean, healthy and safe environment (Rodriguez, 1981; Charles, 1997; Jayawardena, 2002; CEP, 2003). As such, tourism involves "putting up for sale the quality of the environment" (McDonald, 2004, Personal

Communication). In the WCR, there is recognition that environmental sustainability is inextricably linked to economic stability, especially in the context of tourism in SIDS (Andrade, 2004, Personal Communication). There is realization among these states, that, for example, if they continue to dump sewage into their marine and coastal environments, they are in effect “killing their hens with the golden eggs” (Andrade, 2004, Personal Communication). As it is difficult to convince tourists to spend money to swim in a contaminated sea, tourism is recognized as an incentive to the environmental protection process (McDonald, 2004, Personal Communication). An hypothesis that this Regional Seas Programme is actually subscribing to comprehensive programme and project evaluation seems quite rational, as programme and project success are key determinants of the region’s economic and environmental health and security. The research will now explore this further.

CHAPTER 6: PROGRAMME GOALS AND OBJECTIVES – THE EXPECTED VERSUS THE ACTUAL

PURPOSE

A key question is presented in this chapter. It is the first of the Associated Research Questions posed to gather evidence to address the Central Research Question. This chapter seeks to answer: **What are the goals and objectives related to each Action Plan component?**

The diagnostic field study and its comprehensive interviews with programme managers provide the actual state of affairs with respect to the state of evaluation in the Caribbean Environment Programme. This “actual” state is presented in contrast to what was initially hypothesized or “expected” after the critical literature review and the analysis of independent programme evaluations conducted in the last few decades.

THE EXPECTED

After three decades of Regional Seas Programme experience, and over two decades of experience in the Wider Caribbean Region, it is expected that programme evaluation would be mature – namely, conducted in a systematic fashion and entrenched in programme routines. Specific expectations for programme evaluation in this context may be expressed as answers to the questions posed in the first part of the Model of Evaluation Science: What? When? Who? Why? (Table 6.1).

QUESTION	EXPECTATION
“WHAT?”	▪ It is expected that the capacity exists to conduct Impact or Outcome Evaluation. ▪ It is expected that quantitative measures exist to assess whether or not capacity has been achieved ▪ It is expected that action and evaluation are based on the six Action Plan components
“WHEN?”	▪ It is expected that there will be evidence of formative evaluation – evaluation that provides feedback on planning and management exercises at early stages to permit changes in direction or emphasis to improve capacity building and related outcomes, as well as summative evaluation – final assessments of completed policies, programmes and projects
“WHO?”	▪ It is expected that evaluation will be conducted by both internal and external evaluators
“WHY?”	▪ It is expected that evaluation will be more than merely an ad hoc exercise. Evaluation at this stage in the Regional Seas Programme life cycle is hoped to be an entrenched and systematic exercise. ▪ Evaluation should be done in response to statutory programme requirements and mandates. ▪ Planners and managers should conduct evaluation due to a recognized or willing responsibility to justify programme and project effort and expense

Table 6.1: Hypotheses Related to Programme Evaluation

THE ACTUAL

“WHAT”: THE EXPECTATION OF ACTION PLAN COMPONENT USE

It is crucial to revisit the basic structure of the UNEP Regional Seas Programme. It may be recalled that UNEP employs a common strategy in each of its Regional Seas, consisting of a comprehensive Action Plan, an umbrella regional Convention, and any number of specific, technical legal Protocols (Thacher and Meith, 1980; UNEP, 1982b; Hulm, 1983c; UNEP, 1984b; Needham and Jedynack-Copley, 1989; Haas, 1991; Jacobson, 1995; Akiwumi and Melvasalo, 1998; Meith, 2000; Adler, 2003). The Action Plan serves as a blueprint for the regional strategy and programme, and is tailored to each region's own environmental, institutional, political, and socio-economic challenges (UNEP, 1984b; Haas, 1991; Jacobson, 1995; Akiwumi and Melvasalo, 1998; Meith, 2000; Adler, 2003). It is widely stated, and is noted as a programme strength, that each Action Plan consists of a number of key components: Environmental Assessment (EA), Environmental Management (EM), Legal Arrangements (LA), Institutional Arrangements (IA), Financial Arrangements (FA), and Educational and Support Activities (ES) (Table 1.1). **These components are interrelated mechanisms for capacity building and programme implementation, and should serve as an evaluation template** (UNEP, 1984b; Jacobson, 1995; Akiwumi and Melvasalo, 1998). Ideally, EA is the priority activity (Jacobson, 1995). EA identifies problems and areas requiring immediate attention (UNEP, 1984b; Meith, 2000). Further, ongoing EA activities serve to provide governments with information to assess whether or not their laws and management activities are effective (UNEP, 1984). Legal Arrangements (LA) are negotiated to facilitate regional co-operation in the management of these problems

(UNEP, 1984b). In addition, linking a regional Convention with the Action Plan has been shown to promote political will and commitment among the member states (Akiwumi and Melvasalo, 1998). Environmental Management (EM) activities are also based on the data generated from EA, as they aim to control existing problems and prevent new ones (UNEP, 1984b; Akiwumi and Melvasalo, 1998). Further, EM activities serve as a means to implement the LA developed (UNEP, 1984b). Institutional Arrangements (IA) and Financial Arrangements (FA) serve to support EA, EM, and LA actions (Adler, 2003). The Educational and Support Activities (ES) component serves a broad function “to generate public interest and awareness in member countries” (Haas, 1991, p.196), which may create the impetus for increased governmental commitment to the Action Plan (Figure 6.1). It must be noted that Meith (2000) suggests that a new Regional Seas Programme framework is emerging. This framework is based on three elements, “Biodiversity Conservation”, “Land-Based Activities”, and “Integrated Coastal Management”, which are intended to incorporate, not replace, the six traditional Action Plan components (Meith, 2000). However, for the RSP to undergo the transition to this new framework, it is expected that capacity building has been completed in the six original Action Plan areas.

The evidence and testimony related to the use of the Action Plan components as evaluation foundations raised several concerns for the researcher. First, the definition of each component – what specific activities and activity types are encompassed by each component – appears to be unclear. Of significant concern is the fact that EA is noted in the literature and in the field as a priority activity (Jacobson, 1995; Andrade, 2004, Personal Communication; Miller, 2004, Personal Communication; St-Pierre, 2004b, Personal Communication; Vanzella-Khoury, 2004, Personal Communication). However, one key

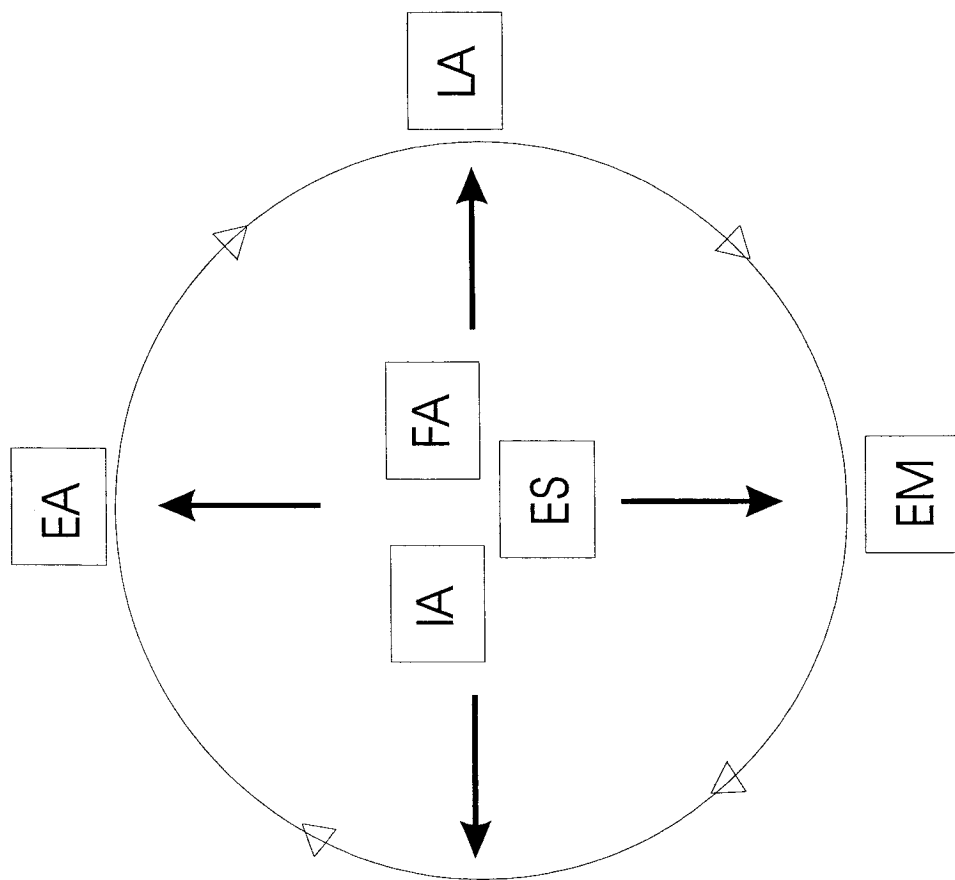


Figure 6.1: Interconnectedness of the Six Action Plan Components
 Adapted with Modifications from UNEP, 1984b; Jacobson, 1995; Akiwumi and Melvasalo, 1998; Meith, 2000

informant questioned the role and use of EA at the Regional Co-ordinating Unit of the Caribbean Environment Programme, as “assessment” implies in situ data collection and monitoring, and hands-on work is not a role of the administrative/facilitator CAR/RCU (Savelli-Söderberg, 2004, Personal Communication). **This clearly calls into question how “Environmental Assessment” is defined in policy and in practice –and how these definitions are interpreted by practitioners.** Second, the evidence and testimony related to the level of use of the Action Plan components within the various subprogrammes, and the CEP in general, appears to confound the trend in the literature to use the six Action Plan components as a template for programme evaluation. Several key informants required time to think about how certain Action Plan components are incorporated into their respective mandates and projects. As such, it may be argued that the six components of the Action Plan framework are submerged in the Convention and Protocol based operational structure of the programme. Projects are not designed according to the six Action Plan components. Rather, these components fit into the projects that are designed to implement the broader goals of the Convention. **As it is often difficult to ascertain what specifically is being done under each component, conducting an evaluation based on these components is difficult.** The third concern focuses on the articulation of programme goals and objectives. The literature notes that “(t)he specific projects and general goals set out under these...**basic elements within each action plan serve as the goals for individual programmes**” (Jacobson, 1995, p.21). This claim led to the development of the first Associated Research Question. However, this claim is refuted by the evidence and testimony garnered from the diagnostic field study. Key informants were asked to communicate the goals and objectives under each Action Plan component in their specific work area. **Programme and**

subprogramme goals and objectives were frequently communicated in broad terms, relating to the general goals of marine pollution reduction and species conservation communicated in the Cartagena Convention and its Protocols. Goals and objectives were very rarely presented as being affiliated with or dependent upon one or more of the Action Plan components. This insight is somewhat disconcerting. Why? Because the programme's ability to meet Convention and Protocol obligations is first and foremost dependent upon previous investments in Action Plan components – capacities to plan and manage. The literature review and the tenets of the three-part Model of Evaluation Science clearly demonstrate the need for goals and objectives to be clearly stated in order for an evaluation to be conducted. The fact that programme goals and objectives are seldom linked to the six Action Plan components, combined with the other concerns previously presented, casts doubt upon the strategy of using the Action Plan components as a template for programme evaluation of the RSP. As such, the faith one might have in evaluations completed to date by assessors external to the Regional Seas Programme is cast into doubt, as they seem to have blind faith in Action Plan components as evaluation foundations (Haas, 1991; Jacobson, 1995).

A significant barrier to the use of the Action Plan components as a template for programme evaluation emerges from the diagnostic field study. The organizational and operational programme framework of the CEP is different from what was initially hypothesized. Its operational structure has evolved from one closely approximating the Action Plan components to one focusing CEP activities directly on the implementation of the Cartagena Convention and its Protocols (UNEP, 2002a; Figure 5.3). As such, the key informants within the CEP were asked to identify the priority attached to each Action Plan

component and its role in capacity building. More specifically, they were asked to describe how, in practice, the six Action Plan components are incorporated into the mandates and daily activities of their respective subprogrammes. The literature strongly suggests that the six Action Plan components are central to the object, purpose, and implementation of the Regional Seas Programme. Capacity building, as previously stated, is required in each of the six areas in order to enable regional fulfillment of Convention and Protocol obligations. As such, the ideal case is that the level of use of each Action Plan component is both high and consistent across all elements of the regional programme. However, the diagnostic field study reveals that the Action Plan components do not have equal priority within the CEP and its subprogrammes. In addition, each subprogramme deals with the various components unevenly. While it is commonly noted that each subprogramme “does a little bit of everything” (Andrade, 2004, Personal Communication; Savelli-Söderberg, 2004, Personal Communication; Vanzella-Khouri, 2004, Personal Communication), the evidence and testimony obtained indicates that the six Action Plan components are frequently not central to the subprogramme mandates and activities.

A four-point qualitative scale was devised to illustrate this contention. The level of use of the six components is measured for each subprogramme. The “Overall” measure of Action Plan component use is reflective of broad statements made by the Co-ordinator and other programme staff. The components’ use in the Specially Protected Areas and Wildlife (SPA) Programme is measured in three separate categories, SPAW-1, SPAW-2, and ICRAN, corresponding to the Action Plan-related evidence and testimony provided by the SPAW Programme Officer and Junior Professional Officer, and the International Coral Reef Action Network Regional Project Manager. Ideally, it would be expected that the

Environmental Assessment component would have the highest score. This is due to the fact that several authors point to EA as the priority Action Plan activity, or the central activity for data collection, monitoring, and the measurement of progress (UNEP, 1984b; Jacobson, 1995; Akiwumi and Melvasalo, 1998; Meith, 2000). However, as demonstrated in Table 6.2, **EA does not appear to have significant priority over the other components.** Unfortunately, there is no data available for the AMEP subprogramme, as at the time of the diagnostic field study, the position of AMEP Programme Officer was temporarily vacant. A clear programme void is also displayed with the absence of a dedicated Programme Officer – and thus a dedicated work plan – for Education, Training and Awareness (ETA). Although ETA is a designated subprogramme area in the CEP, the member governments have never approved the budget to hire a Programme Officer (UNEP, 2004a; McDonald, 2004, Personal Communication; Savelli-Söderberg, 2004, Personal Communication; St-Pierre, 2004b, Personal Communication). As such, the activities that belong under the ETA subprogramme are distributed among the other subprogrammes. This limits the CEP's impact and influence in ETA efforts (St-Pierre, 2004b, Personal Communication). In addition, although all key informants noted that the Caribbean Environment Programme has a strong ETA component overall, the need for every subprogramme to actively engage in ETA activities and the ES component subtracts from their resources and ability to work in EA, EM, LA, IA and FA.

“WHEN”: THE EXPECTATION OF FORMATIVE AND SUMMATIVE EVALUATION

There is indeed some evidence of both formative and summative evaluation

	EA	EM	LA	IA	FA	ES	TOT	
CEP (Overall)	3	3	2	3	2	2	15/18	
CO-ORDINATOR	2	2	2	3	3	2	14/18	
AMEP	-	-	-	-	-	-	-/18	
SPAW -1	3	3	2	3	2	2	15/18	
SPAW -2	1	1	1	2	2	2	9/18	
ICRAN	3	2	1	1	1	2	10/18	
CEPNET	3	2	0	3	1	2	11/18	
ETA	0	0	0	0	0	0	0/18	
TOT	15/24	13/24	8/24	15/24	11/24	12/24		
							LEGEND	
							Not Used At All	0
							Somewhat Used	1
							Daily Use	2
							Priority	3

Table 6.2: The Use of the Six Action Plan Components within the CEP

occurring at the broad programme, the subprogramme, and the specific project levels. At the programme level, evaluation of the global Regional Seas Programme occurs on both an annual and biennial basis. These evaluations fall broadly under the “formative evaluation” heading, but may be considered to be mid-term or interim evaluations. This is due to the fact that the Regional Seas Programme itself is an ongoing initiative and thus cannot be subject to a summative or terminal evaluation. The major fora at which these evaluations take place are as follows. On an annual basis, the Co-ordinators of all RSPs meet to discuss programme plans and progress. This is an opportunity not only for evaluation, but also for collaboration and information exchange (Andrade, 2004, Personal Communication; Savelli-Söderberg, 2004, Personal Communication; Vanzella-Khoury, 2004, Personal Communication). It is noted, however, that to date these meetings have included discussion on programme operation and not on programme evaluation mechanisms (Vanzella-Khoury,

2004, Personal Communication). Every two years, all Regional Seas Programmes are evaluated by the UNEP Governing Council (Andrade, 2004, Personal Communication). Also, every two years, in the specific context of the Caribbean Environment Programme, evaluation is conducted at the Intergovernmental Meeting (IGM). At the IGM, the member governments establish and approve the workplan and budget of the Caribbean Environment Programme, which in turn form the foundation of the activities undertaken by the subprogrammes (Andrade, 2004, Personal Communication). In addition, the CAR/RCU is required to report to the member governments on the status of projects implemented in accordance with the previous biennium's workplan (Andrade, 2004, Personal Communication). At present, the IGM is recognized as the best form of pseudo-evaluation applied to the CEP (Vanzella-Khoury, 2004, Personal Communication). However, it does have shortcomings. Chiefly, the IGM is not dedicated to formal or comprehensive evaluation; rather, evaluation is just one of many points on the agenda (Vanzella-Khoury, 2004, Personal Communication). Further, the CAR/RCU presents the status reports with limited feedback from the member governments, thus limiting the possibility of learning and open dialogue for corrective action (Vanzella-Khoury, 2004, Personal Communication).

Pseudo-evaluation also occurs at the subprogramme level on an annual basis. The most vivid example is the case of the Specially Protected Areas and Wildlife Programme. The Scientific and Technical Advisory Committee (STAC) meets every two years to discuss the status of activities approved by the member countries the previous year (Vanzella-Khoury, 2004, Personal Communication). Also, every two years, on alternating years of the STAC, the Contracting Parties meet to again discuss the status of the previous year's projects and activities (Vanzella-Khoury, 2004, Personal Communication). There does not

appear to be any form of template guiding these discussions. As such, depending on the nature of the activities undertaken, this evaluation may be either formative or summative.

In the context of project evaluation, vivid examples of both formative and summative evaluation are available in the context of the SPAW Programme and the ICRAN project. In both SPAW and ICRAN, the CAR/RCU signs a legally binding Memorandum of Understanding (MOU) with countries and/or organizations listing project expectations – chiefly, activities, outcomes, and use of outcomes (Miller, 2004, Personal Communication; Vanzella-Khoury, 2004, Personal Communication). Project evaluation is thus a comparison of what was agreed in the MOU and what was actually achieved (Miller, 2004, Personal Communication; Savelli-Söderberg, 2004, Personal Communication; Vanzella-Khoury, 2004, Personal Communication). Due to staffing and funding constraints, which will be discussed in detail in later chapters, the CAR/RCU usually cannot do site visits and in situ assessments of project outcomes. As such, they rely on the countries in which the projects are implemented to submit Progress (midterm) and Terminal (completion) Reports to assess the management processes and outcomes of the various projects (Miller, 2004, Personal Communication; Vanzella-Khoury, 2004, Personal Communication). The Progress Reports are based on a standard, simple form for project managers to complete (Vanzella-Khoury, 2004, Personal Communication). The Terminal Reports encompass more in-depth forms, which require project managers to report both project outputs and how these outputs were used (Vanzella-Khoury, 2004, Personal Communication). The Progress and Terminal Report formats are available in Appendix 7. In the context of the ICRAN project, the dispersal of funds is contingent upon compliance with the Progress and Terminal Reporting requirements (Miller, 2004, Personal Communication).

There are several shortcomings noted in this process. First, as the reporting process is frequently the only mechanism for project evaluation, the CAR/RCU is left without hard evidence of project outputs (Miller, 2004, Personal Communication). A key concern here is that checklist reporting and comparing on paper the “agreed” and the “achieved” does not require, for example, the measurement and monitoring of pollutant levels. In essence, **there is no proof – nothing measured, quantified or scientific – to substantiate the surface claims of project success.** Second, it is noted that the projects are mostly undertaken in lesser-developed countries that often lack the necessary capacity and resources to conduct evaluation (Vanzella-Khoury, 2004, Personal Communication). Therefore, it is not uncommon for the Reports to be completed in an unsatisfactory manner (Vanzella-Khoury, 2004, Personal Communication). In addition, reporting deadlines are often missed due to the fact that many marine park managers are overwhelmed with broad mandates and responsibilities (Miller, 2004, Personal Communication). There appears to be a considerable amount of latitude given to project managers in these cases, as CAR/RCU officials recognize that resource, capacity and time shortages are region-wide and programme-wide constraints. It must be emphasized here that the relevant staff at CAR/RCU indicated that **a better system of project evaluation – one incorporating in situ observations and measurements – is both desired and needed** (Miller, 2004, Personal Communication; Vanzella-Khoury, 2004, Personal Communication).

“WHO”: THE EXPECTATION OF AN INTERNAL-EXTERNAL MIX

The issues and concerns related to over reliance on evaluators internal and external to a programme expressed in the literature have been presented in Chapter 3. In addition,

several of the existing RSP and CEP evaluation mechanisms have been discussed. An overview of these key evaluation mechanisms – the UNEP Governing Council, the Annual Regional Seas Programme Meeting, and the Intergovernmental Meeting – indicates that **evaluation of the RSP and the CEP is largely internal to the United Nations Environment Programme and the individual regional programmes.**

There is one important example of external evaluation that merits discussion. In 2003, UNEP contracted an independent consultant to conduct a Mid-Term Evaluation of the Action Phase (2001-2005) of the International Coral Reef Action Network (Barber, 2003; Miller, 2004, Personal Communication). This evaluation was recognized as being very honest about the state of ICRAN, and was noted as causing a great deal of upheaval amongst ICRAN partners (Miller, 2004, Personal Communication). As will be discussed in more depth in the upcoming chapters, the perceived negativity of the evaluation had implications on ICRAN structure and funding (Miller, 2004, Personal Communication). Another important consideration in this context is the issue of bias. As the consultant was hired by UNEP, questions of true objectivity and externality have been raised (Miller, 2004, Personal Communication).

“WHY”: THE EXPECTATION OF SYSTEMATIC EVALUATION

The expectation that evaluation would be a systematic, entrenched and mandated exercise – and not an ad hoc consideration – was the hypothesis that was mostly soundly rejected by the evidence and testimony obtained through the diagnostic field study.

Some evaluation is required at the programme level. For example, the CAR/RCU must report to the member states at the IGM on the implementation status of activities

approved and/or requested by the countries. The member states require evidence that work is being done; if this evidence is not forthcoming, they will be less likely to meet their pledged contributions to the Caribbean Trust Fund (Andrade, 2004, Personal Communication). **This is essentially a weak form of Cost-Benefit Analysis.** At the project level, evaluation – in the form of the implementation of activities, the achievement of results, and Progress and Terminal Reporting – is **legally required** under the SPAW and ICRAN Memoranda of Understanding (Miller, 2004, Personal Communication; Vanzella-Khoury, 2004, Personal Communication).

Despite this, **there is resounding and troubling evidence that programme evaluation largely remains an ad hoc and poorly organized endeavor** in the CEP. This is illustrated by the fact that current or upcoming events can create a storm of interest in issue-specific or thematic evaluation that would otherwise not exist. For example, during the months leading up to the January 2005 10-Year Review of the Barbados Programme of Action for Small Island Developing States (SIDS-POA), the CAR/RCU was inundated with requests from UNEP Headquarters in Nairobi, Kenya and the CEP member states for information and guidance to track their progress in activities related to SIDS (St-Pierre, 2004b, Personal Communication). Further, it is noted that impact indicators are not defined during the project design phase, and so information is not systematically compiled. As such, baseline data does not exist and is not being created; and data may be misrepresented when recalled for future reporting (St-Pierre, 2004b, Personal Communication). These major problems, to be discussed in upcoming chapters, reveal deep concerns about the state of evaluation in the CEP. Simply, **at the present time, evaluation is not applied to the CEP in a manner that may create confidence in the Programme's efforts and effectiveness.**

SUMMARY

This chapter sets out to answer the first Associated Research Question: **What are the goals and objectives related to each Action Plan component?** Before this ARQ can be answered, a statement must first be made about the practical application of the six Action Plan components as capacity building and evaluation foundations. It appears that the Action Plan components are not used in the planning, implementation, and evaluation of policies, programmes, and projects. This is disconcerting, as a lack of consideration of the Action Plan components indicates that the generic guides of the expected evaluation template are not being followed. Further, there is no evidence of capacity building evaluation. This is also an alarming insight, as the basic tenet of the Regional Seas Programme is that capacity building has to happen before the regions can implement their Conventions and Protocols. If capacity building is not being achieved, it follows that the programme is faltering.

A set of expectations, or hypotheses, was derived from the literature review and the tenets of the first part (Typology) of the Model of Evaluation Science. These expectations were related to “what” was being evaluated, “when” and “by whom” it was being evaluated, and “why” it was being evaluated. The evidence and testimony garnered from the diagnostic field study yielded some alarming results. With respect to the “what” question, Impact/Outcome Evaluations of the RSP and the CEP are not possible due to a chronic lack of data and environmental monitoring. This is perhaps symptomatic of the fact that the concept of “Environmental Assessment” is not clearly defined in programme theory and practice. In the context of the “when” question, while evaluations are conducted at both formative and summative programme and project stages, the evaluation mechanisms currently employed are not considered adequate by programme personnel. With regard to

the “who” question, evaluations of the CEP are disproportionately conducted in-house or internal to the programme. Finally, concerning the “why” question, while evaluation may be conducted as a response to a statutory requirement or mandate, evaluation is not conducted in a systematic fashion and is not entrenched in programme/project design and implementation. Finally, the researcher has growing doubts about the validity of the “jewel in the crown” position taken by several RSP critics. More evidence and testimony is provided in subsequent chapters.

CHAPTER 7: PROCESS FOR ENVIRONMENTAL POLICY AND PROGRAMME EVALUATION – THE EXPECTED VERSUS THE ACTUAL

PURPOSE

The previous chapter illustrates that the six Regional Seas Programme Action Plan components do not create a template for programme evaluation. Consequently, this chapter seeks to ascertain what “evaluation” means in the CEP context. More specifically, this chapter focuses attention on the evaluation processes in place. It addresses the second and third Associated Research Questions: **What criteria are currently being used to measure progress on capacity building under each of the six Action Plan components?** and **What evaluation infrastructure supports the use of these criteria?** This chapter presents the current evaluation criteria, exposes the rationale behind the selection of these criteria, and discusses the human, financial, legal, political, technological, and informational resource infrastructure supporting the use of these criteria.

The second and third Associated Research Questions are nested within the second part of the Model of Evaluation Science – the Process Model for Environmental Policy and Programme Evaluation (Figure 3.3). The four major boxes composing this Model – “Institutional Setting and Subject Matter Competency”, “Design and Infrastructure”, “Implementation Processes and Procedures”, and “Evaluation Reporting” – serve as the chapter’s organizational devices. The most salient information fields within each box, in the context of the two ARQs, are considered. This facilitates a comparison of the “expected” and “actual” state of evaluation design and implementation in the context of the CEP. The

Template of Evaluation Science Attributes (Table 2.5) is used to synthesize and summarize the findings of this chapter.

BOX 1: INSTITUTIONAL SETTING AND SUBJECT MATTER COMPETENCY

RATIONALE

Box 1 of the Process Model for Environmental Policy and Programme Evaluation, “Institutional Setting and Subject Matter Competency”, is the point of origin for policy or programme evaluation. Its elements must be considered prior to an examination of the evaluation criteria employed and their supporting infrastructure. It is concerned with the understanding of institutional context, legal standing, structures, functions, processes and mechanisms, and perspectives. It focuses attention on the understanding of environmental issues and problems, policy goals and objectives, and exogenous and endogenous policy influences. Chapter 5, the “Institutional Analysis of the Caribbean Environment Programme”, and Chapter 6, “Programme Goals and Objectives – The Expected Versus the Actual”, have contributed much to this understanding of institutional context, and have set the stage for this analysis.

BOX 2: DESIGN AND INFRASTRUCTURE

RATIONALE

Box 2 of the Process Model for Environmental Policy and Programme Evaluation, “Evaluation Design and Infrastructure”, is concerned with “evaluation architecture”. This

concern is nested at the normative level – **what** should be measured and **how** it should be measured. More specifically, this box includes the definition of evaluation criteria – indicators or standards by which progress may be gauged, and the installation of evaluation infrastructure – human, financial, legal, political, technological and informational resources supporting the selection and implementation of these criteria (Table 7.1).

THE EXPECTED VERSUS THE ACTUAL: EVALUATION CRITERIA AND INFRASTRUCTURE DESIGN

Expected Evaluation Design and Infrastructure Conditions	Actual Evaluation Design and Infrastructure Conditions
Evaluation Criteria, Indicators, or Questions (Measures)	Ad hoc <u>criteria</u> lacking clear linkages to programme goals and objectives
Evaluation Monitoring, Analysis, and Assessment (Capacity)	Very low <u>infrastructure</u> capacity (human, financial, legal, political, technological, and informational resources) to measure scientifically

Table 7.1: Evaluation Criteria and Infrastructure Design Conditions

Evaluation Criteria

The Literature Review and the resulting Three-Part Model of Evaluation Science indicate that **programme goals should be central to the selection of evaluation criteria** (Haas, 1991; Jacobson, 1995). Chapter 6 notes that **the actual linkages between the six universal Action Plan components and Caribbean Environment Programme (and CEP subprogramme) goals and objectives are often tenuous**. In fact, **CEP evaluation criteria are not based on the Action Plan components, but rather on programme, subprogramme, and project specific goals and objectives**. If identified, **evaluation criteria are not harmonized across the Regional Seas Programme, within the**

Caribbean Environment Programme, or even among individual projects within a CEP subprogramme.

Vivid evidence and examples provided by key informants serve to corroborate these statements. In the context of subprogrammes such as Information Systems for the Management of Marine and Coastal Resources (CEPNET) and Specially Protected Areas and Wildlife (SPAW), **no formal evaluation criteria have been defined** (St-Pierre, 2004b, Personal Communication; Vanzella-Khoury, 2004, Personal Communication). Projects for Marine Protected Areas and Coral Reef Management under SPAW and ICRAN, respectively, are not evaluated by set criteria. Rather, the Memoranda of Understanding (MOUs) signed between CAR/RCU and national-level project managers contain descriptions of the activities, expected outputs, and directives for the use of outputs (Miller, 2004, Personal Communication; Vanzella-Khoury, 2004, Personal Communication). The legally binding MOU is used as an evaluation checklist as projects progress and terminate. Essentially, the MOU is gone through line by line, and a congruency check is done between what was agreed to and what was accomplished (Miller, 2004, Personal Communication; Vanzella-Khoury, 2004, Personal Communication). Even where more harmonized evaluation criteria could be established, progress, success and failure remain measured through case specific, relatively ad hoc means. To illustrate, the global ICRAN project has three components – “Reef Management”, “Global Coral Reef Monitoring and Assessment” and “Communications and Knowledge Dissemination” (Miller, 2004, Personal Communication; ICRAN, No Date). These components potentially serve as an evaluation framework. However, evaluation remains limited to the vague correspondence level between MOU objectives and what is being accomplished in the marine and coastal

environment. In essence, **similar projects may be evaluated using different measures and standards.** Concomitantly, the absence of a system of developing evaluation criteria during the project design phase also directly contributes to disarray in the establishment and maintenance of supporting evaluation infrastructure. In this context, defining indicators of impact in the project design phase would facilitate the planning of data collection and the compilation of such data in a more systematic fashion (St-Pierre, 2004b, Personal Communication).

The quest to identify the actual criteria employed in programme and project evaluation proved challenging during the diagnostic field study. As noted above, evaluation criteria are generally poorly defined in the context of this programme and its projects. Criteria identified by key informants are largely related to programme administration, and do not involve measurement of environmental conditions. They clearly focus on programme organization and management, and the fulfillment of case-specific goals, rather than on environmental conditions and environmental change that may be caused by programme/project implementation. The evaluation criteria currently in place may be classified into two broad categories. The first is “General Measures of Success”, and was the central theme of the discussion with the CEP Co-ordinator. The second is “Measures of Impact”, and it was the central theme in the discussions with the Programme Officers.

General Measures of Success

These criteria correspond to broad, normative measures of programme success. These four measures are derived from the logic: if x (condition) then y (the programme is successful). These general criteria are oriented toward measuring programme success on an

administrative level. They are not concerned with quantification or with programme or project impact.

1. *If the CEP facilitates co-operation among its member states, then it is successful.*

This measure of success is reflected in the Literature Review (Hulm, 1983a; Keckes in Hulm, 1983b and Jacobson, 1995; Hinrichsen, 1998; Meith, 2000). Specifically in the Caribbean, it is noted that an indication of programme success is the willingness of nations such as the United States, Mexico, and Cuba to meet and co-operate for the protection of the marine and coastal environment of the Gulf of Mexico (Andrade, 2004, Personal Communication). The ability to foster co-operation among otherwise polarized states is an undeniable measure of programme success in international relations, and possibly in capacity building with respect to the transfer of information, technology, and expertise. However, it must be noted that this broad measure does not consider if this international co-operation is in fact leading to improvements in marine and coastal environmental quality.

2. *If the member governments are willing to contribute financially to the CEP, then it must be a success.*

This criterion of success is based on the theory and practice of Cost-Benefit Analysis. It is contended that, if a nation can see the benefits of a programme, it will not have a problem paying for it (Andrade, 2004, Personal Communication). In the context of the CEP, the issue of intra-regional diversity is cardinal. The Wider Caribbean Region is composed of several Small Island Developing States. Among these is Haiti, regarded as the poorest country in the Western Hemisphere, which has recently been ravaged by political instability and natural disasters. Another island, Monserrat, has been devastated by volcanic eruptions. However, despite the hardships of these member states, they continue to pay their voluntary

contributions to the Caribbean Trust Fund. It is contended by the Co-ordinator that if nations with such challenges contribute to the CTF, then the CEP is indeed a programme that is recognized as important and necessary (Andrade, 2004, Personal Communication). However, in recognizing this as a measure of programme success, it must also be noted that it is “a struggle on a daily basis” to get the member countries to meet their pledges to the CTF (Andrade, 2004, Personal Communication). Several countries are in arrears (Table 7.2). As such, it could be argued that the member states do not see this cost-benefit relationship as clearly as contended above – that they contribute due to obligations other than the desire to see a successful programme persist.

3. *If the CEP Co-ordinator remains in tenure, then the CEP is successful.*

This criterion is based on the notion that, if the member states were not satisfied with the work of the CEP, they would contact the Executive Director of UNEP and have the Co-ordinator replaced (Andrade, 2004, Personal Communication). As such, the current Co-ordinator’s tenure of approximately eight years is an indication of member government satisfaction with CEP progress and activities (Andrade, 2004, Personal Communication). This is indeed an evaluative measure. It is a proxy of programme success in capacity building, as it provides insight into member states’ satisfaction with the work of the CEP. However, it again does not consider the existence or magnitude of changes in the marine and coastal environment due to the laws and projects that are implemented.

4. *If the CAR/RCU does what the member governments ask it to do, then it is successful.*

This criterion is related to the one presented previously. As Secretariat of the CEP, CAR/RCU receives requests for action from the member governments. For example, the

COUNTRIES	Unpaid Pledges at 31.12.02 in US \$	Adjustments	Pledges (2003)	Collections (2003) for Prior Years	Collections (2003) for 2003 & Future	Unpaid pledges 2003 & Prior Years
ANGUILLA	9322	0	10068	0	0	19390
ANTIGUA/BARBUDA	131600	0	10068	0	0	141668
ARUBA	33450	0	9180	0	0	42630
BAHAMAS	0	0	10068	0	10068	0
BARBADOS	0	0	10068	0	0	10068
BELIZE	19000	0	9180	0	0	28180
BRITISH VIRGIN IS.	5505	-5	5940	5500	0	5940
CAYMAN ISLANDS	0	0	5589	0	0	5589
COLOMBIA	-688.37	0	17534	0	0	16845.63
COSTA RICA	69115.36	0	10954	55602.81	0	24466.55
CUBA	63228	0	18937	0	0	82165
DOMINICA, Commonwealth	27966	0	10068	9322	0	28712
DOMINICAN REP.	176459	0	11841	0	0	188300
FRANCE	0	0	229514	0	229514	0
GRENADA	124112.15	0	10068	9321.85	0	124858.3
GUATEMALA	181368	0	10954	0	0	192322
GUYANA	75122	0	10068	0	0	85190
HAITI	18644	0	10068	0	0	28712
HONDURAS	49922	0	10068	0	0	59990
JAMAICA	6609.93	0	15301	0	0	21910.93
MEXICO	17277	0	43200	15570.32	0	44906.68
MONTERRAT	0	0	2700	0	2700	0
NETHERLANDS ANTLS.	25792	0	10068	0	0	35860
NICARAGUA	100432	0	10068	0	0	110500
PANAMA	-3617	0	10954	0	0	7337
ST. KITTS-NEVIS	0	0	2700	0	0	2700
ST. LUCIA	15000	0	9180	0	0	24180
ST. VINCENT & THE GRENADINES	61000	0	9180	17000	0	53180
SURINAME	58671	0	10068	0	0	68739
TRINIDAD AND TOBAGO	21928.38	0	11841	10000	0	23776.38
TURKS & CAICOS ISLANDS	0	0	4860	0	4860	0
USA (Cartegena Conv.)	0	0	400000	0	400000	0
VENEZUELA	409101.84	0	140768	0	0	549869.84
TOTAL	1696320.29		1101123	122316.98	647142	2027986.31

Table 7.2: Arrears to the Caribbean Trust Fund by Member State, 2002-2003
UNEP, 2004a

governments may request the development of a specific legal Protocol. This Protocol is drafted by the Secretariat and adopted by the member states. It follows that the Secretariat must then assist the governments in implementing this Protocol through capacity building. As such, if the CAR/RCU carries through on the demands made of it by the member states, it may be considered successful. A related measure is whether or not the member governments are doing work on their end to implement the Protocols (or activities) facilitated by the CAR/RCU. As such, the criterion “we are successful if we do what the governments ask us to do”, is a very narrow expression of success, as it does not in any way consider the implementation efforts of the member governments. It is not strongly related to capacity building. Further, it again ignores the notion of observed or measured change in the marine and coastal environment as a result of any interventions designed and/or implemented.

Measures of Impact

These criteria correspond to the operational aspects of capacity building and programme/project implementation. Several measures of impact are currently in place. However, many of these are beset by problems. First, as previously noted, in the context of the SPAW subprogramme and the ICRAN project, **evaluation criteria are neither defined nor consistently applied to activities**. Rather, evaluation is based on the execution and achievement of project or case-specific activities and outcomes detailed in the Memorandum of Understanding signed for the project. In some of these cases, evaluation criteria may be quantifiable. For example, a project’s Memorandum of Understanding may require reporting of the number of people trained in a regional workshop or course. However,

whether or not measures are quantified is dependent upon the initial agreement in the MOU (Vanzella-Khoury, 2004, Personal Communication). Another Programme insider noted that even if measures begin on a qualitative basis, a programme should eventually mature to the point where there is a quantitative basis upon which to justify programme actions (McDonald, 2004, Personal Communication).

The issue of quantification leads to questions of measurement. Of interest are questions of context, scale, and units. The example of training courses and workshops may be revisited, as the CEP is frequently identified as being active in course and workshop evaluation (Miller, 2004, Personal Communication; St-Pierre, 2004b, Personal Communication; Vanzella-Khoury, 2004, Personal Communication). Criteria identified for the evaluation of SPAW and ICRAN's Training of Trainers courses include the number of trainees, the number of trainers trained, and the number of decision makers involved (St-Pierre, 2004b, Personal Communication). In addition, all participants evaluate their courses, including the quality of food and accommodations (Miller, 2004, Personal Communication). However, a number of questions beg for answers. If the number of people trained is measured, what number of trainees is considered to be good? Poor? At present, it does not appear that such measures have this context or scale – they are not placed in a framework that dictates what is or what is not acceptable. In essence, **these measures are not compared to goals.**

Further, it must be questioned if any of the criteria in place are scientifically derived or supported. In the context of the ICRAN project, they are not. Upon the completion of a specific beach cleanup project, for example, managers sent relevant photographs to CAR/RCU (Miller, 2004, Personal Communication). These photographs are to serve as

visual evidence that the cleanup was, in fact, completed. However, the photographs do not reveal lingering problems that can only be determined through measurement. Sewage or other pollutant concentrations are sound examples. In addition, the requirement for geospatial references are not apparent. The possibility that locations are inaccurately represented is a strong possibility. In essence, evaluation rigour is lacking, and evaluation confidence is marginal at best.

Evaluation Infrastructure

From the Literature Review emerges an ideal case hypothesis: that **RSP outcomes are measurable, and if they are not, efforts should be in place to attain outcome measurability** (Jacobson, 1995; Vallega, 2002b). However, in response to this hypothesis, the literature itself provides a sense of foreboding. Specifically, Jacobson (1995) contends that, although in situ environmental quality measurements are the best measure of programme success, RSP evaluation has not progressed to this level. This is due to the fact that many regions do not have the capacity to conduct advanced environmental monitoring, and those that are able to monitor (the Mediterranean) do not have this data compiled into a comprehensive database to facilitate analysis of trends (Jacobson, 1995). Therefore, it is expected that, after three decades of programme experience, efforts are being made across the RSP to facilitate outcome evaluation through capacity building. **This expectation includes investments in human, financial, legal, political, technological and informational resources to increase environmental assessment and management capacity to facilitate data collection, compilation, and use in evaluation.**

Human Resources

The various Programme Officers within the CEP are responsible for the mandates of their own work areas, assisting the Co-ordinator, and, if needed, filling the mandates of other Programme Officers on an interim basis (St-Pierre, 2004b, Personal Communication). A frequent lament voiced by the key informants is that Programme Officers' mandates are rapidly growing, as are the number of institutional partners with which they must deal (St-Pierre, 2004b, Personal Communication; Vanzella-Khoury, 2004, Personal Communication). As such, day-to-day management responsibilities suffer, as does the possibility of conducting evaluation (St-Pierre, 2004b, Personal Communication). Human resources constraints will be discussed in detail in Chapter 8.

Financial Resources

The Caribbean Environment Programme is not a donor agency. As such, when it does give funds, for example through the SPAW Programme's Small Grants Fund for Marine Protected Areas, it is not in large amounts (Vanzella-Khoury, 2004, Personal Communication). In addition, the CEP does not receive a budget from UNEP to develop activities, and it therefore is heavily reliant on member states' contributions to the Caribbean Trust Fund (CTF) and funding from external sources (Andrade, 2004, Personal Communication; St-Pierre, 2004b, Personal Communication). The CAR/RCU consolidates, facilitates, and channels funds from external agencies to national agencies for project development and implementation (St-Pierre, 2004b, Personal Communication). Some of the major sources of external funding noted by key informants are the Swedish International Development Agency (SIDA), which is funding parts of each of CEP subprogrammes, and

the Global Environment Facility (GEF), which is funding a large AMEP project for Small Island Developing States (Savelli-Söderberg, 2004, Personal Communication; St-Pierre, 2004b, Personal Communication). Both of these funding arrangements require evaluation. In the context of SIDA's funding, projects must be monitored to ensure that their Terms of Reference and outcomes are congruent with the agreement between CEP and SIDA (Savelli-Söderberg, 2004, Personal Communication). It is expected that evaluation conduct based on quantifiable indicators of impact will increase as the GEF-SIDS project is implemented (St-Pierre, 2004b, Personal Communication). Financial constraints to evaluation will be discussed in detail in Chapter 8.

Legal Resources

The most tangible expression of information sharing among UNEP Regional Seas Programmes is the legal framework of "Twinning Arrangements" (Andrade, 2004, Personal Communication; Savelli-Söderberg, 2004, Personal Communication). Twinning Arrangements involve the pairing of a wealthy and established RSP with a Programme that is newer, more immature, and is struggling. The existing Twinning Arrangement is between HELCOM (Baltic RSP) and the Nairobi Convention (Eastern Africa RSP) (Savelli-Söderberg, 2004, Personal Communication). Under this arrangement, HELCOM shares technical knowledge, information, and ideas with Eastern Africa (Savelli-Söderberg, 2004, Personal Communication). Unfortunately, the CEP does not participate in Twinning Arrangements. Further, inter-regional information sharing is at present limited to technical support and knowledge transfer – for example, the "lending" of experts from one region to another to initiate a project (Savelli-Söderberg, 2004, Personal Communication). Evaluation

protocols, methodologies, and lessons are not currently the subject of inter-regional discussions (Vanzella-Khouri, 2004, Personal Communication).

Political Resources

The CEP collaborates with numerous partners at the national, regional, and global levels. In addition, the Governing Council of UNEP has recently expanded the RSP's (and CEP's) partnerships to include not only institutional arrangements, but also the regional private sector and local communities (Andrade, 2004, Personal Communication). As suggested above, the positive benefits of increasing partnerships and stakeholder involvement are not without consequences, as dealing with more and more partners and networks is taxing on Programme managers and administrators.

Technological Resources

Technological resources primarily encompass networks – communications and other linkages among like institutions and individuals, and databases – electronic data repositories. These form the CEP's decision-support infrastructure, and provide potential data and information banks from which evaluation may be conducted. The Information Systems for the Management of Marine and Coastal Resources (CEPNET) subprogramme is the primary developer and facilitator of this decision-support infrastructure. CEPNET's goal to improve the accessibility of marine and coastal environmental information is fulfilled by its development of networks by which to share this information (St-Pierre, 2004b, Personal Communication). These networks include database and clearinghouse development, increasing Internet training and use, updating and expanding the CEP's website, and

establishing e-groups and listserves (St-Pierre, 2004b, Personal Communication; Vanzella-Khoury, 2004, Personal Communication). CEPNET currently oversees the technical coordination of SPAW's Marine Protected Areas Managers Network (CaMPAM Network) and Database of Marine Protected Areas (Vanzella-Khoury, 2004, Personal Communication). In addition, it is assisting the development of a database for the Oil Spills - RAC and Clearinghouses for land-based sources of marine pollution and for Integrated Watershed and Coastal Areas Management for the AMEP Programme (St-Pierre, 2004b, Personal Communication). Despite the quality of existing, and the promise of developing, decision-support infrastructure, questions of infrastructure maintenance and confidence remain, and formal evaluation of progress is hidden. These concerns will be discussed shortly.

Informational Resources

Informational resources are closely linked to technological resources. Due to CEPNET's position as a facilitator of data and information sharing, this subprogramme is aware of who has what information. As such, CEPNET can put information in context by matching information access with needs. For example, CEPNET has collaborated with the Caribbean component of the Millennium Sea Assessment (CARSEA), UNEP's Global International Waters Assessment (GIWA), and the Caribbean-Latin American section of UNEP's Global Environment Outlook (GEO) as a provider and facilitator of data and information (St-Pierre, 2004b, Personal Communication). More broadly speaking, the various CEP subprogrammes share lessons learned and information via such means as electronic newsletters (CEP News and the ICRAN Newsletter), websites (CEP website and

ICRI Forum) and networks (CaMPAM Network) (Miller, 2004, Personal Communication; Vanzella-Khoury, 2004, Personal Communication).

BOX 3: IMPLEMENTATION PROCESSES AND PROCEDURES

RATIONALE

This box is focused on operationalizing evaluation processes, criteria and infrastructure. Specifically, it addresses concerns of evaluation criteria performance and confidence in evaluation infrastructure (Table 7.3).

THE EXPECTED VERSUS THE ACTUAL: EVALUATION IMPLEMENTATION PROCESSES AND PROCEDURES

Expected Criteria and Infrastructure Implementation Conditions	Actual Criteria and Infrastructure Implementation Conditions
Evaluation Criteria Performance (Continuous)	▪ Criteria are not continuous – over time or among projects
Evaluation Criteria – Data/Information Generation (Production)	▪ Criteria produce data lacking context (scale or units)
Evaluation Criteria – Data/Information Accessibility (Control) and Availability (Retrievable)	▪ Environmental impact information is not available (low capacity for scientific measurement)
Evaluation Processes of Monitoring, Analysis, and Assessment (Confidence in Infrastructure)	▪ Low confidence in infrastructure ▪ Concerns regarding maintenance of existing infrastructure

Table 7.3: Evaluation Criteria and Infrastructure Implementation Conditions

Evaluation Criteria: Continuity

Research reveals that evaluation criteria are not continuous. This lack of continuity is expressed in two ways. First, **criteria do not result in the generation of consistent data**

and information over time. This is symptomatic of the lack of baseline data from which to measure trends, the lack of systematic data compilation mechanisms, and the practice of using project-specific and not universal evaluation criteria (Miller, 2004, Personal Communication; St-Pierre, 2004b, Personal Communication; Vanzella-Khoury, 2004, Personal Communication). Second, **criteria are not continuous among even similar projects, as case-specific and not universal measures of success are employed.** This is best illustrated by the practice of evaluating projects based on project-specific Memoranda of Understanding or Terms of Reference (TOR), and not formally defined, universal, continuous, and consistent criteria (Miller, 2004, Personal Communication; Vanzella-Khoury, 2004, Personal Communication).

Evaluation Criteria: Data and Information Generation, Availability, and Accessibility

The evaluation criteria currently in place are not associated with any performance standard. For example, there is **no frame of reference** by which to ascertain how many workshop trainees is acceptable, or how much money spent on any project is too much. Further, this problem manifests in the “General Measures of Success” presented by the Programme Co-ordinator. For example, if the CEP is considered to be successful based upon its ability to facilitate co-operation among its member states, it is not clear if unanimous agreement and unconditional co-operation is required for “success”. Further, if the success of the CEP is measured by member states’ willingness to contribute to the Caribbean Trust Fund, it is not clear if this success requires all states to contribute financially, or if there is a threshold number of states in arrears that would indicate a level of dissatisfaction with, or “failure” of, the CEP.

It has been established that there is no ability within the CEP to conduct science-based monitoring or data collection. Simply, **capacity does not exist at the regional level to conduct assessment and monitoring, nor to systematically collect and compile environmental data. This capacity does not exist at the national levels either.** This is evident by the inability of CEP personnel to conduct site visits to corroborate the reports they receive from the member countries. Related to constraints in human, financial, legal, technological, and informational resources, **these programme shortcomings are indicative of major capacity building failures in the Environmental Assessment, Environmental Management, and Institutional Arrangements Action Plan components.**

Confidence in Infrastructure

Insight gained from the diagnostic field study indicates a lack of confidence in the current evaluation infrastructure. There is low confidence in human resources infrastructure. As will be explored in Chapter 8, the **pressures of increasing mandates on small offices and individual managers limits the execution and evaluation of activities.** The perpetual vacancy of the post of ETA Programme Officer reduces faith in the information management tools developed by CEPNET, in that an education and training specialist could assist in the design of more effective and efficient mechanisms for information dissemination and decision-support (St-Pierre, 2004b, Personal Communication). Financial resources are a constant concern, as **low funds negatively influence the organization's ability to maintain human, technological, and informational resources.** In the context of technological or decision-support infrastructure, **infrastructure maintenance is a key concern.** The Marine Protected Areas Database, which is currently being upgraded by

CEPNET, is currently described as being outdated and not user friendly (Vanzella-Khouri, 2004, Personal Communication). The lack of regular maintenance of such infrastructure means that larger scale overhauls of existing infrastructure may subtract from efforts to establish new tools. Further, low confidence in both technological and informational resources is a product of ad hoc infrastructure for the collection and compilation of environmental data (St-Pierre, 2004b, Personal Communication).

BOX 4: EVALUATION REPORTING

RATIONALE

This box is concerned with the integration of evaluation results into policies, programmes, projects, and processes to result in institutional and policy learning and programme or project improvement (Table 7.4).

THE EXPECTED VERSUS THE ACTUAL: EVALUATION REPORTING

At present, there are neither criteria designed nor implemented to evaluate the effectiveness of evaluation reporting or information dissemination. However, **legal, technological, and informational infrastructure is in place to share evaluation results and lessons learned from projects.** For example, it is written in legally binding ICRAN project MOUs that that reports and documents must be provided to the CAR/RCU free of charge (Miller, 2004, Personal Communication). These are then distributed to the member governments, Marine Protected Area managers, and other interested stakeholders at training workshops and the IGM (Miller, 2004, Personal Communication). Also in the context of

Expected Evaluation Reporting Conditions	Actual Evaluation Reporting Conditions
Communication Protocols (Language; Media)	Legal, Technological, and Informational Resources <u>are</u> in place to disseminate results
Communication Priority (Dissemination)	- Multimedia dissemination of some information (electronic, hard copy) - Evaluation is <u>not</u> the subject of inter-Regional dialogue
Explicit Evidence of Results Integration into Policy and Process	- No criteria to evaluate the effectiveness of evaluation reporting or information dissemination mechanisms - Frequent project overlap and redundancy within the CEP - Frequent project overlap and redundancy among RSPs “Reinventing the wheel”

Table 7.4: Evaluation Reporting Conditions

the International Coral Reef Action Network, the existing CaMPAM database and the ICRI forum website are used to distribute lessons and results electronically (Miller, 2004, Personal Communication). SPAW and ICRAN's Training of Trainers course Manuals are distributed electronically, on CD-ROM, and in hard copy to any party that asks for this information (Miller, 2004, Personal Communication; Savelli-Söderberg, 2004, Personal Communication). Further, best management practices are transferred among Marine Protected Areas and ICRAN Demonstration Sites (Miller, 2004, Personal Communication). Despite the successes in information sharing, it is noted that there is much room for improvement (Miller, 2004, Personal Communication). Specifically, several key informants stated that **there is still much overlap between CEP and RSP projects and activities**. Often, managers redo work, or reinvent the proverbial wheel, because they were not aware that a similar project had been undertaken elsewhere in the Caribbean region (Vanzella-Khouri, 2004, Personal Communication). Much work is redone at the regional level, as the

transfer of lessons from programmes and projects among RSPs is not streamlined (Savelli-Söderberg, 2004, Personal Communication). In this context, it is important to remember that while programme and project lessons are discussed among RSP Co-ordinators at their Annual Meetings, it is not clear if evaluation mechanisms and results are regularly on the agenda of inter-regional communications at this forum (Vanzella-Khoury, 2004, Personal Communication).

SUMMARY

“Institutional Setting and Subject Matter Competency” (Box 1) provides the foundation for evaluation design and implementation, and is comprehensively addressed in Chapters 5 and 6.

The Template of Evaluation Science Attributes (Table 2.5) is used here as a summary device to illustrate the observed incongruency between the “expected” and the “actual” evaluation criteria and infrastructure conditions (Table 7.5). The researcher, as a result of this analysis, has a low level of confidence in the existing evaluation criteria and infrastructure employed by the CEP.

Key informant insights related to “Design and Infrastructure” (Box 2), indicate that the evaluation criteria currently in place are ad hoc and disorganized. Further, it is evident that there is low infrastructure capacity to support criteria that are more scientifically based. Discussion related to “Implementation Processes and Procedures” (Box 3) suggests that the evaluation criteria and infrastructure in place do not possess such attributes as “continuity” or “context”.

Key informant insights in the context of “Evaluation Reporting” (Box 4), indicate

<i>The Expected</i>			<i>The Actual</i>		
Attribute	Criteria	Infrastructure	Attribute	Criteria	Infrastructure
Continuity	-Continuity through time; can be measured from one year to another	-Infrastructure supports the possibility of continuous measurement over time	Not Continuous	-Ad hoc criteria -No baseline or time series -Not continuous among projects	-Human, financial, technological, and informational resource constraints prohibit measurement of change over time and “policy-programme learning”
Connected	-Clear linkages to Action Plan Components and Programme Goals	-Infrastructure designed and maintained to measure defined criteria	Not Connected	-Connection to project and case specific goals and objectives, not to the broader Action Plan	-Ad hoc and project-specific criteria lead to ad hoc and disorganized supporting infrastructure
Reliable	-Quality assurance -Confidence in what is being measured	-Up-to-date infrastructure	Not Reliable	-No scientific, environmental impact justification for programme activities	-Infrastructure is not properly maintained (out-of-date databases)
System	-Procedure -Replicable -Ingrained in managers -Evaluation considered in project design phase	-Infrastructure exists for systematic data collection compilation	No System	-Evaluations often done from recollection of facts and measures; -Evaluation criteria not considered in project design.	-No systematic infrastructure for data collection or compilation

Table 7.5: Summary Table of “The Expected” Versus “The Actual” Evaluation Criteria and Infrastructure Conditions

The Expected			The Actual		
Attribute	Criteria	Infrastructure	Attribute	Criteria	Infrastructure
Universal	-Consistent across programmes/projects/evaluations	-Infrastructure designed and maintained to measure defined criteria	Not Universal	-Criteria are project-specific, not universal	-Ad hoc and project-specific criteria lead to ad hoc and disorganized supporting infrastructure
Simplicity	-Number and kind of criteria	-Infrastructure designed and maintained to measure defined criteria	Not Simple	-Different evaluations measure different things -No universal evaluation methodologies or measures	-Ad hoc and project-specific criteria lead to ad hoc and disorganized supporting infrastructure
Precision	-“What” -Clearly defined criteria	-Clearly defined infrastructure to support clearly defined criteria	Not Precise	-Lack of clarity in what is being measured Ex. what is “quality?”	-No way to measure poorly defined terms (ex. “quality”)
Measurable	-“How” -Context; Scale; Units	-Infrastructure in place for scientifically derived and supported environmental assessment and monitoring	Not Measurable	-Not scientifically-based -Little quantification -No context of meaning for quantified measures Ex. How many trainees is “good”? “bad”?	-No existing infrastructure or capacity to conduct scientifically based environmental assessment or monitoring at the national or regional levels

Table 7.5: Summary Table of “The Expected” Versus “The Actual” Evaluation Criteria and Infrastructure Conditions Cont’d

that the infrastructure does exist to support the sharing of evaluation results within the region and among regions. However, **the ability to share is not always translated into the practice of sharing.** The following chapter – Evaluation Barriers and Challenges – attempts to identify the key barriers to more mature evaluation science in the CEP.

CHAPTER 8: EVALUATION BARRIERS AND CHALLENGES – THE EXPECTED VERSUS THE ACTUAL

PURPOSE

The barriers and challenges to conducting evaluation in the context of the Caribbean Environment Programme are now considered. The Model of Evaluation Science, specifically its section on Evaluation Barriers and Challenges, is used as an advisory and organizational tool (Figure 3.4). In addition, select barriers and challenges, and those that were encountered but not foreseen in the Model, are discussed in more detail.

BOX 1: INSTITUTIONAL SETTING AND SUBJECT MATTER COMPETENCY

RATIONALE

The barriers pertaining to “Institutional Setting and Subject Matter Competency” are illustrated in Table 8.1. The barriers and challenges emerging in this context relate to the establishment of understanding of baseline institutional and environmental conditions prior to beginning and evaluation. In addition, they are related to the clear articulation of policy, programme, and project goals and objectives, which form the foundation for evaluations in these domains.

BARRIERS RELATED TO INSTITUTIONAL SETTING AND SUBJECT MATTER COMPETENCY

The barriers related to “Institutional Change and Institutional Policy Change” merit some discussion. This group of barriers is symptomatic of the difficulties of evaluating

Expected Barriers	Actual Barriers
Institutional Change and Institutional Policy Change	▪ Inherent Difficulty of Environmental Evaluation ▪ High Turnover of Member Government Staff
Political Expertise (Anticipatory Action) vs. Technical Expertise (Remedial Action)	▪ No Evidence of Imbalances Between Proactivity and Reactivity
Problem and Issue Misunderstandings	▪ No Evidence of Misunderstanding of Regional Environmental Issues and Problems
Vagueness of Policy Goals and Objectives	▪ Lack of Clear Linkages Between the Action Plan Components and Programme/Subprogramme Goals and Objectives
Policy and Programme Tokenism	▪ No Evidence of Token Policies or Programmes
-	▪ Human, Financial, Legal, and Political Resource Constraints

Table 8.1: Expected and Actual Barriers Related to Institutional Setting and Subject Matter Competency

environmental interventions in general, and of superimposing evaluation on a dynamic institutional setting. The former refers to the difficulty of measuring changes that may be attributable to a specific intervention in a large and open system such as the natural environment, or specifically, the ocean (Savelli-Söderberg, 2004, Personal Communication; St-Pierre, 2004b; Personal Communication). The latter refers to conducting evaluation in a setting where projects are constantly starting, operating, and ending; where institutional and government personnel are frequently moving and leaving; and where local communities are conducting their daily activities.

A major set of evaluation barriers related to Institutional Setting and Subject Matter Competency was not foretold by the Model of Evaluation Research Barriers and Challenges. These are barriers related to constraints in the Programme's supporting resources. Specifically, restricted human, financial, legal, and political resources hinder the design and implementation of evaluations.

Human Resources

Human resources constraints are identified by several key informants as a primary barrier to conducting evaluation within the CEP (McDonald, 2004, Personal Communication; St-Pierre, 2004b, Personal Communication; Vanzella-Khoury, 2004, Personal Communication). **They are identified as a major limiting factor in the ability to conduct on-site evaluations of programme and project impacts** (Savelli-Söderberg, 2004, Personal Communication; Vanzella-Khoury, 2004, Personal Communication). In addition, **limited staffing levels and the short-term nature of many positions leads to a loss of “institutional memory” and continuity** (McDonald, 2004, Personal Communication; St-Pierre, 2004b, Personal Communication). **Human resources shortages are inextricably linked to shortages of financial resources**, as increasing the human resources base requires increased financial resources (Savelli-Söderberg, 2004, Personal Communication). **They are also linked to constraints created by the structure of UNEP**, as the CEP cannot just “arbitrarily” create new positions and hire new staff. All positions (and supporting funds) must be approved by the member governments and UNEP (St-Pierre, 2004b, Personal Communication). These points will be discussed in depth in the context of barriers related to “Financial Resources” and “Evaluation Implementation Processes and Procedures”.

Personnel shortages at the CAR/RCU have several expressions. One is the perpetual vacancy of the Education, Training, and Awareness Programme Officer position. Having a fully qualified ETA Programme Officer on staff would have several benefits. First, it would allow the other Programme Officers and CAR/RCU personnel to focus on their own specific mandates rather than on ETA activities. This would, perhaps, allow for increased time to be

spent on the evaluation of CEP and subprogramme policies, programmes, and projects. Second, the collaboration between two Programme Officers would potentially increase the efficiency and effectiveness of training and information management tools produced by CEPNET in support of the other subprogrammes – in essence, this would improve the technological and informational infrastructure of the CEP (St-Pierre, 2004b, Personal Communication). Another expression of personnel shortages is the identified need to hire additional technical support staff at the CAR/RCU. Such staff would include database development and programming personnel in support of CEPNET's activities (St-Pierre, 2004b, Personal Communication). Permanent staff members would allow CEPNET to establish a "routine service of technically supporting the other subprogrammes" (St-Pierre, 2004b, Personal Communication). At present, CAR/RCU must rely upon consultants to do this work. However, consultants can only be hired for fixed periods with no immediate re-hire or contract extension/renewal (St-Pierre, 2004b, Personal Communication). As such, new consultants often must come in mid-project, leading to the disruption of information flow and activities (St-Pierre, 2004b, Personal Communication). Additional problems associated with reliance on consultants will be discussed further in the context of "Financial Resources".

Finally, and again related to "Financial Resources", the increasingly expanding mandates of the CEP Programme Officers, surrounding increased travel, partnerships, and projects, clearly indicate the need for increased human resources. It is noted that "I'm not able to spend the little money I get in a way, because I cannot co-ordinate everything properly, I'm just too spread out...and if we had more human resources to produce more, not only would we be able to better spend that money, but I'm sure it would attract more

funds” (St-Pierre, 2004b, Personal Communication). Interestingly, it may be argued that better evaluation processes and mechanisms would allow for stronger definition of priorities in the CEP’s workplans.

Financial Resources

Financial Resources are identified as either the primary or the secondary barrier to conducting evaluations in and of the CEP (Savelli-Söderberg, 2004, Personal Communication; St-Pierre, 2004b, Personal Communication). **They are noted as one major factor contributing to shortages in human resources** (Savelli-Söderberg, 2004, Personal Communication; St-Pierre, 2004b, Personal Communication). Financial constraints contribute to human resource constraints in two main ways. First, it is contended that positions cannot be created due to a lack of funds (St-Pierre, 2004b, Personal Communication). Second, financial constraints mean that the CAR/RCU cannot hire consultants from outside of Jamaica, further limiting the labour pool (St-Pierre, 2004b, Personal Communication). Table 8.2 illustrates the 2002-2003 CEP budget and expenditures, including the finances allocated to human resources. Interestingly, it is evident in Table 8.2 that the CEP’s Professional and Support Salary budget exceeded expenditures in both 2002 and 2003. Further, the 2002-2003 approved budget subtotal has greatly exceeded the expenditures subtotal. This seems to suggest that there is money available for the hiring of some additional staff – perhaps even a Programme Officer for ETA.

Activity	Approved Budget 2002	Expenditures 2002 CTF	Other Contributions	Total
Professional Salaries	447475	421964	259125	681089
Support Staff Salaries	250000	198847	26000	224847
Consultants & Sub- contracts	107500	8826		8826
Travel	89000	100415		100415
Meetings	145000	135501		135501
Equipment	61500	55319		55319
Rent and Maintenance	17000	2819		2819
Maintenance	37000	14549		14549
Reporting	25000	7051		7051
Sundry	60500	5591		53194
Financial adjustments prior years	0	0	0	0
Sub-total	1239975	950882	285125	1283610
Activity	Approved Budget 2003	Expenditures 2003 CTF	Other Contributions	Total
Professional Salaries	464000	453846	156839	610685
Support Staff Salaries	249000	160573		160573
Consultants & Sub- contracts	0	46378	24811	71189
Travel	50000	139582		139582
Meetings	30000	97481	57185	154666
Equipment	16000	9379		9379
Rent and Maintenance	17000	1635		1635
Maintenance	150000	24831		24831
Reporting	6000	949		949
Sundry	21138	22239		22239
Financial adjustments prior years	0	-21707		
Sub-total	1003138	935186	238835	1195728

Table 8.2: CEP Budget and Expenditures, 2002-2003
UNEP, 2004a

Legal Resources

Legal resources serve as a barrier to conducting evaluation in that Cartagena Convention itself limits the feedback received by the CAR/RCU from the member governments. The Cartagena Convention does not require its parties to report to the Secretariat on its activities or investments to implement the Convention (St-Pierre, 2004b, Personal Communication). This is in sharp contrast to other multilateral agreements, such as the Convention on Biological Diversity (CBD) (St-Pierre, 2004b, Personal Communication). Parties to the CBD are required in Article 26 of the Convention to produce comprehensive, regular reports: “Each Contracting Party shall, at intervals to be determined by the Conference of the Parties, present to the Conference of the Parties, reports on measures which it has taken for the implementation of the provisions of this Convention and their effectiveness in meeting the objectives of this Convention” (CBD, 1992). As such, the CAR/RCU is severely limited in its knowledge of the activities of the member states. The SPAW and LBS Protocols do contain some requirements for reporting (St-Pierre, 2004b, Personal Communication). For example, Article 19 of the SPAW Protocol requires reporting on the status of, and changes to, new and existing Protected Areas, buffer zones, and protected species (SPAW Protocol, 1990). However, as the SPAW Protocol has only recently entered into force and the LBS Protocol is not yet active, more time is needed to ascertain the effectiveness of these reporting requirements and their role in facilitating evaluation (St-Pierre, 2004b, Personal Communication).

Political Resources

Despite the fact that much of the RSP’s success is measured by its ability to foster

co-operation among states, the vast cultural and economic differences among the CEP member countries is identified as a barrier to evaluation. As previously stated, the CEP is composed of twenty-eight member governments representing the “first world” (for example, the United States, France, the United Kingdom and the Netherlands), the “second world” (for example, Colombia, Mexico, and Venezuela), and “third world” (for example, Haiti) (Andrade, 2004, Personal Communication). A challenge is presented in that co-ordinated regional action for the environment requires near uniform capacity for action across the region. Ideally, the capacity of the lowest-level countries should be raised through capacity building efforts (Andrade, 2004, Personal Communication; St-Pierre, 2004b, Personal Communication). At present, communication is a challenge between the Secretariat and the least developed governments of the region (St-Pierre, 2004b, Personal Communication). These governments are especially plagued by high personnel turnover rates, so that there is always a new person dealing with the Secretariat or in charge of a specific project (St-Pierre, 2004b, Personal Communication). Institutional memory and continuity are thus closely linked to development status (St-Pierre, 2004b, Personal Communication). The low institutional capacity, and the human and financial resources constraints within these governments, limits their ability to conduct evaluation of themselves or of their projects (Vanzella-Khoury, 2004, Personal Communication). Very few countries have data collection and/or environmental monitoring programmes (St-Pierre, 2004b, Personal Communication). It is noted that due to their precarious social, economic, and political situations, little additional work can be asked of these governments despite the pervasive desire to improve evaluation (Vanzella-Khoury, 2004, Personal Communication).

BOX 2: DESIGN AND INFRASTRUCTURE

RATIONALE

The key barriers and challenges in the context of “Design and Infrastructure” are presented in Table 8.3. Issues and concerns related to the lack of a universal methodological approach, the integrity of evaluation criteria, and the absence of sustainable monitoring infrastructure were addressed in detail in the previous chapter. As such, different barriers existing in this context will be addressed.

BARRIERS RELATED TO DESIGN AND INFRASTRUCTURE

Expected Barriers	Actual Barriers
Social/Political Values vs. Technical Values Related to Policy Design – “Missing” Evaluation Forms	▪ Lack of Representation of Technical Values (measurement, site visits) in Evaluation
Quantitative Methodology applied to Normative Concerns	▪ No Evidence of Reliance on Quantitative Methodologies
Lack of a Universal Methodological Approach	▪ No Universal Methodological Approach for Evaluation Exists
Lack of Sustainable Monitoring Infrastructure	▪ No Sustainable Monitoring Infrastructure
Criteria Attributes in Question – Continuity, Connected, Reliable, System, Universal, Simplicity, Precision, Measurable	▪ Evaluation Criteria Found <u>Not</u> to be Continuous, Connected, Reliable, Systematic, Universal, Simple, Precise, or Measurable

Table 8.3: Expected and Actual Barriers Related to Evaluation Design and Infrastructure

Evidence from the diagnostic field study indicates that CEP programme and project evaluation considers social and political values. For example, it was widely noted that CAR/RCU officials have sympathy for overwhelmed national-level managers and governments (Andrade, 2004, Personal Communication; Miller, 2004, Personal

Communication; Vanzella-Khoury, 2004, Personal Communication). In cases where MOU obligations have not been met, managers at the national levels are given the opportunity to justify voids. CAR/RCU staff then have discretion in judging whether or not the reasons provided are reasonable (Miller, 2004, Personal Communication). However, the diagnostic field study indicates that the CEP's current evaluation processes lack consideration of technical values, such as state of the environment monitoring. **Evaluation is consistently found to be lacking in terms of measurement of programme and project impacts on the ground** (Miller, 2004, Personal Communication; Savelli-Söderberg, 2004, Personal Communication; St-Pierre, 2004b, Personal Communication; Vanzella-Khoury, 2004, Personal Communication). Therefore, there is no evaluation barrier related to over reliance on quantitative methodologies. Rather, in the context of the CEP, the key barrier related to "Design and Infrastructure" is the absence of quantification and state of environment measurements.

BOX 3: IMPLEMENTATION PROCESSES AND PROCEDURES

RATIONALE

It is evident that barriers in one aspect of the evaluation process create and exacerbate barriers in others. The key barriers and challenges in the context of "Implementation Processes and Procedures", presented in Table 8.4, are a result of the rigid bureaucratic structure and institutional inertia within the UNEP system.

BARRIERS RELATED TO IMPLEMENTATION PROCESSES AND PROCEDURES

As previously noted, the structure of UNEP limits the freedom of its agencies to independently hire personnel. In this context, despite the recognized need for more staff within the CAR/RCU, the institution may not create these new positions without first obtaining funds and member state approval (St-Pierre, 2004b, Personal Communication).

Expected Barriers	Actual Barriers
Complexity of Multiple Barriers and Challenges – Negative Synergy	Strong Evidence of Positive Feedback Among Barriers
Power of Institutional Tradition	Problematic UN and UNEP Structure
Self Interest/Vested Interest	Preservation of Self-Interest (Evaluation Backlash)
Perception of Related Threats, Risks, Consequences	No Evidence of the Avoidance of Evaluation Due to Fears of Negative Consequences
Political/Managerial Interference	No Evidence of Interference
Perception and Experience with Evaluation Costs, Benefits, and Inequities Between These	No Evidence of the Avoidance of Evaluation Due to Perceived Incongruities Between Evaluation Costs and Benefits

Table 8.4: Expected and Actual Barriers Related to Evaluation Implementation Processes and Procedures

UNEP's structure creates other barriers as well. Specifically, in the context of evaluation, these barriers manifest in the evaluation process employed by the Specially Protected Areas and Wildlife Programme. It is noted that SPAW's current evaluation method – the submission by member governments of regular Progress Reports and a Terminal Report on specific projects – is not adequate, due to the fact that it neglects environmental monitoring and site visits (Vanzella-Khoury, 2004, Personal Communication). However, as this evaluation format is common across UNEP, it cannot be changed “arbitrarily” within the CEP (Vanzella-Khoury, 2004, Personal Communication). It may thus be argued that **the**

desire to harmonize evaluation methods across certain programmes and for certain projects has led to a stagnation of the evaluation process. This stagnation is the result of resisting even perhaps beneficial change in favour of the arguably ineffective status quo.

The notion of bureaucratic resistance to change leads directly to the issue of institutional inertia to evaluation. There is no immediate evidence that evaluation is avoided due to fears of negative findings, and no evidence to suggest political or managerial interference with evaluation results. To clarify, if evaluation is avoided, it is due to human or financial resource constraints or the lack of data and information collection and compilation capacity, not due to the fear of negative results. Further, in instances where evaluation results have been negative toward a programme or project, these results have not been censored. However, this does not translate to warm reception of negative evaluation findings. The example of the independent ICRAN evaluation illustrates this point, and highlights the issue of institutional resistances to evaluation.

In 2003, independent consultant Charles Barber was contracted by UNEP to conduct a midterm evaluation of the Action Phase of the International Coral Reef Action Network. This evaluation “called it like it was” (Miller, 2004, Personal Communication). It pointed out several of ICRAN’s shortcomings. Among these shortcomings are that ICRAN’s management and governance structure is made overly complex by the Network’s unclear mission and purpose; that the Network is resistant to change due to its dependence on United Nations Foundation funding; that its system of disseminating funds to sites is inefficient; and that it has not effectively synthesized and shared lessons from the field (Barber, 2003). While this evaluation was recognized as being “honest”, it caused much consternation among ICRAN partners (Miller, 2004, Personal Communication). Upon release of the

evaluation report, project progress was delayed due to reduced, and then absent, funding (Miller, 2004, Personal Communication). While this evaluation backlash led to the eventual restructuring and improvement of the Network, it is clear evidence of the potential evaluation has to be associated with negative consequences and to cause anxiety for programme and project managers and planners.

BOX 4: EVALUATION REPORTING

RATIONALE

The previous chapter indicated that although the infrastructure is in place to disseminate lessons learned from programmes and projects, and evaluation results, both within the Caribbean region and among other regions, this dissemination does not always happen in practice. This is due to a set of “Evaluation Reporting” barriers, which are presented in Table 8.5.

BARRIERS RELATED TO EVALUATION REPORTING

A major reporting barrier is the selective or restricted dissemination of the project lessons and evaluation results. First, it is noted that access to information is not guaranteed in the Wider Caribbean Region (McDonald, 2004, Personal Communication). For example, if water quality is being measured in an area, this dataset is only made available to a select group of people and not to all of the interested stakeholders (McDonald, 2004, Personal Communication). Second, the transfer of lessons learned within the region, and among the Regional Seas Programmes, is limited. Within the region, ideally the CAR/RCU will

Expected Barriers	Actual Barriers
Political and Managerial Interference – Censorship	▪ Restricted Dissemination Can Suggest Censorship of Results
Restricted Dissemination of Evaluation Results	▪ Evidence of Inadequate Dissemination Despite Strong Efforts to Share Results, Information, and Lessons
Clients	▪ Suggested That Not All Clients Get All of the Information
Stakeholders	▪ Suggested That Not All Stakeholders Get All of the Information
Media	▪ Evidence That Publication/ Dissemination Media May Restrict Spread of Results and Lessons, Despite Efforts for Wider Distribution
Language and Presentation	▪ No Immediate Evidence of Restrictions Due to Language or Format/Presentation
Decision Maker Favouritism for Quantitative and not Qualitative Results	▪ Qualitative Results Are Not Ignored or Refuted

Table 8.5: Expected and Actual Barriers Related to Evaluation Reporting

disseminate its information and the governments will do the same with the results of their projects (Vanzella-Khouri, 2004, Personal Communication). However, for reasons largely unknown, this does not always happen, and there remains much duplication of projects and efforts as different governments and managers constantly “reinvent the wheel” (Vanzella-Khouri, 2004, Personal Communication). It is noted that reports and results should be distributed more openly among the regions. At present, certain regions have information and knowledge that others could benefit from, and vice versa; thus, in order to avoid duplication in activities, it is imperative that existing information be synchronized and used (Savelli-Söderberg, 2004, Personal Communication).

These voids in data, information, and knowledge sharing exist despite efforts to increase the dissemination of results and lessons learned. These efforts include the electronic sharing of information – on the CEP website, in the CEP News newsletter, the

CaMPAM Network, the ICRI Forum, and through various e-groups and listserves; and through more traditional means of sharing information – sharing of Training Manuals on CD-ROM and in hard copy, and the dissemination of documents at the IGM. One major failing in the dissemination of information is the navigability of the UNEP website. It is noted that the UNEP website is not user-friendly, and often the only way to find reports is to e-mail someone to send it to you (Savelli-Söderberg, 2004, Personal Communication). However, as this requires knowing who to contact, it is suggested that finding information is limited to those already possessing inside knowledge (Savelli-Söderberg, 2004, Personal Communication).

SUMMARY

The Generic Model of Evaluation Research Barriers and Challenges provides a set of expected or hypothesized barriers to evaluation. Evidence gained from the diagnostic field study yields a set of actual evaluation barriers and challenges that are congruent with these hypotheses. Specifically, the expected barriers of “Institutional Change and Institutional Policy Change”, “Lack of a Universal Methodological Approach”, “No Sustainable Monitoring Infrastructure”, “Questionable Criteria Attributes”, “Institutional Inertia”, and “Restricted Dissemination of Results” were realized in practice. Certain barriers not foreseen by the Model of Evaluation Barriers and Challenges, such as constraints related supporting programme resources (human, financial, legal, political, technological, and informational resources), were found in practice to pose severe challenges to evaluation. The attention focused upon these challenges and constraints in the key informant interviews suggests that “Supporting Policy/Programme Resources”, which appears in the Process

Model for Environmental Policy and Programme Evaluation, would be a valuable addition to a revised Model of Evaluation Barriers and Challenges.

CHAPTER 9: CONCLUSIONS AND RECOMMENDATIONS

PURPOSE

This chapter distills the key messages emanating from the thesis to present a set of conclusions and recommendations related to capacity building and evaluation within the Caribbean Environment Programme. The “Conclusions” section is structured according to the major Results chapters of the thesis. It summarizes the key findings of each. Further, answers to the Associated and Central Research Questions are provided. The “Recommendations” section attempts to provide a set of cost-effective and realistic changes to the Caribbean Environment Programme’s evaluation processes. The first recommendations set pertains to investments that should be made in each of the six Action Plan components to strengthen the CEP’s capacity building efforts. The second recommendations set is related to the tenets of the Generic Model of Evaluation Science, and the desire to strengthen evaluation design and implementation and to reduce barriers and challenges. Finally, the thesis concludes by identifying select future research avenues.

CONCLUSIONS

PROGRAMME GOALS AND OBJECTIVES

“What”

The hypothesis that evaluation is based on the six “universal” Regional Seas Programme Action Plan components of Environmental Assessment, Environmental

Management, Legal Arrangements, Financial Arrangements, Institutional Arrangements, and Education and Support Activities is false. The goals and objectives of the CEP subprogrammes do not reflect these components. Rather, goals and objectives are derived from the Cartagena Convention and its Legal Protocols. The operational structure of the CEP around four subprogrammes – Assessment and Management of Environmental Pollution (AMEP), Specially Protected Areas and Wildlife (SPAW), Information Systems for the Management of Marine and Coastal Resources (CEPNET), and Education, Training and Awareness (ETA) – and the derivation of goals and objectives unrelated to the basic capacity building components of the Action Plan, translates into difficult ascertaining how – and if – these six components are incorporated into CEP programmes and projects. Evidence and testimony from key informant interviews indicates that the six Action Plan components are all used, albeit unevenly, among the subprogrammes. Although the literature identifies “Environmental Assessment” as the priority, EA does not clearly take precedence in Caribbean subprogramme activities. In fact, it is troubling to note discrepancies in the definition of “Environmental Assessment”. Interestingly, key informants defined EA activities in different ways. One identified a past EA-related priority as being the compilation of “State of the Coast” reports for the member countries (St-Pierre, 2004b, Personal Communication). However, another noted that EA is not even a responsibility of the CAR/RCU, as “assessment” refers to activities on the ground, and the CAR/RCU’s mandate is to facilitate and co-ordinate – not execute – activities (Savelli-Söderberg, 2004, Personal Communication).

“When”

In the context of the CEP, evaluation occurs at various times in programme and project life cycles. Evaluation is often “formative” – conducted in early stages for purposes of improvement; mid-term or interim – done between stages or in mid-cycle; or “summative” – a backward-looking assessment of successes and failures. Among the evaluation forms employed are the Intergovernmental Meeting (IGM) at the programme level, and the completion of Progress and Terminal Reports at the project level. The CEP is subject to evaluation every two years at the IGM. At this forum, the CAR/RCU reports to the member states on the implementation of the activities and projects they requested and approved (Andrade, 2004, Personal Communication). This evaluation may thus be formative, mid-term, or summative. However, evaluation is but one point on the IGM agenda. As such, it is not comprehensive (Vanzella-Khoury, 2004, Personal Communication). In addition, the IGM largely involves the CAR/RCU reporting to the member governments, with little opportunity for the governments to supply feedback or to develop true, two-way dialogue (Vanzella-Khoury, 2004, Personal Communication). At the project level, national-level Protected Area and Demonstration/Target Site Managers under the SPAW Programme and the ICRAN Project are required to submit Progress (mid-term/formative) and Terminal (summative) Reports to the CAR/RCU. These reports are frequently the only form of evaluation conducted on these projects due to the inability to conduct site visits (Miller, 2004, Personal Communication; Vanzella-Khoury, 2004, Personal Communication). The reporting mechanism is recognized as being “not entirely adequate” (Vanzella-Khoury, 2004, Personal Communication). This condition is due to several problems: project managers, not independent evaluators, are responsible for completing

them; the reports are standard forms that ask, by definition, standard and not specific questions; and written reports offer little in the way of hard, science-based evidence of project outcomes. It is noted that a better evaluation process is both wanted and needed (Vanzella-Khoury, 2004, Personal Communication).

“Who”

Evidence and testimony presented in Chapter 6 indicates that CEP evaluations are largely conducted internally. One concrete example of external evaluation related to the RSP is that of the 2003 ICRAN evaluation. Although the evaluation was regarded as honest, the report yielded much negativity, primarily in the form of reduced funding and eventual restructuring of the ICRAN Project (Miller, 2004, Personal Communication). However, the result of this evaluation – an improved Project – suggests that external evaluation is ultimately a positive experience.

“Why”

Some elements of evaluation in the context of the CEP are conducted due to a legal requirement to evaluate. However, evaluation is, largely, not a systematic exercise. In fact, evaluation is described as “piecemeal”, “ad hoc”, and “disorganized” (St-Pierre, 2004b, Personal Communication). Evaluation is not planned during the design phases of projects (St-Pierre, 2004b, Personal Communication). When undertaken, it is frequently thematic, reactive, and intrusive. For example, a planned Conference on Small Island Developing States prompted numerous requests for the CAR/RCU to facilitate and assist evaluations of member states’ activities relevant to their implementation of the Barbados Programme of

Action for Small Island Developing States (St-Pierre, 2004b, Personal Communication). As a result of this ad hoc evaluation process, other work was delayed in an effort by CAR/RCU staff to accommodate these requests.

EVALUATION IMPLEMENTATION PROCESSES AND PROCEDURES

Evaluation Criteria and Infrastructure Design

All evidence strongly suggests that evaluation criteria are not reflective of the six Action Plan components. Rather, they are derived from programme, subprogramme, or project-specific goals and objectives. As such, formal evaluation criteria have not been defined at any level. As seen in the context of the SPAW Programme and the ICRAN Project, project-level evaluations are based on criteria stemming from the Memorandum of Understanding signed for that specific project (Miller, 2004, Personal Communication; Vanzella-Khoury, 2004, Personal Communication). In addition, the Progress and Terminal Report forms ask several open-ended questions, leaving considerable outcome reporting to the discretion of individual, national-level managers. As such, there is no guarantee that common evaluation criteria are applied to similar projects. At the subprogramme level, evaluation is just as ad hoc. In the context of the SPAW Programme, there is no apparent template to guide evaluation-oriented discussions at the Meetings of the Parties or of the Scientific and Technical Advisory Committee. In the context of the CEPNET subprogramme, no evaluation exists (St-Pierre, 2004b, Personal Communication). At the broad Programme level, some very general measures of success or failure are applied to the CEP. For example, success is measured by the CEP's ability to facilitate co-operative

relations among member governments and by the governments' willingness to make financial contributions to the regional trust fund (Andrade, 2004, Personal Communication). It is clear that the criteria in place lack such attributes as "universality", "continuity", "system", and "measurability" considered necessary to instill confidence (Tables 2.5 and 7.5).

The supporting evaluation infrastructure is considered in terms of human, financial, legal, political, technological, and informational resources. Chronically unstable human resources at the national level, systemic financial constraints from the United Nations to the national levels, limited legal requirements to share evaluation expertise and to force the reporting of national level project outcomes to the Secretariat, and a lack of political will among member governments to mobilize resources in support of marine environmental protection are identified as major problems for the CEP. While the CEP's supporting technological and informational resources – its networks, databases, and ability to facilitate access to environmental information by its many regional and global partners – are currently the focus of many improvement efforts, they are subject to several shortcomings in their implementation and use, particularly in the context of being "current" and "accessible".

Evaluation Criteria and Infrastructure Implementation

The failure to define formal evaluation criteria has led to the use of ad hoc criteria that lack the attributes necessary to provide confidence in the data and information they produce. These criteria provide data lacking continuity, precision and context; and do not allow faith to be placed in the Regional Seas Programme's capacity building or environmental improvement efforts.

As previously noted, the supporting evaluation infrastructure is subject to several problems in its implementation, maintenance, and use. Perpetual human and financial resource constraints hinder the implementation of activities and hamper the possibility of conducting comprehensive evaluation. Specifically, a lack of human resources – often due to the lack of funds to create and maintain staff positions – leads to the impossibility of conducting on-site evaluations of project outcomes, meaning that in situ environmental assessment and monitoring are not possible. As such, environmental data is not systematically collected nor compiled, and neither the establishment of baseline conditions nor the analysis of positive or negative environmental change over time is possible.

The maintenance of infrastructure is another key concern. In the context of technological, decision-support infrastructure, it is noted that the Marine Protected Areas Database used within the SPAW Programme is not user-friendly and its information is out-of-date (Vanzella-Khouri, 2004, Personal Communication). At present, the CEPNET subprogramme is dedicating much of its work to updating and improving this and other technological and information-based infrastructure. These remedial efforts subtract time, human resources, and money from other activities.

Evaluation Reporting

The necessary legal, technological, and informational infrastructure is largely in place to allow the dissemination of evaluation results and the sharing of programme and project lessons. The existing legal and technological infrastructure in place in the SPAW Programme and the ICRAN Project are illustrative of the current ability and the future potential for information sharing (Miller, 2004, Personal Communication; Vanzella-Khouri,

2004, Personal Communication). ICRAN Project Memoranda of Understanding require that project documents must be supplied to the CAR/RCU for later dissemination at meetings and workshops. The ICRAN and SPAW Training of Trainers course manuals are distributed electronically, on CD-ROM, or in hard copy to parties seeking this information. Further, information is shared via the CaMPAM Database, the Marine Protected Areas database, the ICRI forum website, and various other listserves and e-groups. At the programme level, the Annual Regional Seas Programme Meetings provide an opportunity for all of the Regional Co-ordinators to discuss programme processes and activities. However, these Meetings have not yet progressed to discuss evaluation processes and results (Vanzella-Khoury, 2004, Personal Communication).

EVALUATION BARRIERS AND CHALLENGES

Institutional Setting and Subject Matter Competency

Barriers to conducting evaluation in the domain of “Institutional Setting and Subject Matter Competency” are related to the inherent difficulty of conducting environmental evaluation, frequent institutional change due to high national-level staff turnover, and constraints in supporting policy and programme resources. Nothing can be done to simplify the large, open system of the marine environment. The determination of cause and effect – or, the certainty that an observed environmental change is due to a specific intervention – is not achievable. However, it is realistic to state that investments in human, financial, legal, political, technological, and informational resources supporting the CEP are both necessary and possible. These investments require strengthened capacity building efforts related to the

six Action Plan components. They will be discussed further in the context of “Recommendations”.

Evaluation Design and Infrastructure

The major barriers and challenges in the context of “Evaluation Design and Infrastructure” are related to the lack of a universal methodological approach for evaluation, the absence of sustainable monitoring infrastructure, and the existence of evaluation criteria that are devoid of the attributes defined in the Template of Evaluation Science Attributes (Chapters 2 and 7). These barriers and challenges are primarily the products of a lack of investment in the Action Plan components – namely, “Environmental Assessment”, “Environmental Management”, and “Institutional Arrangements”. The necessary investments in these components to reduce these barriers will be discussed comprehensively in the “Recommendations” section.

Evaluation Implementation Processes and Procedures

The major barrier identified in the context of “Evaluation Implementation Processes and Procedures” is that of institutional inertia and the preservation of self-interest. Although external evaluations may be honest, and may ultimately result in significant programme or project improvements, an aversion to such honest criticism is suggested. In the context of the independent evaluation of ICRAN, while there is no evidence that results were censored, they were certainly not welcomed by project staff or ICRAN’s global partners. In fact, it is noted that the evaluation “...offended quite a number of people...” (Miller, 2004, Personal Communication). As will be discussed further in the context of “Recommendations”, this

inertia can never be entirely removed. However, with additional investments in the Action Plan components of “Institutional Arrangements” and “Education and Support Activities”, this inertia may be reduced.

Evaluation Reporting

There is evidence that many investments and efforts have been made to disseminate “lessons learned” from programmes and projects and from evaluation, both within the Wider Caribbean Region and between the WCR and other regions. However, both within and among the regions, there remains even stronger evidence that this information is not being shared enough. It is noted that access to information is often limited to certain individuals and programme “insiders” (McDonald, 2004 Personal Communication; Savelli-Söderberg, 2004, Personal Communication). Further, there is much programme and project overlap within and among regions, due to the fact that managers do not know what has already been done in other places (Vanzella-Khoury, 2004, Personal Communication). Stronger investments in “Education and Support Activities” and “Evaluation Reporting” mechanisms are needed to overcome these barriers. These will be discussed more in the context of “Recommendations”.

REVISITING AND RESPONDING TO THE ASSOCIATED AND CENTRAL RESEARCH QUESTIONS

ARQ #1: What are the Goals and Objectives Related to Each Action Plan Component?

The response to this Associated Research Question is that programme, sub-

programme, and project goals and objectives are not clearly linked to the six Action Plan components. The element of universality among the various Regional Seas Programmes, based on the fact that each Action Plan contains the same components and, as such, all Programmes have similar structures and goals, is cast into doubt.

Meith (2000) suggests a movement from the original Action Plan components to a new Regional Seas Programme framework. This emerging framework is intended to encompass, not replace, the traditional Action Plan framework (Meith, 2000). The suggested new components are “Biodiversity Conservation”, “Land-Based Activities”, and “Integrated Coastal Management” – and these may be seen reflected in the CEP’s activities under the SPAW and AMEP subprogrammes (Meith, 2000). However, it remains troubling that the six basic Action Plan Components, which are to be included in this emerging framework, are so hidden that not even general component-related goals may be articulated. Evaluations derived from the academic community have used the six Action Plan components as a template to evaluate RSP progress (for example, Haas, 1991; Jacobson, 1995). However, the poor definition of the range of activities to be encompassed by each of the six components, chiefly “Environmental Assessment”, and the difficulty in ascertaining goals and objectives related to these components in the field, suggests that this strategy is ill advised. Specifically, it is found that the advertised, basic capacity building elements, or “programme building blocks”, are failing. They are not sufficiently considered or incorporated in the planning, implementation, or evaluation of programmes or projects. Further, they are failing in that a lack of investment in these six components has resulted in weak programme and project evaluation criteria and supporting infrastructure.

ARQ #2: What Criteria are Currently Being Used to Measure Progress on Capacity Building Under Each of the Six Action Plan Components?

Similar to the definition of programme goals and objectives, the criteria currently being used to measure capacity building progress are not clearly related to the six Action Plan components. In addition, formal criteria related to specific programme, subprogramme, or project goals and objectives have not been defined. Rather, the criteria in place are largely ad hoc measures derived on a project-specific basis. The criteria currently in place may be categorized as either “General Measures of Success” or “Measures of Impact”. The former refers to very broad measures that suggest an administrative or “public face” presentation of the programme, such as “we are successful if we facilitate co-operation among member states”. However, it is unclear how concepts such as “co-operation” are to be defined or measured. This lack of precision requires one to question their faith in what is being measured. The latter refers to measures such as “amount of money spent” or “number of individuals trained in a regional workshop”. While these criteria are quantifiable measures that attempt to gauge the outcomes of programmes or projects, they lack context or scale to indicate what is good or bad; acceptable or not acceptable.

At the programme and project implementation level, there is little faith in the current evaluation mechanisms. This lack of faith stems from the virtual “black box” of programme and project outcomes. In essence, **the criteria to measure what is being done, in terms of capacity building and environmental improvement efforts, are not in place.** This is confirmed by the statement, “...we have no means of evaluating the impact in the...participating countries...are we improving the capabilities of the government institutions? Are we improving the quality of the individuals? Are we improving the

quality of the coastal and marine environment? Are we reducing pollution?...” (St-Pierre, 2004b, Personal Communication).

ARQ #3: What Infrastructure Supports the Use of These Criteria?

The existing evaluation infrastructure is weak at best. Human resources are strained at the national and regional levels. At the national level, constraints are primarily due to a low pool of trained individuals and high turnover of government staff. At the regional level, human resources are constrained by the large mandates placed on the few managers and planners at the CAR/RCU. Restricted financial resources, coupled with the bureaucratic limitations of the UNEP system, prohibit the creation of new positions and the hiring of additional permanent staff at the CAR/RCU. At present, the lack of a legal requirement within the Cartagena Convention for member states to report on their activities to the CAR/RCU limits the Secretariat’s knowledge of its capacity building and environmental improvement impacts at the national level. Technological and decision-support infrastructure, such as databases and networks supporting activities related to Specially Protected Areas and Wildlife, are recognized as being in need of major overhauls. As such, many technological and informational efforts are focused on remedial action and not moving forward.

Central Research Question: Does Evidence Exist to Support the Contention that the Regional Seas Programme is Indeed “the Jewel in UNEP’s Crown”?

The research at hand has cast much doubt over the Regional Seas Programme in the Caribbean in terms of its capacity building and evaluation capabilities. Each of the

Associated Research Questions draws attention to failings within the Programme. Goals and objectives are weakly connected to the advertised programme foundation of the Action Plan components. Evaluation criteria are disconnected from the goals and objectives, and there is a resounding lack of confidence in what they measure. The supporting infrastructure is limited and stressed; and efforts are focused on infrastructure repair and not the creation of new infrastructure. As such, it must be concluded that, **at present, the “jewel in the crown” label cannot be corroborated.** Before the Caribbean Regional Seas Programme can be written off as a success or a failure, it is necessary that the six basic Action Plan components experience a re-investment.

In retrospect, it is possible that the success or failure of the Regional Seas Programme is related to outcomes that go beyond the objectives of a regional Action Plan and Convention, such as providing a vehicle for increased regional co-operation. Perhaps the greatest achievement of the Regional Seas Programme is its promotion of a “shared environment” to promote “shared unity” among nations that would otherwise not co-operate, communicate, or share common interests. This is a noteworthy consideration in the context of the Wider Caribbean Region. As is noted in the literature review, the absence of a common cultural heritage in the Caribbean has historically limited the success of efforts for regional economic and political integration. Therefore, just as a standard Cost-Benefit Analysis seeks to consider secondary and intangible benefits in the absence of strong primary benefits, **an Evaluation Science Model applied in the context of the Regional Seas Programme needs to include criteria to account for those outcomes that are unexpectedly induced.** In the case of the Regional Seas Programme, secondary benefits such as reduced regional conflict are arguably just as valuable as the establishment of

regional networks of scientific institutions, the adoption of new environmental legislation, and the reduction of heavy metal concentrations in coastal waters.

RECOMMENDATIONS

It is a daunting task to issue recommendations that are feasible and usable, and not utopian platitudes such as “change the UNEP structure” or “provide significant additional funds”. Simply, if such fixes were possible, they would likely have been implemented earlier! Here, the focus is on smaller changes which may be implemented more easily and have profound effects on programme capacity building and evaluation capabilities. An effort has been made to present only those recommendations that are likely to be usable by Programme planners and managers.

NECESSARY INVESTMENTS IN THE SIX ACTION PLAN COMPONENTS

The first set of recommendations is related to necessary investments in Regional Seas Programme architecture – that is, investments that should be made in the six capacity building components forming the original Action Plan. These investments are intended to increase the capability of the CEP to assist member governments in institutional and scientific capacity building to overcome the shortcomings identified in the current conception of programme goals and objectives and in the design and implementation of evaluation. Further, these investments should help in overcoming some of the identified evaluation barriers and challenges.

Environmental Assessment

It is recommended that the definition of “Environmental Assessment” be clarified at the regional or Secretariat level. Specifically, it should be made clear if “Environmental Assessment” refers to activities on the ground, or supporting informational efforts. **In the context of “on the ground” assessment, the EA component could be greatly strengthened by following up on the UNEP Governing Council’s call to increasingly involve the private sector and local communities in the Regional Seas Programme.** As proposed by Jacobson (1995), environmental assessment and monitoring on the ground could be conducted, cost-effectively, by employing individuals or recruiting volunteers from local communities to observe and record such things as fish catch sizes or the number of days without visible pollution on beaches. Not only would this increase the amount of environmental and programme/project outcome information available, but it would also reduce pressures on scarce, regional-level human resources by allowing in situ or on the ground monitoring to take place without requiring costly travel to conduct site visits.

Environmental Management

“Environmental Management” includes such activities as environmental impact assessment (EIA) and coastal zone management (CZM). These activities are widely criticized as being too narrow in focus, for example, related exclusively to oil spills and not integrated or considerate of the entire ecosystem (Jacobson, 1995). A practical solution is needed to increase the comprehensiveness of Environmental Management activities at the national level. **It is recommended that governments seek to capitalize on the economic importance of tourism in the Caribbean, and to use this as a catalyst for environmental**

protection. Efforts to relate management activities to sustainable tourism initiatives, for example, launching media or educational campaigns reinforcing this link, could be an important way to ensure community, national government, and region-wide commitment.

Financial Arrangements

Stronger provisions are required to increase the receipt of contributions from member governments to the Caribbean Trust Fund (CTF). However, as this has been a constant struggle since programme inception, there is no easy fix to the financial woes of the CEP. **It is recommended that priorities for action be identified via strengthened environmental assessment and monitoring activities, through more transparent communication to the Secretariat of activities and legislation implemented at the national level, and through increased programme and project evaluation. The definition of priority action areas will allow finances to be focused where they are most needed.** More intense efforts in priority areas may allow the member governments to more clearly see the advantages of membership in the Caribbean Environment Programme. This could increase the likelihood of member governments meeting their pledged CTF contributions by strengthening the suggested “cost-benefit” relationship between evidence of positive outcomes from CEP activities and the willingness to contribute financially to the CEP.

Legal Arrangements

It is recommended that amendments be made to the Cartagena Convention to require that member states report to the Secretariat on their activities. This adjustment

would be an important change to strengthen capacity building and evaluation capabilities. Increased transparency in national reporting to the Secretariat would allow for CAR/RCU officials to compile information on programme and project related activities and outcomes. This would permit greater confidence in the Secretariat's ability to gauge its capacity building successes and failures. Capacity building priorities could thus be defined. In addition, this would facilitate the evaluation of the outcomes of national level programmes and projects. Further, it is noted that, at present, the status of the creation and implementation of national-level legislation and regulations is a virtual "black box" from the perspective of the Secretariat. Increased transparency and communication in the context of national environmental legislation would facilitate regional-level understanding of not only what is being done, but also how it is being done.

Institutional Arrangements

Related to the recommendation of increasingly incorporating local communities in assessment and monitoring activities, it is suggested that some decentralization of institutional responsibilities take place in member countries with restricted financial resources and human resources expertise. Following the recommendation of Jacobson (1995), **it is recommended that visions for large scale, resource-intensive assessment and monitoring efforts be supplanted in these countries by smaller scale, community based efforts.** In essence, it is felt that it is better that something be done than having efforts "frozen" due to a lack of supporting resources.

Another important "fix" to strengthen Regional Seas Programme "Institutional Arrangements" is to incorporate non-coastal states in the development and

implementation of the Action Plans and Conventions. Championed by Jacobson (1995), this is important due to the large amounts of land-based pollution discharged into the Caribbean Sea from major river systems. For example, attention should be given to including such countries as Brazil in the Caribbean Action Plan and the Cartagena Convention due to the Amazon River's influence on the Caribbean Sea. On a smaller scale, the United States should promote interest in the CEP in States beyond the Gulf of Mexico coast, due to the discharge of the Mississippi River – and its inland pollutants – into the Caribbean basin.

Education and Support Activities

Perhaps the strongest investments need to be made in the “Education and Support Activities” Action Plan component. This is due to the fact that education and awareness play important roles in mobilizing governmental and community understanding and interest in the environment.

First, it is recommended that the established – but perpetually vacant – position of Education, Training, and Awareness Programme Officer be filled. This will strengthen the CEP's ETA activities and will remove the responsibility for co-ordinating ETA activities from the other Programme Officers. However, it is likely that investments in education and public awareness will have to be made before this can be accomplished. The member governments have never, in two decades of programme experience, approved the allocation of funds to hire an ETA Programme Officer. It is unlikely that they will recognize this as a priority without enhanced understanding of why a dedicated ETA Programme Officer is needed.

Second, it is recommended that increased education and training be provided at the local level should the CEP decide to incorporate decentralized environmental monitoring efforts in the form of community- or volunteer-based monitoring systems. Ensuring proper training in making, recording, and reporting environmental observations will increase the quality of data collected and enhance community-level understanding of environmental issues, problems, and impacts.

There is one final recommendation in the context of Education and Support Activities. At the outset of this research, the researcher purposefully sought evidence of Canadian contributions to the Caribbean Environment Programme. Little was found. At the end of the research, it is hypothesized that Canada has the potential to be a significant contributor to Education, Training and Awareness in the Caribbean. For example, Canada is a supporter of the Commonwealth Scholarship Programme, and many of its universities participate in educational exchange programmes. **It is recommended that the United Nations Environment Programme Focal Point in Ottawa, Ontario, become more active in formalizing the training of students from the Wider Caribbean Region in such disciplines as environmental law and the environmental sciences.**

NECESSARY INVESTMENTS IN THE TENETS OF THE GENERIC MODEL OF EVALUATION SCIENCE

The second set of recommendations is related to investments that need to be made in the context of the Generic Model of Evaluation Science. These recommendations are related to evaluation types and evaluation processes and procedures.

Evaluation Typology

Recommendations are attached to the “what”, “when”, “who”, and “why” questions. In the context of “what”, **it is recommended that evaluation be more closely linked to the goals and objectives defined for the subprogrammes and their projects.** Rather than relying solely on project-specific MOUs, project evaluation should consider more explicitly the congruency between what is being done and the broader subprogramme goals. With respect to “when”, **it is recommended that evaluation be considered in the earliest stages of programme and project planning and design.** This may help to reduce the ad hoc nature of evaluation, as criteria and supporting infrastructure will be considered as more than an afterthought, and evaluation will be more systematic and planned rather than reactive and informal. In the context of “who”, **it is recommended that additional attention be focused on the importance of the insights of external evaluators.** External evaluators are able to provide more honest assessments of programme and project outcomes without having to consider vested institutional or self-interests. In the context of “why”, **it is recommended that evaluation be ingrained in planners and managers during the programme and project design phase, so that it is conducted as “second nature” and is more than an automatic reaction to a mandate.**

Evaluation Processes

Recommendations may be issued according to the four boxes of the Evaluation Process Model. In the context of “Institutional Setting and Subject Matter Competency”, certain investments must be made in supporting programme resources. For example, **one potential, cost-effective solution to the CAR/RCU’s chronic human resource shortages**

would be the employment of interns (Savelli-Söderberg, 2004, Personal Communication). In the context of “Design and Infrastructure”, it is **recommended that evaluation criteria be tested against the Template of Evaluation Science Attributes to determine their reliability and practical utility. Further, supporting evaluation infrastructure should also be measured against this template.** In the context of “Implementation Processes and Procedures”, it is **strongly recommended that the CEPNET subprogramme follow through on its maintenance of technological, decision-support infrastructure such as the Marine Protected Areas Database.** Chiefly, the plan to allow MPA managers to directly input new information should be implemented as quickly as possible, as it is a proactive measure that will prevent this infrastructure from being out-of-date in the future (St-Pierre, 2004b, Personal Communication). With respect to “Evaluation Reporting”, it is **recommended that the CAR/RCU promote information sharing to the member governments as a cost-saving measure.** Specifically, the sharing of lessons learned would reduce the amount of project overlap and project planning, design, and start-up efforts. As the member governments are constantly facing human and financial resource constraints, the idea of measures to reduce the cost and amount of work required should be appealing. **Finally, it is recommended that criteria be defined and put into place to evaluate the effectiveness of information and evaluation reporting mechanisms.** Conducting evaluation in this context would allow these mechanisms to be improved as necessary.

FUTURE RESEARCH

In answering the Associated and Central Research questions posed, this research raises even more questions that should be addressed in future research. First, a “black box”

is identified in terms of activities and legislation at the national level within the Caribbean Regional Seas Programme. This is primarily due to the absence of legal requirements for the member governments to report on their activities to implement the Cartagena Convention to the Programme Secretariat. As such, the Secretariat has little knowledge of what is being done within the countries. A very useful future research project would be an examination of the legislation implemented by the member governments in support of the Cartagena Convention and its Protocols. Further, it would be interesting to examine the major activities and projects implemented at the national level. Increased understanding of national-level legislation and activities would provide the Secretariat with the insight needed to identify capacity-building priorities. In addition, this information would increase the comprehensiveness and detail of any programme and project evaluations conducted.

A second potential area for future research is the expansion of this study to other regions composing the UNEP Regional Seas Programme. Conducting a critical analysis of programme evaluation capacity – including the incorporation of the six Action Plan components into programme goals and objectives and examining the evaluation criteria and supporting infrastructure in place to measure programme progress – would be an especially worthwhile endeavor in the context of long-established regional programmes such as the Mediterranean, the Kuwait Region, the Red Sea and Gulf of Aden, and the East Asian Seas. Expanding such inquiry to other regions would allow for comparison of capacity building strengths and weaknesses. Further, it would facilitate the generalization of results to provide an overall assessment of the state of capacity building in the global Regional Seas Programme.

Finally, it is necessary that the Generic Model of Evaluation Science be tested in other natural resources contexts. For example, the Typology of Evaluation Forms and Attributes (Figure 3.1) suggests that there are different motivations for conducting evaluation. It would be interesting to test this part of the Model to ascertain if evaluation changes in substance based on either the natural resource management context to which it is applied, or on the motivation(s) for conducting evaluation.

In conclusion, it must be noted that this thesis would have been substantially different had the researcher not conducted the diagnostic field study in Kingston, Jamaica. The literature was found to often produce a “false signal” of Regional Seas Programme success and the state of programme evaluation in this context. Had the researcher not visited the institution and developed a rapport with its planners and managers, the results would have reflected a mirage programme, not reality. Further, the researcher’s understanding of the institution’s structures, functions, and processes was enhanced beyond what could have been provided from the literature alone. Based on these experiences, it is recommended that Graduate Supervisors in universities champion a diagnostic field studies approach at the proposal stage to strengthen both the researchers’ contextual understanding and the substance of the research produced.

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APPENDIX 1:
CRITERIA COLLECTION EXERCISE – EXTERNAL EVALUATIONS

(1) Environmental Assessment (EA)

Criteria	Source
Studies on environmental baseline conditions	Jacobson
Contribution of pollution sources, and social/economic conditions affecting the coastal or marine environment	Jacobson
Training of (indigenous) professionals	Jacobson
Improving local laboratory capabilities	Jacobson
Increased interlaboratory consistency	Jacobson, Boxer (1978)
Establishing monitoring programmes	Jacobson
Establishment of regional networks in monitoring, to focus efforts on broader regional, and not just national, problems	Jacobson
(UNEP sponsored) specialized assessment reports	Jacobson
(UNEP and other international organization) production of reference method documents for monitoring activities	Jacobson
(UNEP) purchasing/establishment of scientific hardware and facilities in the region	Jacobson
Local support for regional assessment efforts	Jacobson
Publication of regional and country-specific technical reports	Jacobson
Publication of reports by regional scientific groups to assist in the formulation of goals for Action Plans	Jacobson
Use of low-cost monitoring efforts, such as using volunteers for observations of gross environmental improvements (e.g. number of days without visible sewage on the beach)	Jacobson
Inter-regional transfer of lessons and ideas	Boxer (1982)
Consideration of transport and accumulation processes in determining pollution levels	Boxer (1978)

(2) Environmental Management (EM)

Criteria	Source
Environmental Impact Assessment Programmes	Jacobson
Coastal Zone Management Programmes	Jacobson
Emergency Contingency Planning Programmes	Jacobson
Fisheries Management Programmes	Jacobson
Pre- and post- RSP measurements of the visibility of environmental problems and efforts, level of financing, level of regional co-operation	Jacobson
Construction of additional sewage treatment plants	Jacobson
Construction of oil reception facilities	Jacobson
Establishment of emergency oil response facilities	Jacobson
Interregional training of scientists/interregional cooperation of scientists on management problems	Jacobson
Focus of Action Plan is broader than simply "oil pollution"	Jacobson
Consideration in the Action Plan of large ecosystems, watershed management, riverine inputs of pollutants into the coastal environment (limitations on the extent of the geographical coverage)	Jacobson (Boxer 1978)
Existence/Identification of "Leadership Countries", which are powerful enough to influence the decisions of others, and which make success possible by their participation	Skjærseth
Correspondence between scientific advice and political decisions	Skjærseth
Existence and role of "epistemic communities" influencing policy decisions	Haas (1990)
Existence of a regional community/ network of marine scientists	Haas (1991)
Existence of respect for these scientists and their work among government officials	Haas (1991)
Access to government by/for scientists	Haas (1990)

(3) Legal Arrangements

Criteria	Source
Development of a Regional Convention (adoption/into force)*	Jacobson
Number of supporting Protocols Developed (adoption/into force)*	Jacobson
Existence of a Protocol on Land-Based Sources of Pollution (adoption/into force)	Jacobson
Existence/availability of data to support the claim that "protocols adopted to date seem to propose adequate policy solutions to address the intended issues"	Jacobson
Level of reporting on compliance to the Protocols	Jacobson
Inclusion of specific pollutant reduction and time limits in the Protocols	Jacobson
"Protocol Coverage": are the key sources of contamination and degradation (e.g. LBS, habitat degradation) adequately regulated under the existing legal and policy framework?	Jacobson
Development of national legislation and regulations to implement the regional instruments	Jacobson
Evidence of increased legal capacity to prevent marine pollution at the national level	Jacobson
Information on other national legal developments in response to specific Regional Seas Programmes (note: this is completely lacking!)	Jacobson
Level of political support for environmental programmes given to national leaders	Boxer (1982)

* See Aldaberto Vallega (1996):

The Convention Membership Geographical Coverage (CMGC)/ Protocol Membership Geographical Coverage (PMGC) Indicators, $nt:n1/Nt:N1$ (where nt and $n1$ represent the member states of the Convention (Protocol) in the year it was adopted and the year which is being analyzed; and Nt and $N1$ represent the number of states existing in the region in the year the Convention (Protocol) was adopted and the year which is being analyzed.

The Convention/Protocol Time Effectiveness (C/PTE) Indicator:

$$CTE = \frac{n}{N} \left(\frac{t-T}{N} \right)$$

Where N is the # of states parties to the Convention in the last year, T is the year of adoption of the Convention, t is the year when the state in question ratified/approved/acceded to the Convention

Frequency of national bureaucratic restructuring	Boxer (1982)
The follow-up of stated goals (needs the "common objective" from the AP/Conv/Prot)	Skjærseth

(4) Institutional Arrangements

Criteria	Source
Involvement of international institutions (UNEP)	Jacobson
Action-Plan specific regional bodies established (creation of a local Secretariat, RCU)	Jacobson
Involvement of sub-regional (Bi- and Tri-Lateral organizations)	Jacobson
Identification and involvement of national focal points	Jacobson
Involvement/establishment of national institutions (research centres, laboratories)	Jacobson
Evidence of the RSP strengthening existing national infrastructure	Jacobson
Number of cooperating states that are otherwise (politically) divergent	Jacobson
Inclusion of landlocked/non-coastal states in the Action Plan and Convention	Jacobson
National/Regional Institution staff turnover (frequency of personnel changes)	Boxer (1982)

(5) Financial Arrangements

Criteria	Source
Total expenditure on the RSP (USD)	Jacobson
Proportion of total expenditures provided by UNEP directly	Jacobson
Proportion of total funds from cooperating agencies and supporting organizations	Jacobson
Proportion of total funds from Regional Trust Funds	Jacobson
Number of member states meeting or surpassing their pledged TF contributions	Jacobson
Proportion of Action Plan funding goal(s) achieved (% of pledged money paid)	Jacobson
Benefits offered to developed countries for bringing their resources to the use of developing countries	Jacobson

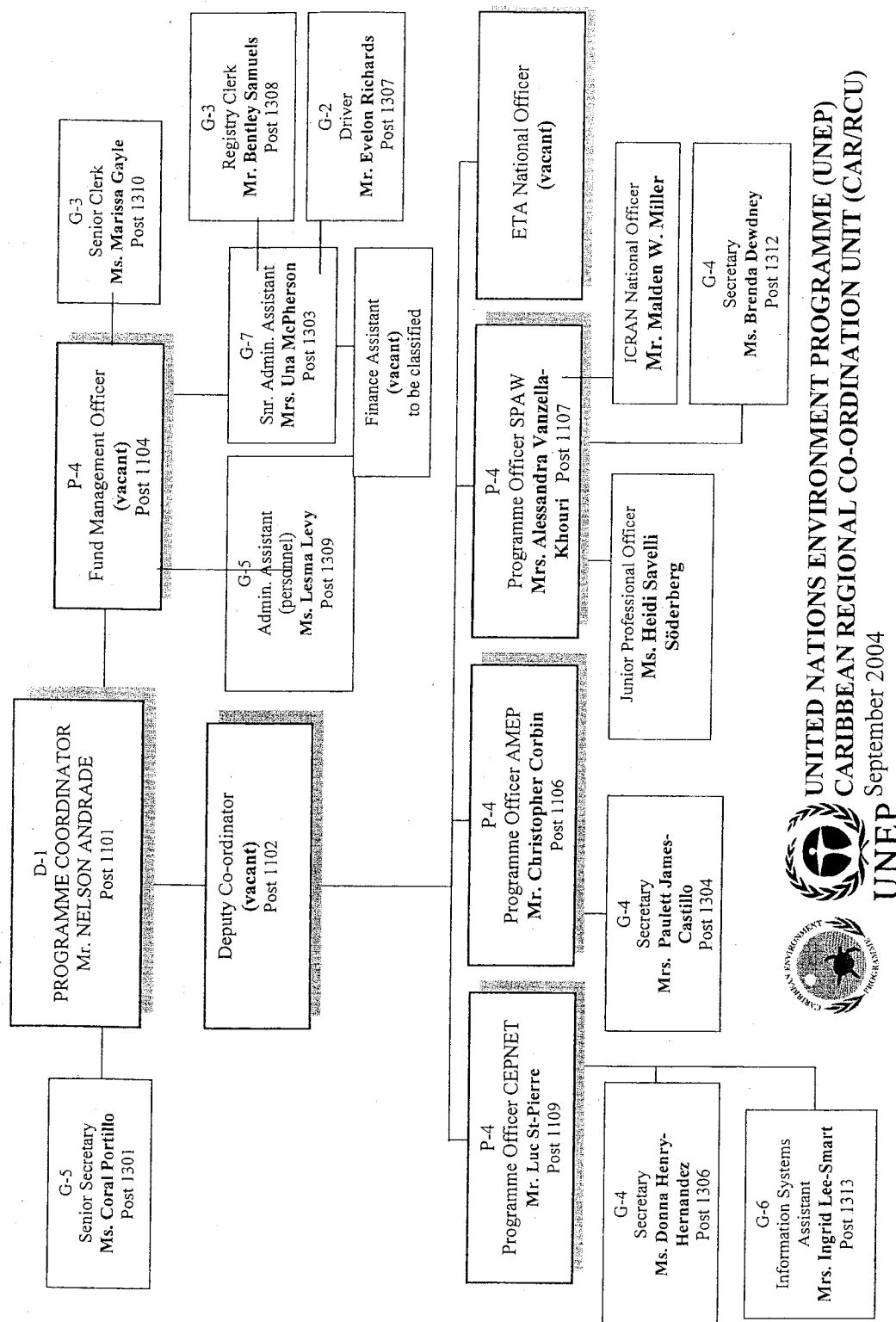
(6) Educational and Support Activities

Criteria	Source
(UNEP generated) public environmental education, media, information circulation, educational displays, popular brochures, about regional activities.	Haas (1991)
Publication of “background reports” on state of the marine environment by UNEP and/or other international organizations	Haas (1991)

CRITERIA COLLECTION EXERCISE – INTERNAL EVALUATIONS

CRITERIA	AP COMPONENT(S)
Mobilization of financial and manpower (sic) resources of nations in the region for the support of the Action Plan.	4, 5
The enactment, implementation and enforcement of national and international legislation and policies on environment, prompted directly or indirectly by the Action Plan.	3
The level of participation of national institutions in the development and implementation of the Action Plan.	4
The nature, magnitude, and quantity of training provided through the Action Plan.	1, 2, 6
The efficiency of technical meetings held in the framework of the Action Plan to improve exchange of scientific data and promote coordinated management strategies	2
The level of participation by regional and international organizations, measured by the degree of substantive and financial support provided for the implementation of regional cooperative environmental actions within the framework of the Action Plan.	4, 5
The level of community participation in the decision making process with respect to resource exploitation and conservation.	1, 2, 4, 6
The amount and quality of scientific data as well as the information and educational materials generated by the Action Plan.	1, 6

APPENDIX 2: CEP STRUCTURAL HIERARCHY AND KEY INFORMANT ROLES/PROFILES



The Structural Hierarchy of the CAR/RCU
UNEP, 2004a

Name	Position	Nationality	Tenure	Education	Background	Prev. UN Exp.	Role(s)
Nelson Andrade Colmenares	Co-ordinator, Caribbean Environment Programme	Venezuela	8 years	Geography (Urbanist); Master's in Environmental Studies (California Polytechnic State University, Cal-Poly San Luis Obispo, 1983)	Former Land Use National Planning Director (Government of Venezuela); For 5 years previous to appointment with CEP, was Director of Planning and Budget with Venezuela's Ministry of Natural Resources	No	Manage CAR/RCU (staff of approx. 20) Manage CEP Action Plan Responsible for implementation of the Cartagena Convention Responsible for management of the Convention and its 3 Protocols Deals with 28 member governments (Political Focal Points, ex. Minister of Foreign Affairs) (Technical Focal Points, ex. for biodiversity, pollution, information systems, education, etc.)

Name	Position	Nationality	Tenure	Education	Background	Prev. UN Exp.	Role(s)
Luc St-Pierre	CEPNET Programme Officer	Canada	4 years (at end of October, 2004)	Master's in Geography (Sherbrooke, 1984 -5)		No	Provides implementation of the CEPNET workplan (workplan covers 2 years) Supervise capacity related to activities for which funding is received from external agencies Supervise 2 permanent UN staff members at the CAR/RCU (computing and assistant) Supervise (average of) 2-3 short term/ temporary consultants who are developing tools

Name	Position	Nationality	Tenure	Education	Background	Prev. UN Exp.	Role(s)
Alessandra Vanzella-Khoury	SPAW Programme Officer	Colombia	16 years total About 14 years in Jamaica About 10-11 years in SPAW	Master's in Marine Biology (microbiology OR microbial ecology)	Long tenure in UN system	Programme Officer/liaison for CEP and South East Pacific RSP in Nairobi (OCA/PAC) prior to work in Jamaica	Responsible for the SPAW Programme Co-ordination of SPAW activities, supervision of funding (allocations and expenditures) Doesn't maintain the financial books (CAR/RCU Finance Department/ Administration or by UNEP Nairobi) Oversee and co-ordinate SPAW Programme – activities related to the Protocol and Meetings (COP, STAC); co-ordination of activities/projects Co-ordinate/ Supervise people who come to work for SPAW (ex. Heidi)

Name	Position	Nationality	Tenure	Education	Background	Prev. UN Exp.	Role(s)
Malden Miller	ICRAN Caribbean Project Manager	Jamaica	3 years (in January 2005)	B.Sc. University of the West Indies M.Sc. University of the West Indies, Zoology with a specialization in coral reef ecology	Currently in first assignment with UNEP and CEP	No	ICRAN works to implement the goals of ICRI on the ground, using 3 main components: -Reef Management ("Management Action"), which involves capacity building; Reef Monitoring and Assessment; Communication/ Knowledge Dissemination/ Public Education Deal with different countries and institutions within the Target and Demonstration Sites Deal with MPA managers Ensures that proper reporting requirements are met

Name	Position	Nationality	Tenure	Education	Background	Prev. UN Exp.	Role(s)
Heidi Savelli-Söderberg	SPAW Junior Professional Officer	Sweden/ Venezuela	7 months (in August 2004)	Master's in Ecotoxicology Focusing on zoology, EIA, & geology/ environmental science	6 month internship with the Nairobi Convention (EAF RSP) Then, consultancy with the Resource Centre of the Nairobi Convention	Not employed by UNEP in any way – but worked with issues/ activities of the RSP	Assists Alessandra with the implementation and planning of the SPAW Programme Preparing documents (ex. working & information documents for IGM) Preparing the SPAW workplan Roles delimited in employment Terms of Reference Will be working with sustainable fisheries in the Caribbean – seeking partnerships b/w SPAW & regional fisheries orgs. Write proposals for funding

Name	Position	Nationality	Tenure	Education	Background	Prev. UN Exp.	Role(s)
Franklin McDonald	Advisor to the Programme (Consultant)	Jamaica	Began May 2004 (3 months in August 2004)	Master's in Engineering Geology Bachelors in Geology	Former Chair of the Governance Mechanism In charge of Jamaica's Environmental Programmes Was the head of the Jamaican Geological Survey	Yes – Was at the Meeting creating the Caribbean RSP in 1981	Advisor/ Consultant Review & contribute to the CEP Strategy document

APPENDIX 4: DISCUSSION GUIDE

Hello. My name is Shannon Christie. I am a graduate student in the Department of Geography at the University of Ottawa conducting research for my Master of Arts Thesis, entitled "The UNEP Regional Seas Programme: A Critical Analysis of Programme Evaluation Capacity". My thesis supervisor is Dr. Roger Needham.

Thank-you for your willingness to participate in this research project. Your participation is greatly appreciated. Before we begin the interview, I would like to inform you of your rights as a participant. A list of your rights has been provided for you on your copy of this discussion guide.

Your participation in this interview is entirely voluntary.

You are free to refuse to answer any question at any time.

You are free to withdraw from the interview at any time.

This interview will be kept strictly confidential and will be available only to myself and my thesis supervisor.

Parts of this interview may be included in my thesis and related future publications. Neither your name nor any identifying characteristics will be included, if this is desired.

This "Discussion Guide" follows the attached Figure. The guide and figure were provided to you in earlier correspondence.

(Distribute two copies of the Consent Form and one copy of the Discussion Guide/Figure. Allow time for them to be read and questions to be asked. Ask the participant to retain one copy of the Consent Form for his/her records, and to sign the other copy and return it to the researcher. The copy of the Discussion Guide/Figure may be kept by the participant).

Opening Questions: Participant Profile

- What is the title of your position?
- How long have you been with the Caribbean Environment Programme (CEP)?
- How long have you held your current position at the CEP?
- Have you held any other positions at the CEP?
- Have you held any other administrative or managerial positions inside or outside of the Regional Seas Programme?
- Would you mind sharing with me:
 - Your nationality?
 - Your education/training?

Questions Related to Participant's Responsibilities

- What are your administrative and/or managerial responsibilities?

- The literature (produced both by UNEP and academics) note that the Regional Seas Programme Action Plans are generally structured around a number of major components. These are identified as “Environmental Assessment”, “Environmental Management”, “Legal Arrangements”, “Institutional Arrangements”, “Financial Arrangements”, and “Education and Support Activities”.

For Researcher’s Reference/Understanding:

Some examples of activities under these components taken from the literature are:

EA – Baseline Studies; Pollution Monitoring

EM – EIA; Ecosystem Management; CZM; Contingency Planning

LA – Regional Convention and Protocols; Implementation of Global Conventions/Initiatives; Supporting Domestic Legislation

IA – Action Plan Secretariat; National Focal Points; Institutional Network; Intergovernmental Meetings

FA – UNEP; Regional Trust Funds; Other Contributions

ES - Public Workshops; Media; Brochures; Youth Education/Involvement

- Which of these six components are incorporated into the mandate of your specific area of responsibility (subprogramme)? Do they all have the same critical weight?
- How are they incorporated (programs, policies, projects, initiatives)? Representative examples?

Questions Related to Goals and Objectives

- What are the primary goals and objectives related to:
 - Environmental Assessment?
 - Environmental Management?
 - Legal Arrangements?
 - Institutional Arrangements?
 - Financial Arrangements?
 - Education and Support Activities?
- Compare the “actual” to the Discussion Map Graphic – Attempt to draft a new graphic

Questions Related to Evaluation Criteria

- What evaluation criteria are currently in place to measure progress under:

Are these criteria defined for projects (project level) or the programme (programme level)? Does the composite score of project success/failure translate to programme success/failure ($\sum \text{projects} = \text{programme}$)?

- Environmental Assessment?
 - Environmental Management?
 - Legal Arrangements?
 - Institutional Arrangements?
 - Financial Arrangements?
 - Education and Support Activities?
- What types of criteria do you find to be most successful (useful)? Least successful (useful)? Why?

Are the criteria used the best possible to measure progress towards goals and objectives? Are they based on science? Are they “second-best” or compromises due to lack of science, etc.?

- What are the major barriers (obstacles to conducting ideal evaluations, ex. lack of science, financial) to evaluating progress in:
 - Environmental Assessment?
 - Environmental Management?
 - Legal Arrangements?
 - Institutional Arrangements?
 - Financial Arrangements?
 - Education and Support Activities?

Questions Related to Evaluation Infrastructure

- What evaluation infrastructure (supporting resources) are currently in place to support the use of these criteria?
 - Human?
 - Technological?
 - Financial?
 - Legal?
 - Others? (ex. Informational)

- Where would you like to see additional investment in evaluation infrastructure support?

Questions Relating to Programme Evaluation in General

- Are you formally required to conduct programme evaluation?
 - If yes, to whom do you submit evaluation reports?
 - If no, is informal evaluation conducted?
- By whom is evaluation conducted? (*in-house; consultants*)
- When is evaluation conducted? (*annual; end of project(s); project mid-term; planning stages*)
- Are you concerned with the level to which evaluation results are used/internalized?
- Does the Caribbean Environment Programme benefit from the evaluation experiences and lessons from the larger Regional Seas Programmes (evaluations of other regions)? In what ways?
- In which areas do you think evaluation is mature – and least mature – and why?

“Mature” seems to imply a consideration of evaluation in planning stages, internalization of results, etc.
- Anything I have missed?
- May I contact you later in the week if I am available, or by e-mail/phone at a later date if I require any clarification on your insights?

Thank-you for your time and for sharing with me your insights regarding programme evaluation and the Caribbean Environment Programme. Your contribution to my research is greatly appreciated.

I will transcribe interview tape and notes (if applicable) and forward a copy of this transcript to you at the address you provided. You can then verify your statements before further analysis is done.

I look forward to sharing the results of my research with you.

Thank-you again.

APPENDIX 6: DATA ANALYSIS – CODING

NVivo revision 2.0.163

Licensee: Geographie

Project: *Shannon*

User: *Administrator*

Date: 6/30/2005 - 5:06:33 PM

NODE LISTING

Nodes in Set: *All Tree Nodes*

Created: 3/7/2005 - 9:59:49 AM

Modified: 3/7/2005 - 9:59:49 AM

Number of Nodes: 8

- 1 (1) /Tree Node
- 2 (2) /All
- 3 (3) /Environmental Assessment
- 4 (4) /Environmental Management
- 5 (5) /Legal Arrangements
- 6 (6) /Institutional Arrangements
- 7 (7) /Financial Arrangements
- 8 (8) /Educational and Support Activities

NVivo revision 2.0.163

Licensee: Geographie

Project: *Criteria/Infrastructure*

User: *Administrator*

Date: 6/30/2005 - 5:09:40 PM

NODE LISTING

Nodes in Set: *All Tree Nodes*

Created: 3/21/2005 - 12:22:44 PM

Modified: 3/21/2005 - 12:22:44 PM

Number of Nodes: 2

- 1 (1) /Criteria
- 2 (2) /Infrastructure

Nodes	Paragraphs Coded	Documents Coded	Passages Coded	Memos Linked To	Other Docs Linked To	Extracts Linked To	Other Nodes Linked To
(1) Tree Node	0	0	0	0	0	0	0
(2) All	10	1	6	0	0	0	0
(3) Environmental Assessment	14	1	5	0	0	0	0
(4) Environmental Management	11	1	4	0	0	0	0
(5) Legal Arrangements	20	1	4	0	0	0	0
(6) Institutional Arrangements	31	1	7	0	0	0	0
(7) Financial Arrangements	26	1	7	0	0	0	0
(8) Educational and Support Activities	10	1	2	0	0	0	0

Nodes	Paragraphs Coded	Documents Coded	Passages Coded	Memos Linked To	Other Docs Linked To	Extracts Linked To	Other Nodes Linked To
(1) Criteria	264	6	29	0	0	0	0
(2) Infrastructure	528	6	76	0	0	0	0

APPENDIX 7: PROGRESS AND TERMINAL REPORT FORMATS

UNEP-Caribbean Environment Programme CaMPAM Small Grants Fund

PROGRESS REPORT FORMAT

SECTION 1 - BACKGROUND INFORMATION

1.1 Project Title:

1.2 Project Number:

1.3 Responsible Office: (Unit/Branch)

1.4 Coordinating Agency or Supporting Organization (if relevant):

1.5 Reporting Period: (the period covered by this report)

SECTION 2 - PROJECT STATUS

2.1 Status of the Implementation of the Activities and Outputs Listed Under the Workplan in the Project Document (check appropriate box)

☐ Project activities and outputs listed in the Project workplan for the reporting period have been materially completed and the responsible Office is satisfied that the project will be fully completed on time (give reasons for minor variations as Section 3 below).

☐ Project activities and outputs listed in the Project Workplan for the reporting period have been altered (give reasons for alterations: lack of finance; project reformulated; project revisions; other at Section 3 below).

☐ Project activities and outputs listed in the Project Workplan for the reporting period have not been fully completed and delays in project delivery are expected (give reasons for variations in Section 3.1 and new completion date in Section 3.2 below).

☐ Insufficient detail provided in the Project Workplan.

2.2 List Actual Activities/Outputs Achieved in the Reporting period: (please tick appropriate box)

(a) TRAINING SEMINAR/WORKSHOP

Title: _____

Venue and dates _____

Convened by _____ Organized by _____

Report issued as doc. No/Symbol _____ Languages _____ Dated _____

For Training Seminar/Workshop, please indicate: No. of participants _____ and attach **annex** giving names and nationalities of participants.

(b) PRINTED MATERIALS

☐ Report ☐ Technical Publication ☐ Technical Report ☐ Others

Title:

Author(s)/Editor(s)

Publisher

Symbol (UN/UNEP/ISBN/ISSN)

Date of publication

(When technical reports/publications have been distributed, attach distribution list)

(c) ☐ **TECHNICAL INFORMATION**

☐ **PUBLIC INFORMATION**

Description

Dates

(d) TECHNICAL COOPERATION

☐ Attachments

☐ Advisory Services

☐ Staff Missions

☐ Others (describe)

Purpose

Place and duration

<u>Beneficiaries</u>	<u>Countries/Nationalities</u>	<u>Cost(in US\$)</u>
----------------------	--------------------------------	----------------------

_____	_____	_____
_____	_____	_____
_____	_____	_____

(e) SERVICES

Description

_____	Dates

(f) OTHER OUTPUTS (list and name)

SECTION 3 - PROJECT DELIVERY

3.1 Summary of the Problems Encountered in Project Delivery (if any)

3.2 Actions Taken or Required to Solve the Problems (identified in Section 3.1 above)

**UNEP-Caribbean Environment Programme
CaMPAM Small Grants Fund**

TERMINAL REPORT FORMAT

Implementing Organization

Project/MOU _____

No.: _____

Project/MOU _____

Title: _____

1. Project Needs and Results

Re-state the needs and results of the project.

2. Project activities

Describe the activities actually undertaken under the project, giving reasons why some activities were not undertaken, if any.

3. Project outputs

Compare the outputs generated with the ones listed in the project document.

List the actual outputs produced under the following headings (Please tick appropriate box)

(a) TRAINING SEMINAR/WORKSHOP

Title: _____

Venue and dates _____

Convened by _____

Organized by _____

Report issued as doc. No/Symbol _____

Languages _____

Dated _____

For Training Seminar/Workshop, please indicate: No. of participants _____ and attach annex giving names and nationalities of participants.

(b) PRINTED MATERIALS

☐ Report

☐ Technical Publication

☐ Technical Report

☐ Others

Title: _____

Author(s)/Editor(s) _____

Publisher _____

Symbol(UN/UNEP/ISBN/ISSN) _____

Date of publication _____

(When technical reports/publications have been distributed, attach distribution list)

(c) ☐ TECHNICAL INFORMATION	☐ PUBLIC INFORMATION
Description _____ _____ _____ _____	
Dates _____	

(d) TECHNICAL COOPERATION		
☐ Attachments ☐ Advisory Services ☐ Staff Missions ☐ Others (describe)		
Purpose _____ _____		
Place and duration _____		
<u>Beneficiaries</u>	<u>Countries/Nationalities</u>	<u>Cost(in US\$)</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

(f) OTHER OUTPUTS/SERVICES For example, Networking, Query-response, Participation in meetings etc. _____ _____ _____ _____
--

4. **Use of outputs**
State the use made of the outputs.

5. **Degree of achievement of the objectives/results**
On the basis of facts obtained during the follow-up phase, describe how the project document outputs and their use were or were not instrumental in realizing the objectives/results of the project.

6. **Conclusions**
Enumerate the lessons learned during the project execution. Concentrate on the management of the project, indicating the principal factors that determined success or failure in meeting the objectives set down in the project document.

7. **Recommendations**
Make recommendations to:
 - (a) Improve effect and impact of similar projects in the future;
 - (b) Indicate what further action might be needed to meet the project objectives/results.

8. **Non-expendable equipment**
Please attach to the terminal report a final inventory of all non-expendable equipment (if any) purchased under this project, indicating the following:

Date of purchase, description, serial number, quantity, cost, location and present condition, together with your proposal for the disposal of the said equipment.