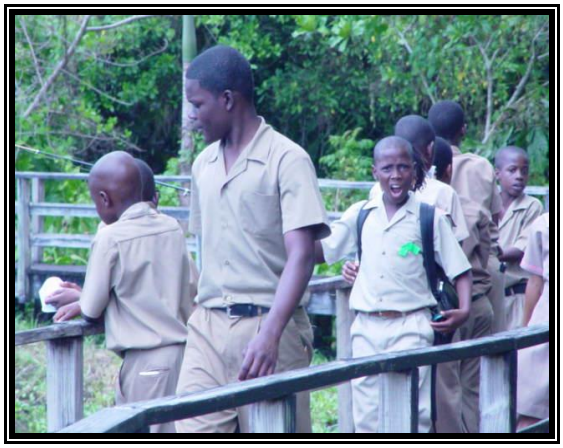
The Challenge of Building Capacity for Participatory Natural Resource Management:

the Case of Jamaica's National System of Protected Areas

Caribbean Natural Resources Institute



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The Challenge of Building Capacity for Participatory Natural Resource Management: the Case of Jamaica's National System of Protected Areas

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PREFACE

This case study documents some of the work undertaken by the Caribbean Natural Resources Institute (CANARI) as part of a regional programme, "Capacity Building for Community Participation in Natural Resource Management in the Caribbean", implemented in collaboration with and with financial support from the United Kingdom Department for International Development – Caribbean. The case study was prepared and published by CANARI with the support of the John D. and Catherine T. MacArthur Foundation, as an output of the project "Developing and Disseminating Methods for Effective Biodiversity Conservation in the insular Caribbean". Much of the work described in the paper also received the financial support of the Environmental Foundation of Jamaica (EFJ) and technical support from a range of Jamaican institutions, including the Jamaica Conservation and Development Trust (JCDT), National Environment and Planning Agency (NEPA), National Environmental Societies Trust, Negril Area Environmental Protection Trust, and Negril Coral Reef Preservation Society.

The paper has benefited from the review and comments of a number of persons in Jamaica, including: Ms. Carla Gordon, Mr. Roger Williams and their colleagues at NEPA; Ms. Susan Otuokon, Executive Director of the JCDT; and Ms. Selena Tapper, former Executive Director of the EFJ. CANARI colleagues Gillian Cooper and Vijay Krishnarayan provided useful feedback and other forms of assistance. The contributions of Mrs. Carolyn Hayle, the author's partner in much of the work that is described in this paper, are also acknowledged with grateful thanks. While all of these individuals have made important contributions to this case study, the opinions expressed are those of the author alone.

LIST OF ACRONYMS

CANARI	Caribbean Natural Resources Institute
CITES	Convention on International Trade in Endangered Species
DEMO	Development of Environmental Management Organizations
DFID	Department for International Development
EFJ	Environmental Foundation of Jamaica
JCDT	Jamaica Conservation and Development Trust
NCRPS	Negril Coral Reef Preservation Society
NEPA	National Environment and Planning Agency
NEPT	Negril Area Environmental Protection Trust
NGO	Non-governmental Organisation
NRCA	Natural Resources Conservation Authority
PARC	Protected Areas Resource Conservation
USAID	U.S. Agency for International Development

EXECUTIVE SUMMARY

Despite a rich natural and cultural patrimony, Jamaica's development has lagged since its independence forty years ago, and poverty rates remain high, especially in rural areas. Recognising the need to realise the value of its resources in sustainable ways, in 1989 the government embarked on an ambitious initiative to develop a comprehensive and state-of-the art national system of protected areas. With international assistance, the project progressed rapidly during its first few years: protected area legislation was prepared, two flagship parks were established, and a trust fund to finance the system was set up through debt-for-nature swaps. A national protected area system plan was prepared, which called for delegation of management responsibilities to local non-governmental organisations and other mechanisms for stakeholder involvement. But design flaws, unrealistic expectations, inadequate human and technical resources, and insufficient political support eventually caused the project to stall. By the late 1990s the country faced the challenge of redesigning the system and building the capacity to manage it. This paper describes and analyses the results of interventions undertaken between 1998 and 2002 by the Caribbean Natural Resources Institute (CANARI), one of the many national, regional, and international actors that have been involved in those efforts.

Capacity development has proven a difficult art with elusive benchmarks, but studies of the performance of capacity development projects indicate that they require flexibility, a good understanding of local realities, special skills, high levels of participation, and long time frames. Building the capacity of organisations requires attention to a range of elements, which include:

- *World view*: a coherent frame of reference that the organisation uses to interpret the environment it operates in and define its place within that environment
- *Culture*: a way of doing things that enables the organisation to achieve its objectives, and a belief that it can be effective and have an impact
- *Structure*: a clear definition of roles, functions, lines of communication, and mechanisms for accountability
- *Adaptive strategies*: practices and policies that enable an organisation to adapt and respond to changes in its operating environment
- *Skills*: knowledge, abilities, and competencies
- *Material resources*: technology, finance, and equipment
- *Linkages*: an ability to develop and manage relationships with individuals, groups, and organisations in pursuit of overall goals

Using these elements as a framework, organisational capacity needs can be assessed and strategies developed for addressing them. The framework also provides a structure for measuring progress in capacity development.

CANARI's interventions in Jamaica were guided by its assessment of the capacity needs of the main governmental and non-governmental actors and focussed on strengthening their ability to work together and to implement participatory approaches to protected area management. Its initial emphasis was on building trust, providing formal training opportunities for strategically

selected individuals, and offering technical advice and assistance on issues such as collaborative management and financing. Its objective during this period was to stimulate reflection and dialogue on the requirements for participatory management.

Its next objective was to develop among the major stakeholders a shared understanding of the protected area system's capacity needs. The mechanism used was a participatory review of the country's experience in protected area management, commissioned by the Environmental Foundation of Jamaica, a major financial supporter of the system's development. The main conclusion of the review was that a new national system plan was needed to guide future development, and that it should be prepared in such a way as to itself serve as an exercise in capacity building. The final phase of CANARI's intervention was the design of this process, again using a participatory methodology that allowed all the main stakeholders to have a say in what the system plan should include and how it should be developed.

Although there is still much to be done, these interventions appear to have assisted the main stakeholders to:

- develop greater consensus on the role of the protected area system in national development and a better understanding of the challenges and constraints faced by the various actors;
- make progress on an institutional framework for collaboration at local, sectoral, and national levels;
- gain skills needed to implement participatory approaches;
- develop new mechanisms for sustainable financing.

Among the lessons drawn from the four-year intervention the following have broad applicability:

- To build effective participatory resource management institutions, the capacity needs of all partners must be given attention. An institution can only develop at the pace of its organisational components, and if any of these lag behind, the institution itself will as well.
- Organisational cultures adopt conditioned responses to external forces of change. These adaptive responses protect organisations from becoming overwhelmed by the demands of outside agents and influences, but increase the challenges for capacity-development change agents such as CANARI.
- Building trust, especially among multiple and acrimonious stakeholders, takes considerable time but is essential for effective capacity-development processes. It also requires developing a detailed understanding of the local social, political, and institutional context, in itself a lengthy and time-consuming process.
- Capacity development does not occur linearly, but in fits and starts, and requires repeated reinforcement.
- The success of capacity development efforts is closely tied to the level of support and reinforcement provided by the political directorate, which is itself generally a reflection of public interest and backing.

1. INTRODUCTION

In the early 1990s, when events like the Earth Summit in Rio were raising world awareness about the links between environment and development, Jamaica committed itself to developing a comprehensive and state-of-the-art national system of protected areas as one component of its national strategy for sustainable development. The effort was supported by the U.S. Agency for International Development (USAID), and was enthusiastically embraced by Jamaica's environmental community. An impressive team of young professionals assumed leading roles, and early progress was swift. By 1993, protected area legislation and regulations had been prepared; two flagship protected areas had been established and were being used as "pilot parks" to test management approaches; a national Conservation Data Centre had been set up to provide scientific support to the development of the system; and the Jamaica National Parks Trust Fund had been created through two debt-for-nature swaps, with an initial capitalisation of 12.3 million Jamaican dollars (about 550,000 U.S. dollars).

The initiative was particularly important because it was, up to that time, the most extensive conservation effort in the Caribbean to incorporate principals of community participation and co-management. Responsibility for the management of each protected area was to be delegated to a local non-governmental organisation (NGO), with public participation further encouraged through the establishment of local committees to advise on management. Within a short while, however, progress stalled. Few additional protected areas were established, and some that were had no management. Income from the Jamaica National Parks Trust Fund dropped disastrously due to depreciation of the Jamaican dollar, a decline in interest rates, and the failure of efforts to capitalise it further; and no additional mechanisms for sustainable funding, such as user fees, were created. The arrangements for delegating management to local organisations failed to address the issue of management costs or to clearly define the role of government; both the government and their management partners lacked the technical resources needed for effective management; and efforts to stimulate community involvement were only sporadically and partially successful. Less than ten years after its start, the development of a national system of protected areas was in crisis.

These problems were largely a result of a failure to create from the start adequate and durable local management capacity. Capacity, in the jargon of technical assistance work, generally refers to the broad range of factors, from skills to attitudes to financial resources, that enable individuals, organisations, or systems to perform their functions and achieve their objectives (Bolger 2000).

The Caribbean Natural Resources Institute (CANARI) is a technical assistance organisation dedicated to the testing and promotion of participatory approaches to natural resource management in the insular Caribbean. It had closely followed the development of Jamaica's protected area system and provided training and technical support to some of the organisations involved, and was

dismayed by the reversal of progress. In 1998, CANARI identified Jamaica's protected area system as one of the targets of a programme in capacity building, which it was implementing with the support of the United Kingdom's Department for International Development (DFID). This paper describes the process employed by CANARI to support the capacity development of organisations involved in protected area management in Jamaica, and analyses the results[1]. The analysis is based on a framework for capacity assessment that was developed by CANARI as part of the same DFID-funded programme (Krishnarayan *et al.* 2002).

[1] The paper deals specifically with CANARI's work, and for the purpose of analysis largely isolates it from other interventions, which include the efforts of the Canada/Jamaica Green Fund Project, the Environmental Foundation of Jamaica, The Nature Conservancy, the USAID-funded *Development of Environmental Management Organizations* and *Coastal Water Quality Improvement* projects, and the Government of Jamaica itself. All these agencies and programmes have provided substantial support to the development of Jamaica's protected areas, without which CANARI's contributions would not have been possible.

2. A SHORT HISTORY OF JAMAICA'S PROTECTED AREA SYSTEM

Why a protected area system is important for Jamaica

Jamaica (Figure 1) is blessed with an exceptional diversity of natural resources and ecosystems. Among the approximately 3,000 identified plant species, nearly 30% are endemic. Bird, reptile, amphibian, and insect species also have high rates of endemism. The mountainous spine through the centre of the island, which reaches heights of over 2,000 metres in the Blue Mountains, provides an extensive forest-covered watershed, producing over 4 million cubic metres of water per year, or more than four times the annual human demand. The Cockpit Country, a large isolated area of unique limestone formations, is a refuge for endemic plants and animals, including all of Jamaica's rare birds (JCDT 1992). Marine and coastal resources include well-developed fringing reefs along much of the north shore, mangrove forests and herbaceous swamps, which line over 30% of the island's coast, and other wetlands, including two important morasses (Government of Jamaica and Ralph M. Field Associates, Inc. 1987).

Despite this remarkable natural patrimony, an equally rich cultural heritage, and a skilled and well-educated work force, Jamaica has struggled over forty years of independence to achieve its development goals. Poverty rates are high, particularly in the rural areas, and around 25% of the population lives on less than US$2 per day (World Bank Group 2000). Since the mid-1990s, the government has faced continuing economic crisis, and social unrest is a regular feature of life, particularly in poor inner city areas. The resource base is, and has long been, under constant

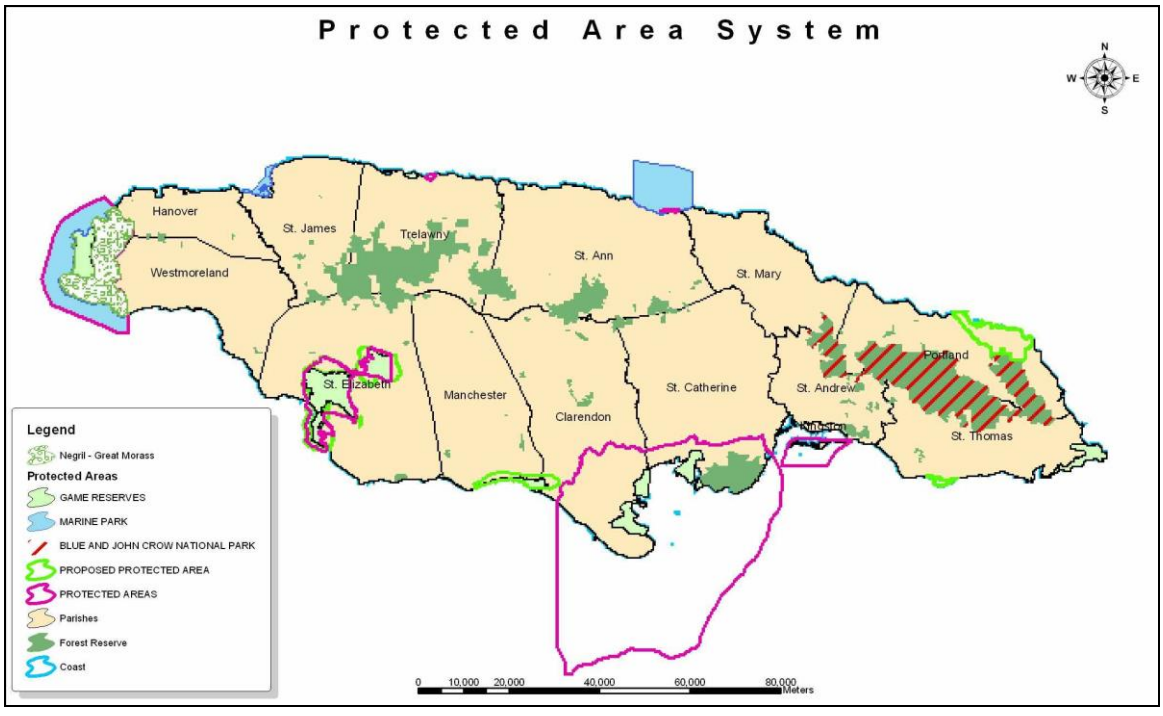

Figure 1. Map of Jamaica showing major protected areas
Map credit: Dale Reid

assault, both from poor rural populations with few other options and from heedless developers whose activities cannot always be controlled despite a generally good framework of planning laws and regulations. The need to realise the value of the country's natural resources in sustainable ways is well recognised, and has manifested itself in a number of initiatives, such as:

- the integration of the national agencies responsible for physical planning and for natural resource conservation into a single institution, the National Environment and Planning Agency (NEPA);
- the establishment of a high-level integrated watershed management council and implementation of a number of projects to improve watershed management;
- the creation in 1993, through a US$30 million debt swap agreement between the Governments of Jamaica and the United States, of a national foundation, the Environmental Foundation of Jamaica (EFJ), to support civil society sustainable development initiatives;
- the implementation of projects and participation in international initiatives such as the Green Globe and Blue Flag certification systems and the ISO 14000 standards for hotels and attractions, to create a more positive relationship between the tourism industry and the natural resources upon which it depends;
- ratification of international environmental treaties including the Convention on International Trade in Endangered Species (CITES), the Convention on Biodiversity, the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region (Cartagena Convention), and the Convention on Wetlands of International Importance (Ramsar Convention).

The government and the country's environmental community saw a system of protected areas as another critical component in an integrated strategy for national sustainable development.

Early progress

Protected areas have existed in Jamaica for decades. The first forest reserves were established in the 1930's, and interest in establishing national parks to protect other economically and ecologically critical areas and species dates back at least to the 1960's. A Provisional National Parks Committee was set up by the Forestry Department in 1970, and in 1975 a National Parks Branch was established within the Natural Resources Conservation Department. While these initiatives resulted in some preliminary policy documents and plans, work on developing an integrated national system of protected areas really began in 1989, with a USAID-funded project known as Protected Areas Resource Conservation (PARC). The two-phase project had a budget of more than US$ 5 million and aimed to build the nation's capacity to establish and manage protected areas.

According to project documents, the goal of the PARC project was to "integrate conservation of biological diversity with sustainable economic development", and its main components included:

1) establishment of pilot parks in two areas of national economic importance: the Blue and John Crow Mountains (which provide the main watershed for the Kingston metropolitan area) and Montego Bay (Jamaica's major tourism destination);
2) establishment during the second phase of at least two additional protected areas in economically important areas;

Blue and John Crow Mountain National Park, Portland Gap
Photo credit: Marsha Mason

3) development of a protected area system plan;
4) creation of an effective institutional framework for protected area management;
5) establishment of a Conservation Data Centre to provide information for management;
6) establishment and capitalisation of a Jamaica National Parks Trust Fund to provide financial sustainability for the system;
7) drafting and adoption of support legislation.

The project came at a time when perceptions regarding the roles of government and of civil society in the management of natural resources were changing rapidly throughout the world. In Jamaica, the government was transforming the department responsible for environmental oversight into the semi-autonomous Natural Resources Conservation Authority (NRCA). National and local environmental NGOs were springing up and some were receiving substantial support from external funding agencies. There was a feeling in some circles that these organisations would be better able to manage valuable natural and cultural resources than the government.

One premise of the PARC project was that the country's natural resource management capacity was dispersed among governmental agencies and civil society organisations, none of which had the ability to lead the development of the system on its own. The responsibility for project

activities was therefore divided among a range of partners, and the design of the system of protected areas was and continues to be grounded in concepts of collaborative management[2].

The first phase of the project proceeded smoothly. The Montego Bay Marine Park was established in June 1992, and the Blue and John Crow Mountains National Park (whose boundaries encompassed an existing forest reserve) in February 1993. With funding from PARC, staff were employed, equipment purchased, trails built, mooring buoys installed, and interpretive materials developed. Particular attention was given to fostering local participation. Meetings were held in local communities and with individual interest groups, and the project supported local development projects as a means of building trust (Kerr and Parchment 1992). Local Advisory Committees were established in three communities adjacent to the Blue and John Crow Mountains National Park, and an organisation representing key stakeholders (mostly from the local tourism industry) was established to help guide the management of the Montego Bay Marine Park. Work was initiated on a national system plan, beginning with the identification and prioritisation of additional areas to be included in the system.

Responsibility for preparing the system plan and for administering the Jamaica National Parks Trust Fund was given to the Jamaica Conservation and Development Trust (JCDT), a national NGO formed in the late 1980's. In the early 1990's interest rates were high, and the Trust Fund produced sufficient income to cover the day-to-day management costs of the two parks. It was assumed that further capitalisation of the Fund would keep pace with the growth of the system.

The creation of an institutional framework for the system proved to be more problematic. Initially responsibilities were to be allocated among different government actors, with the NRCA playing the role of coordinator, as stipulated in the Act that created it. But PARC staff supported the creation of an independent coordinating body, which they felt could more effectively raise and manage funds and coordinate the involvement of non-governmental partners. This issue was never satisfactorily resolved.

Heading off course

In 1992, at the end of this first phase of the PARC project, the initiative was seen as a great success. The draft Plan for a System of Protected Areas outlined ambitious plans for expanding the system under the oversight of an autonomous entity, referred to in the Plan as the Parks Management Trust, and USAID committed itself to an additional phase of support. But that second phase was considered largely a failure. A 1996 evaluation noted:

- no new parks had been established although two were envisioned;
- neither of the existing parks had revenue generation programmes in operation;
- a capital campaign to increase the Jamaica National Parks Trust Fund was never undertaken;
- the Parks Management Trust was never created to coordinate the management of the system.

[2] Collaborative management is described in Krishnarayan *et al.* (2002) as "where there is a formal sharing of management responsibilities between parties; where roles and responsibilities are clearly articulated and understood; and where [they] are determined by stake and capacity."

The concept of shared management was partially realised in 1996, when the government delegated responsibility for managing the Blue and John Crow Mountains National Park to the JCDT and responsibility for the Montego Bay Marine Park to the Montego Bay Marine Park Trust, a stakeholder organisation established in 1992. However, the delegation instruments failed to stipulate the management role of government, and the NGO management agents soon found themselves overwhelmed by the technical and financial costs of managing the parks. Initially, these organisations received payments from the Trust Fund to cover their day-to-day costs, but they were expected to raise supplemental funds for special projects and capital expenses on their own. Once the funding provided through the PARC project ended, the NGOs began to feel increasingly abandoned by government, which lacked the resources to provide much support. When the delegation instruments came up for renewal in 1999, both NGO partners declined to renew them without a renegotiation of their terms.

Between 1997 and 1999, a few new protected areas were established, several with the understanding that they would also be managed by NGOs. But while the government reassessed its policies in response to the shortcomings of the first two experiments in delegation, no management arrangements were made for the new areas.

Nonetheless, there was *de facto* involvement of local NGOs, and some were able to secure external grant funding to carry out limited management activities. The government tacitly endorsed these efforts, but its own capacity remained extremely limited. By the end of the decade, the income from the Trust Fund had begun to diminish and all the parks faced growing budgetary shortfalls. The EFJ began to assume an increasing role in keeping the NGO management agencies afloat, but they were constrained by their rules of operation, which restricted the types and amounts of funding that they could provide, and by a lack of in-house expertise in the field of protected area management.

The management of protected areas has been made even more difficult by impacts originating outside their boundaries. For example, the ecosystems in the marine parks have been heavily degraded by land-based pollution and sedimentation, over which the park management has no control. Similarly, the biodiversity of the Blue and John Crow Mountains National Park is compromised by development and deforestation in surrounding areas. The government has little capacity to enforce development laws and regulations, making it virtually impossible to protect the integrity of protected areas.

In fact, few of the early accomplishments of the PARC project, which ended in 1998, proved to be durable. By the end of the decade, all of the protected areas that had been established were struggling, sometimes unsuccessfully, to achieve even the most basic management objectives. Both the government agencies and NGOs involved in managing the system were experiencing serious financial, technical and management problems: feelings of distrust had developed between the government agencies, the environmental NGOs, and the EFJ; the Jamaica National Parks Trust Fund had attracted no further funding and its trustees had decided to stop payments from it in order to replenish its diminishing capital; the Conservation Data Centre was defunct, having provided almost no support to the development of protected areas; and no new forms of financing, such as user fees, had been introduced. A policy for the national system of protected areas was in place, and strong commitment to the protected area system remained, both within civil society and government, but the obstacles were enormous.

What went wrong?

The first phase of the PARC project was notable among development aid projects for its high level of local involvement in planning and decision-making. The core of the project team was made up of Jamaicans, who were largely able to steer the project as they saw fit. Most project consultancies went to Jamaicans, which led to the development of a cadre of committed local advocates for the development of the system. But the second phase of the project took a different, more orthodox aid project approach. USAID and American consulting firms largely took charge of management and decision-making. The original Jamaican project team members found it increasingly difficult to influence the direction of the project and began dropping out and moving on to other endeavours. The cooperative spirit that prevailed during the first phase was lost, and an undercurrent of animosity began to characterise relations between the project and Jamaican government agencies and NGOs. This dysfunctional environment made the effective implementation of project activities extremely difficult, if not impossible, particularly in light of other fundamental problems that also contributed to the project's failure to achieve its objectives.

A review conducted in 2001 (CANARI 2001) identified a number of flaws in the project's original assumptions, which early enthusiasm and project money had concealed, and which affected results and led to poor decisions. Most of the flaws were caused by misunderstandings regarding the institutional environment and by overly optimistic estimations of the capacities of the management partners. For example:

- The government was assumed to have the financial and human resources to preserve major representative stocks and areas of all of Jamaica's biological resources, including populations of indigenous animal and plant species, natural communities and ecosystems (nearly 200 sites are listed as protected area candidates in PARC project documents). In fact, environmental agencies are chronically under-financed, operating on skeleton budgets or living from one external aid project to the next.
- The project dealt only with areas established under the Natural Resources Conservation Authority Act and thus did not integrate into the emerging system a range of existing protected areas, including forest reserves and national monuments, or create effective mechanisms to draw on the technical capabilities of the agencies responsible for their management. Instead, it created large and ambitious pilot parks whose management objectives were far beyond the capacity of the management agencies to achieve.
- The environmental NGOs were assumed to be more stable, technically competent, financially viable, and representative of local stakeholders than they actually were[3].
- Technical training, particularly at the professional level, was given little attention, and none of the external financial assistance packages included provision for graduate or undergraduate study in fields relevant to protected areas. As a result, the staff of government agencies lacked specific expertise in protected area management, and some of the NGOs acting as management agents were led and staffed by persons with considerable dedication but limited technical qualifications.

[3] At that time of the PARC project, there was a strong neo-liberal sentiment against "big government" in the international development community and in the United States Congress that may have influenced USAID's thinking with respect to NGOs.

- There was a lack of appreciation of the costs of managing the system, and of the challenge of raising the funds required. This resulted in management failures, and misunderstandings and recriminations between the various actors.
- The design of the National Parks Trust Fund was based on overly optimistic assessments, drawn from experiences in contexts and countries very different from Jamaica, regarding the potential of such funds to attract capital.
- In general, the project gave insufficient attention to financial sustainability. The costs of running the system and individual protected areas were never calculated, and funding mechanisms were identified but not systematically pursued.
- The EFJ was expected to support the system by strengthening the NGO partners, but its governing agreement precluded it from giving the types of support that were often required, and from assisting the government agencies that also needed support.
- Government never accepted the rationale for abandoning the initial concept of a centralised management structure within the NRCA in favour of an autonomous Parks Management Trust. As a result, there was no well-defined management framework and the agencies involved were unsure how to relate to one another.

In summary, the conceptual framework for the system was built around the establishment of an autonomous Parks Management Trust, the development of the Jamaica National Parks Trust Fund to finance the system, and management partnerships between government and NGOs. With the failure of the project to establish the Parks Management Trust, build the technical capacity of the management partners, and adequately capitalise the Trust Fund, the system as designed was doomed to failure. The challenge the country now faced was to put aside the initial, failed model and to redesign an institution that had the capacity, structure, and political backing to move the country's protected area system forward in support of local and national development.

Some positive responses to build on

Despite its shortcomings and failures, PARC did create a local constituency of stakeholders committed to the core idea of a system of protected areas and prepared to do what they could to move the process ahead. The USAID-funded Development of Environmental Management Organizations (DEMO) project helped NRCA to strengthen its technical capacity, collaborate more effectively with non-governmental partners, and implement a more team-based approach to its work. The small but committed staff of its Protected Areas Branch was able to start working more closely with partners and to develop guidelines for implementing the protected areas policy. The NGOs working in protected areas established an informal association, called the Jamaica Protected Areas Network, to lobby government for more equitable delegation agreements. The Forestry Department was strengthened through externally funded capacity development programmes and was able to give more attention to its priority forest reserves and to its management responsibilities within the Blue and John Crow Mountains National Park. EFJ responded with the establishment of a Jamaica $ 50 million (equivalent to approximately US$1 million) fund to support protected area management for a three-year period while critical system-wide issues, including funding and capacity building, were addressed. Conflict among the main actors continued, but even this could be seen as an indication of interest, commitment, and a desire to do things better.

3. THE INTERVENTION: CREATING CAPACITY FOR PARTICIPATORY MANAGEMENT

Capacity development: an overview

Developing a complex institution such as a protected area system requires a range of approaches and interventions, including capacity building, which focuses mainly on improving the effectiveness of the organisations operating within the larger institution.

The poor performance of projects such as PARC has been attributed to a number of causes "related to the nature of aid agencies themselves, and the inherent problems of capacity development" (Thompson 1996), including:

- the inflexibility of the bureaucracies, systems, and procedures of aid agencies: this inflexibility resulted in the failure of the PARC project to identify and adjust for initial design flaws that crippled later progress;
- a poor understanding of local realities (including in this case the capacity of local NGOs to be effective management partners) and the use of imported approaches and models (such as the Jamaica National Parks Trust Fund);
- a lack of the special skills required to support organisational development: the training and other support provided by PARC appear to have had little lasting positive impact on local organisations;
- ineffective systems for measuring the effectiveness of capacity development efforts: the benchmarks used to assess PARC's progress were all based on "hard" accomplishments, such as the establishment of a protected area or the preparation of a policy document.

Capacity building is a strategy drawing on a range of disciplines such as management theory and organisational development. Thompson (1996) describes the aim of capacity building as "adaptive management… management which learns and adapts, thinks creatively and makes good judgements in the face of complexity and change, rather than seeking to control and command." The achievement of that aim clearly requires an approach that is flexible, responsive, interactive, and iterative, that has an open time frame, and that works simultaneously at the level of the individual, the organisation, and the institution as a whole.

CANARI's work on capacity building (Krishnarayan *et al.* 2002) suggests that organisational capacity resides in the following elements:

- *World view*: a coherent frame of reference that the organisation uses to interpret the environment it operates in and define its place within that environment
- *Culture*: a way of doing things that enables the organisation to achieve its objectives, and a belief that it can be effective and have an impact
- *Structure*: a clear definition of roles, functions, lines of communication, and mechanisms for accountability

- *Adaptive strategies*: practices and policies that enable an organisation to adapt and respond to changes in its operating environment
- *Skills*: knowledge, abilities, and competencies
- *Material resources*: technology, finance, and equipment
- *Linkages*: an ability to develop and manage relationships with individuals, groups, and organisations in pursuit of overall goals

CANARI uses these elements as a framework for assessing the capacity needs of organisations and for developing strategies to address them. The framework also provides a structure for measuring progress in capacity development.

Analysing the stakeholders' capacity needs

Any effort to build the capacity of the institution of protected area management in Jamaica must address the individual needs of its varied organisational components (Table 1). While the capacity needs of government agencies, NGOs, and other partners in participatory management arrangements often differ, in Jamaica's case some of the most critical needs were broadly shared (Table 2).

Table 1: Targets of capacity development for Jamaica's protected area system

	Name	Protected Area Responsibilities
Government agencies and statutory bodies	Ministry of the Environment	Policy and legislative level guidance and ministerial oversight
	NEPA (which absorbed the NRCA in 2001), particularly its Protected Areas Branch	System planning and overall coordination, establishment of new areas, management oversight, and the development of policies and plans
	Forestry Department	Management of Forest Reserves*
	Fisheries Department	Management of Fish Sanctuaries*
	Jamaica National Heritage Trust	Management of cultural sites that have been designated as National Monuments*
NGOs	JCDT	Administration of the Jamaica National Parks Trust Fund and management of the Blue and John Crow Mountains National Park
	Montego Bay Marine Park Trust	Management of Montego Bay Marine Park
	Negril Coral Reef Preservation Society (NCRPS)	Management of Negril Marine Park
	Negril Area Environmental Protection Trust (NEPT)	Management of Negril Environmental Protection Area
Funding agencies	Jamaica National Parks Trust Fund	Funding core management costs of established protected areas and supporting further development of the system

	Name	Protected Area Responsibilities
	EFJ	Capacity-building for environmental NGOs through provision of grants and technical assistance

* Until recently, these areas were not seen as essential elements of the national system of protected areas, and there was little coordination with these agencies in the development of the system.

Table 2: Assessment of pre-intervention capacity needs of main stakeholders

	All partners	Public sector partners	Civil society partners
World view	Shared commitment to a national system of protected areas, but lack of a clear, shared vision of its role in national development.		
Culture		Despite an increased use of participatory approaches as a result of DEMO, a legacy of top-down, unilateral management.	NGO culture sometimes adversarial, in opposition to rather than in partnership with government.
Structure	Lack of a body or forum for regular and open communication among all actors. Development of the system impeded by communication breakdowns and misunderstandings.	Hierarchical structures that make rapid responses and adaptation difficult, but recent evolution of some structures for collaboration among agencies and with NGOs at the individual protected area level (e.g., co-management agreement between the Forestry Department, NEPA, and JCDT on the management of the Blue and John Crow Mountains National Park).	Structures for involving and receiving input from stakeholders often inadequate. Weak management structures, sometimes effectively comprised of only one person.
Adaptive strategies	Need for adaptive strategies not considered in the original design of the system, and changes in the political, institutional, and economic environment resulted in stagnation.	Because of rigid, hierarchical structures, can be slow to adapt to change.	Tend to have little resilience to loss of key personnel or financial setbacks.
Skills	Lack of the skills required to work together, to develop common plans and a shared vision, including skills in facilitation, conflict management, negotiation, and communication.	Access to specific technical skills, but lack of broad expertise in protected area management.	Insufficient technical management skills.

	All partners	Public sector partners	Civil society partners
Material resources	Financial and technical resources inadequate and their allocation not transparent.	Additional resources provided to Protected Areas Branch as part of NEPA's reorganisation. But continued failure of government budgetary process to meet needs of management agencies, resulting in undue reliance on (unsustainable) external support.	Limited ability to secure required resources; frequent financial and staffing crises.
Linkages	Poor communication and coordination among virtually all main partners; lack of understanding of one another's motives and constraints; distrust and occasional outbreaks of animosity.	Poor ability to reach out to and communicate with partners and stakeholders. Naïve understanding of the requirements for building effective partnerships.	Some success in forging linkages among themselves, but much less effective in developing alliances with other partners.

Phase I: Building trust and supporting local efforts

CANARI had provided various forms of assistance to Jamaican agencies involved in protected area management from the early stages of the system, and by the mid-1990s, Jamaican natural resource managers were participating regularly in CANARI training activities. But in 1998, its involvement became more substantial when it was asked by the EFJ to assist in addressing some of the many problems that were impeding the development of protected areas. This invitation came at a time when CANARI was beginning a four-year programme on capacity building for community participation in natural resources management, and support to Jamaica's protected areas fit well within the programme framework.

Through discussions with EFJ and other Jamaican organisations and analysis of the main issues, CANARI gradually developed a multi-pronged strategy to assist in addressing some of the protected area system's organisational capacity needs. The strategy, which was highly opportunistic and evolved over time, included the following components:

- formal training opportunities for strategically selected individuals in CANARI workshops and courses on participatory resource management;
- development of close relationships with key organisations in order to share information and provide advice;
- training and technical assistance to management agencies, to transfer participatory resource management skills and approaches;
- coordination of a participatory analysis of management issues and needs;
- coordination of the design of a new national protected area system plan, based on the analysis, which provided a template for meeting major institutional development requirements.

CANARI's involvement coincided with, and was able to build upon, the many local initiatives that were also responding to the crisis in the protected area system, including the evolution of NRCA into NEPA and the strengthening of its Protected Areas Branch; EFJ's increased attention to protected area management issues; the establishment of the Jamaica Protected Areas

Network of NGO; and institutional strengthening within the Forestry Department that increased its capacity to participate in the development of the system. CANARI's initial objective was to stimulate reflection and dialogue on the requirements for participatory management. To do that, it worked on developing positive relationships with as many of the main stakeholders as possible. Between 1998 and 2002, fifteen persons from NEPA, the Forestry Department, the Fisheries Division, EFJ, and Jamaican environmental NGOs attended CANARI workshops on aspects of participatory management, most with sponsorships provided by CANARI. One two-week workshop was held in Jamaica and drew on case studies from the country's protected area management experience. As local organisations began to see CANARI as a knowledgeable and sympathetic source of support in the field of participatory resource management, they started requesting its assistance in their own efforts at institution building.

Phase II: Developing a shared understanding of capacity needs

In 2001, with the management of Jamaica's protected areas continuing to deteriorate, EFJ decided to reassess its approach in order to provide more effective support. As part of the assessment, it invited CANARI to review the history of the system of protected areas, analyse the factors contributing to the current situation, and identify requirements for improving the management of both the overall system and individual protected areas. CANARI proposed that the review be conducted in a participatory way, in order to help the main stakeholders understand the factors contributing to the difficulties they faced, draw lessons, and jointly define a way forward.

The reviewers, who included a non-Jamaican member of CANARI's staff and a local counterpart, first gathered information from project documents and detailed interviews of more than thirty individuals currently or formerly involved in the development of the system. The information was analysed and preliminary findings were shared through a background paper and a meeting of all the main stakeholders. Participants in the meeting validated and refined the findings, and reached consensus on the requirements for the further development of the system. The results were documented in a report that was shared with all the major actors (CANARI 2001).

The main conclusion of the review was that because of changes in the political, institutional, and economic environment over the previous ten years a new national system plan was needed. It recommended that the development of that plan serve in itself as an exercise in capacity building by dealing, in a participatory manner, with issues such as:

- *Institutional arrangements*: guidelines for delegating management responsibilities to non-governmental partners and for developing agreements among major management partners
- *Stakeholder participation*: guidelines and mechanisms to foster full and active participation of stakeholders in management planning and evaluation
- *Role in national development*: strategies to optimise the contribution of the protected area system to local and national social and economic development
- *Financial sustainability*: components of a sustainable financing strategy for protected areas, and responsibilities for implementing it
- *Resource sharing*: guidelines on the sharing of staff between agencies and between protected areas for optimal use of limited technical and financial resources

Building an Institution, Piece by Piece

As part of its intervention, CANARI assisted some of the stakeholders to develop small but important pieces of the protected area system. In cases like the ones described here, it tried to structure its support in ways that built capacity rather than fostered dependency.

Developing a Memorandum of Understanding between NGOs
After participating in a CANARI training course on co-management, the Executive Directors of the NCRPS and NEPT decided to develop an agreement to guide their collaboration in the management of the Negril Marine Park and to serve as the basis for a future co-management agreement between themselves, NEPA, and other management partners. This decision represented an important step in the development of participatory management arrangements in Jamaica because it was motivated by a perceived need to collaborate and was based on an understanding and acceptance of the principles of co-management. CANARI assisted the two organisations in developing the agreement and a plan to monitor its effectiveness and efficiency. Although the agreement was never fully implemented, it has remained a basis for discussion and negotiation for the two organisations regarding their respective roles.

Designing a marine park user fee system
The national protected areas policy notes that "wherever feasible, cost recovery mechanisms including fees for use of system resources… shall be put in place", and while the government had stated its commitment to implementing user fee systems, particularly to cover the management costs of marine protected areas, its progress in designing such a system and putting it in place has been slow. With funding crises for the marine parks looming, NCRPS asked CANARI to facilitate a dialogue on the design and implementation of the marine park user fee system. The process included a workshop that brought together key stakeholders including the government, NCRPS, EFJ, and user group representatives to develop detailed recommendations. The government incorporated elements of the user fee system design coming out of the workshop into the development of a user fee procedures manual for national and marine parks, and legislation for the system's implementation was eventually prepared and enacted. The process offered an opportunity to bring the stakeholders together to identify solutions to critical problems, and contributed to a clearer agreement among all parties of their individual management roles and a better understanding of one another's constraints.

- *Coordination and communication*: mechanisms for ongoing communication among management partners
- *Accountability*: structures for providing oversight to the protected area system, including review and approval of work plans and budgets
- *Evaluation*: procedures for monitoring and regular evaluation of institutional efficiency and management effectiveness.

Phase III: Designing an integrated process for capacity development

The final step in CANARI's intervention was to prepare a detailed design and proposal for the development of a national protected area system plan, again at the request of EFJ. As in the case of the management review, CANARI used a participatory methodology that gave stakeholders opportunities to identify capacity needs and find ways to address them.

The proposal (CANARI 2003) describes a twelve month planning process combining widespread stakeholder consultations and involvement with technical research, leading to a plan for

developing and managing a system of protected areas with the goal of optimising the contribution of areas of critical ecological and cultural importance to Jamaica's sustainable development. Components of the proposed planning process that aim at creating a sustained process of capacity development include:

- widespread public awareness programmes to provide information and concepts that stakeholders at all levels of society need in order to be able to participate effectively in the planning process;
- building a shared "world view" through the development of a national consensus on what protected areas mean in the context of Jamaica's social and economic development and what the system of protected areas should aim to achieve;
- development of a legal and institutional framework for the system that is effective, efficient, and fully provides for stakeholder participation and input;
- development of guidelines for collaborative management of individual protected areas;
- analysis of the resources, institutions and skills required to implement the plan and the measures required to develop them.

The planning process proposed by CANARI was accepted by the key management agencies, and at the time of this writing, implementation had begun.

4. ANALYSIS OF RESULTS

The challenges of developing a protected area system in support of Jamaica's national sustainable development are enormous and require a long-term effort on the part of many actors, as well as the insertion of substantial technical and financial resources. But some of the components of an effective system are finally emerging, and CANARI's interventions appear to have made a contribution in several areas, as indicated by the following updated capacity assessment framework.

Table 3: Assessment of CANARI's contribution to building capacity of main stakeholders

	Pre-intervention issues	Interventions and impacts
World view	Shared commitment to a national system of protected areas, but lack of a clear, shared vision of its role in national development.	Participatory analysis of management issues and needs helped stakeholders realise the need for a shared vision and objectives, which were developed during the system plan design. These are to be presented to the wider stakeholder community for consideration and refinement during the system planning process.
Culture	Government culture accepting of participatory approaches, but still largely one of top-down management; NGO culture adversarial regarding government.	Involvement of strategically selected individuals in CANARI's training courses on participatory resource management helped to demonstrate value of a culture of collaboration and to build personal relationships. Participants in these activities report that they have contributed substantially to their own and their organisations' ability to implement participatory approaches. Participatory processes employed in user fee system workshop, management review, and system plan design also brought actors together to solve common problems, and helped to demonstrate their interdependence.
Structure	Lack of a body or forum for regular and open communication among all actors. Hierarchical structures within government make rapid responses and adaptation difficult. Some frameworks for collaboration among management partners (e.g. delegation and co-management agreements), but structures for involving and receiving input from other stakeholders often inadequate.	Progress in creating an institutional framework for collaboration at several levels: Local: Memorandum of Understanding to govern the collaboration of NGOs involved in managing the Negril Marine Park; Sectoral: Involvement of government, NGOs, and the tourism sector in dialogue finalising the design of a user fee system for marine protected areas; National: Recommendations, as part of the system plan design, on a collaborative framework for the oversight and coordination of the system.

	Pre-intervention issues	Interventions and impacts
Adaptive strategies	Inability to adapt to political, institutional, and economic changes contributed to stagnation of system. Rigid structures made government slow to adapt. NGOs lacked resilience to changes and setbacks.	Design for new system plan includes preparation of methods and procedures for monitoring implementation of the plan; evaluating its effectiveness, efficiency and impact; and revising and updating its contents. The design also proposes more flexible management arrangements for individual protected areas, so as not to place undue burdens on organisationally fragile non-governmental partners.
Skills	General lack of the skills required for participatory resource management. Technical skills and expertise in protected area management inadequate.	CANARI training courses, several implemented in collaboration with or with financial support from Jamaican partners, transferred skills in participatory planning, stakeholder analysis, conflict management, designing participatory institutions, and measuring management effectiveness. Participants report they are using at least some of these skills in their work.
Material resources	Financial and technical resources inadequate for all partners, and their allocation not transparent.	Management review uncovered and analysed shortcomings of original plan for financing the system. System plan will include a detailed financial sustainability strategy employing a range of consistent sources and mechanisms in order to assure its resilience. All major stakeholders to be involved in the design of the plan in order to assure transparency and secure the endorsement of implementing agencies. Progress in implementing user fee systems accelerated through participatory development of recommendations that were accepted by government.
Linkages	Poor communication and coordination among main partners; generally poor ability to forge alliances.	All CANARI interventions tried to create opportunities for communication and shared problem solving, and informal networks were established through training activities; but while the situation has improved, mutual distrust is deep-seated and lingering. Components of the system planning process that aim at improving linkages include: • development of guidelines for negotiating and preparing delegation instruments and cooperative agreements, to rectify the current power imbalances in these processes; • definition of arrangements and mechanisms for ongoing stakeholder input in planning and management; • design of mechanisms for coordination and communication among the main management partners.

5. LEARNING FROM EXPERIENCE

CANARI's support to the capacity development of Jamaica's protected area system provided a number of lessons that can help guide future capacity development initiatives, especially those involving complex participatory institutions. Some of the most important lessons include the following:

In building effective participatory institutions, the capacity needs of all partners must be given attention.

An institution can only develop at the pace of its organisational components. If any of those lag behind, the institution itself will as well. Past efforts to build Jamaica's protected areas institution had tended to focus separately on either the government agencies or the NGO management partners, leading to uneven capacity development of the two major actors. While this approach may have made sense from a development agency perspective, its effect was to broaden divisions, create resentments, and slow progress. In response, CANARI tried to give equal attention to building the capacity of all major actors to carry out their individual management roles within the overall framework of an integrated management system. It also created opportunities for the various players to work together to identify needs and solve common problems. This created the possibility of developing a shared vision and objectives for the system, and led to greater mutual understanding of motivations, needs and constraints.

Capacity needs exist at many levels within institutions, however. A technical organisation without a political mandate, like CANARI, is able to support capacity needs at technical and professional levels, but building capacity at senior policy and decision-making levels, particularly within governmental institutions, is equally necessary and requires different strategies.

Organisational cultures adopt conditioned reactions to external forces of change.

Governments and environmental organisations in the Caribbean are the constant focus of external influences, from development assistance agencies, consultants, and international and regional organisations, all of which have their own agendas. Sifting through each new opportunity or proposal would drain more time and resources than most organisations can afford. As a result, organisations adopt patterned responses depending on their own culture and experience. Some may embrace all external offers of assistance. Others may accept them but with little actual commitment or engagement. Others employ the longstanding Caribbean strategy of resistance to any change from the outside. These adaptive but non-selective reactions can be seen as a positive indication of institutional resilience, but one that increases the challenge faced by external change-agents such as CANARI.

Building trust, especially among multiple and acrimonious stakeholders, takes considerable time but is essential for effective capacity-development processes.

CANARI spent the first two years of its four-year intervention developing a detailed understanding of the local social, political, and institutional context and getting to know the actors involved. It built relationships with the main stakeholders by visiting them to discuss their problems and needs, inviting them to participate in training activities and conferences, and providing small forms of advice and assistance. It worked at creating linkages and alliances at as many levels as possible, from senior administrators to directors of organisations and agencies to

technical staff to representatives of important stakeholder groups. In doing so, it learned to navigate the minefield of local politics and organisational rivalries and to present an image of constructive neutrality. This time-consuming and often difficult effort made it possible to develop a comprehensive understanding of the institutional landscape and to effectively bring all the parties together for participatory processes of analysis (the management review) and planning (the system plan design).

Capacity development does not occur linearly, but in fits and starts, and requires repeated reinforcement.

As noted by Thompson (1996), the somewhat nebulous nature of capacity development makes it difficult to measure in quantitative terms. This difficulty is increased by the fact that capacity does not grow steadily day by day or month by month, but in short spurts, often followed by long periods of little or no progress. Understanding of complex concepts of participatory resource management grows slowly and requires practical reinforcement. Progress was most evident when participants in CANARI training activities were given opportunities to apply their learning to practical issues and problems. Without such reinforcement on a regular and repeated basis, much learning is lost.

The success of capacity development efforts is closely tied to the level of support and reinforcement provided by the political directorate.

It is quite possible that the achievements of the PARC project would have been more sustained if they had been reinforced through a demonstration of political support. Instead, however, financial commitments made by the government (for example, an annual contribution to the Jamaica National Parks Trust Fund) were not honoured; legal instruments for developing the system (such as regulations required for implementing user fee systems) were not prepared; key agencies were not given the budgetary and political support they needed; and NGO management partners were not provided with the technical support and assistance necessary to manage the protected areas delegated to them. Recognising the link between sustainability of capacity development and political support, CANARI, although not able to gain direct access to the political directorate, gave particular attention to promoting the involvement of senior administrators who have such access. This allowed some important initiatives, such as the marine park user fee system and the proposal for the development of a new system plan, to move forward without the resistance that had marked previous efforts. Longer-term efforts must however also concentrate on public outreach, both nationally and within communities in or adjacent to protected areas, since strong public support must eventually translate into commitment at the political level.

6. CONCLUSION

The process described in this paper demonstrates the long-term, non-linear, and often frustrating nature of capacity development. At the end of a four-year intervention, there are some clear indications of progress, but the future of Jamaica's national system of protected areas is by no means certain. While the system planning process proposed by CANARI is now under way with the full support and participation of all the main actors, even the most well implemented process will not solve all of the problems facing the system, including the lack of political will that is demonstrated by the insufficient and annually diminishing budgets of the country's natural resource management agencies.

A major challenge faced by organisations involved in capacity development is deciding when to withdraw from the process. It is well known that support that goes on too long can lead to dependence, while support that ends too soon may have no lasting impact. In the case described here, the duration of CANARI's intervention was defined by the length of the donor-funded programme that supported it. Whether this time frame will prove to have been adequate to provide a lasting impact, only time can tell. It will however be important for CANARI, local stakeholders including the government and EFJ, and interested external agencies to continue to reinforce the skills, approaches, and attitudes that have been developed. Only with such reinforcement can the process of capacity development continue and the system of protected areas move forward in support of national development.

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Caribbean Natural Resources Institute

The Caribbean Natural Resources Institute (CANARI) is an independent, regional, technical assistance organisation with more than 20 years of experience on issues of conservation, the environment, and sustainable development in the islands of the Caribbean.

CANARI's mission is to create avenues for the equitable participation and effective collaboration of Caribbean communities and institutions in managing the use of natural resources critical to development.

The Institute has specific interest and extensive experience in the identification and promotion of participatory approaches to natural resource management.

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