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**NRCA 2000
Workshop Report**

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NRCA 2000 WORKSHOP REPORT

1.0 INTRODUCTION

From September 11-13, 1992, the Natural Resources and Conservation Authority (NRCA) hosted a workshop--NRCA 2000--to assist the agency to establish a framework in which it can develop an Operational Strategy and Action Plan for effectively managing Jamaica's natural resources. The workshop stemmed from the growing concern that without a clearly articulated strategy for fulfilling its mandate (as set forth in the Natural Resources Conservation Act of 1991), the NRCA's efforts would achieve only limited success.

1.1 PARTICIPANTS AND FACILITATORS

The 53 participants were invited from various Government of Jamaica (GOJ) organizations, including board and staff members of the NRCA; public sector entities, non-governmental organizations (NGOs), and international donor organizations. The workshop was held at the Ciboney Hotel in Ocho Rios and was facilitated by a workshop team made up of environmental professionals from Jamaica, the United States, and Canada through assistance from the NRCA, United States Agency for International Development (USAID), and the Canadian International Development Agency (CIDA). A list of participants is included in Annex A.

1.2 DESIRED RESULTS

The workshop had five principal desired results:

1. Input for the leadership of NRCA and others from important constituencies on strategic questions facing NRCA as it plans its immediate and long-term needs;
2. A shared sense of NRCA's potential and likely areas of maximum leverage for fulfilling its mandate and purpose;
3. A stronger sense of coordination among players and potential players in the environmental management system;
4. Support and guidance in defining the most effective direction for NRCA in the short term; and
5. Input for guiding GOJ allocation of resources for environmental management.

The desired results of the workshop were ambitious, and it was understood from the start that the collaboration required to develop an overall environmental management system could not be achieved in one weekend. Therefore, the workshop was designed as the first in a series of dialogues and meetings between all the players in the environmental community of Jamaica.

1.3 WORKSHOP FORMAT

The format of the workshop was designed to lead the participants through four basic steps:

1. Assessing the strengths, weaknesses, opportunities, and threats that NRCA has or faces as it assumes the lead in ensuring that Jamaica's resources are sustainably managed;
2. In light of such assets and liabilities, addressing some of the strategic questions NRCA must answer to implement an environmental management system;
3. Piecing together a map of the various players in Jamaica's environmental management system, including identifying the resources each brings to the system as well as the needs each has of others in the system; and
4. Initiating an action plan aimed at establishing the mechanisms to address the issues arising out of the workshop.

The week before the workshop, each participant was provided: (1) a Briefing Paper which discussed the format and desired results of the workshop and (2) a questionnaire in which they were asked to rank a list of illustrative environmental issues in Jamaica. The following is a summary of the significant issues addressed during small group exercises and large group discussions at the workshop.

2.0 WORKSHOP OUTPUTS

2.1 ASSESSING NRCA'S STRENGTHS WEAKNESSES OPPORTUNITIES AND THREATS

The participants were divided into four groups and asked to address one of the following: (1) strengths, (2) weaknesses, (3) opportunities, or (4) strengths. The following issues were identified by the groups:

NRCA STRENGTHS

1. NRCA has a clear legal mandate
2. NRCA is a statutory body: salaries, appointments, flexibility, funding services
3. NRCA has a strong and diverse Board (GOJ, NGO, Private Sector) with high visibility
4. NRCA has strong staff leadership, including an Executive Director with a good record, acceptability, and open approach to issues
5. NRCA has access to expanding financial resources (donors, GOJ) as well as the possibility of a co-financing
6. NRCA is a new organization, able to make a fresh start and implement changes
7. NRCA has an experienced and loyal staff
8. NRCA has substantial body of well articulated proposals for action

NRCA WEAKNESSES

1. NRCA's predecessor had an unfortunate history due to inadequate support, resulting in an inability to perform or deliver
2. NRCA has inadequate autonomy despite its statutory status
3. NRCA has thus far demonstrated a slow pace in developing regulations
4. There exists an imbalance between NRCA's mandate and its available resources
5. NRCA has inadequate mechanisms for raising resources

6. NRCA lacks trained and sufficient numbers of staff
7. NRCA lacks an noticeable public image
8. NRCA lacks coherency as part of government machinery
9. NRCA suffers from poor communication internally, inter-agency and with the public
10. NRCA lacks a clearly defined role in policy implementation

NRCA OPPORTUNITIES

1. NRCA has an opportunity for assuming institutional leadership
2. Global interest exists on environmental issues
3. External financial and technical resources are availability
4. Growing national interest in environment offers a base for improving public awareness
5. A wealth of data on the environment exists offering a basis for action
6. Opportunities exist to strengthen and sustain the economic base of the country
7. Environmental concerns are being integrated into the planning and implementation of development projects
8. Committed communities are providing NRCA with the opportunity to devolve responsibilities to communities, local government, and other relevant organizations

NRCA THREATS

1. Public attitudes which pose potential threats include:
 - The perception of environment as anti-development
 - Public expectation/perception
 - Low level of comprehension of environmental issues
2. NRCA must operate in the context of Government budget cuts and funding policies of donors
3. Poverty decreases choices for adopting environmentally sustainable activities
4. Bureaucracy and institutional complexity of the system make establishing a coordinated environmental management system difficult
5. Jamaica's resource base consists of complex and interrelated ecosystems
6. The players in the system have vested interests and competition for limited financial resources

2.2 RANKING ENVIRONMENTAL PRIORITIES

A questionnaire was circulated before and during the workshop to offer participants the opportunity to present some initial thoughts on the priorities of environmental issues facing the NRCA. The questionnaire was circulated to the 53+ participants, including XX% who were invited but did not attend, as well as to 34 non-participants for their input prior to the workshop. Thirty-five (35) questionnaires were completed and returned. A copy of the questionnaire is provided in Annex C. The results of the completed questionnaire are presented in Table 1 on page 4.

2.3 ADDRESSING STRATEGIC ISSUES

Participants were divided into six groups, each of which addressed one of the strategic questions given on page 14 of the Briefing Paper. Presentations from the small groups are summarized below:

2.3.1 GROUP 1. What are the environmental issues on which NRCA should focus over the short, medium, and long terms?

Group 1 identified the following roles NRCA should assume in context of major substantive areas of the environment:

Watershed Management:	Executing agency for all the above
Beach and Coastal Zone Management:	Execution, monitoring, and implementation
Water Pollution:	Ministry of Tourism & Environment
Waste Management:	Ministry of Tourism & Environment

Table 1. Priorities of Environmental Issues Questionnaire

Issue	# Blanks	# Responses	Median	Ranking
Soil Degradation	1	34	9.2	1
Monitoring & Compliance	4	31	9.0	2
Coastal Pollution	3	32	8.5	3
Water Pollution	4	31	7.6	4
Coral Reefs	3	32	7.5	5
Natural Areas	2	33	7.4	6
Solid Waste	3	32	7.4	7
Agricultural/Forest Land	1	34	7.3	8
Environmental Health	5	30	7.3	9
Coastal Water	3	32	7.2	10
Toxic Waste	6	29	7.1	11
Urban Areas	4	31	6.9	1
Air Pollution	3	32	6.5	11
National Parks	2	33	6.2	12

2.3.2 GROUP 2. What role should the public play in environmental management?

Group 2 raised a number of issues which must be addressed to ensure public involvement in environmental management: (1) A distinction must be made between awareness and involvement; (2) There should be greater use of local and community mechanisms; (3) NRCA must provide an avenue for public involvement, and the public must help decide criteria for environmental management; (4) NRCA must be credible; and (5) Community based initiatives should be linked with NRCA's conservation efforts.

ADVANTAGES AND DISADVANTAGES OF INCREASED PUBLIC INVOLVEMENT
Increasing public involvement in the environmental management has a number of advantages and disadvantages. Advantages of public participation include an increased capacity in the following areas:

1. Environmental reporting and action against environmental abuse;
2. Communicating and accounting for individual choices regarding lifestyle/consumer;
3. Exerting pressure on political directorate for environmental protection, e.g., solid waste management; and
4. Exercising legal rights.

Disadvantages of public involvement include the opportunity for manipulation, the retardation of some kinds of positive development, and the increased cost of the development process.

ROLES OF ORGANIZATIONS IN INCREASING PUBLIC INVOLVEMENT

The role of NRCA should be the following:

1. Facilitate networking among existing agencies, NGOs, individuals, private sector;
2. Information exchange and dissemination;
3. Design and conduct national media campaign, the content, timing, and level of which need careful consideration; and
4. Support education on benefits of resource conservation.

The role of the private sector should be the following:

1. Provide funding;
2. Increase private sector sensitivity to needs for public participation and determination of community development;
3. Become more environmentally responsible ("green"), e.g., waste reduction/recycling, water/energy conservation;
4. Provide skills (e.g., management) and training; and
5. Provide technical assistance.

The role of NGOs should be the following:

1. Act as "watchdogs" for the environment;
2. Coordinate with NRCA to obtain and disseminate accurate information;
3. Conduct education programs (internal as well as outreach); and
4. Identify opportunities for public participation and community action.

The role of other government agencies is also critical.

2.3.3 Group 3: What should be the relationship between NRCA and other GOJ agencies?

Group three defined five general types of relationships existing among agencies:

1. Inter-ministerial;
2. Functional, based on legislation;
3. Functional, based on shared programs and goals;
4. Functional, based on shared resources; and
5. Informal.

The existing constraints affecting these relationships include:

1. Lack of clear and documented procedures;
2. Lack of clearly defined roles and functions;
3. Lack of effective communication;
4. Dominance of personality over systems;
5. Weak or nonexistent information system; and
6. Multiple levels of coordination committees.

Alternative strategies for addressing the constraints include:

1. Development and communication of clear and documented procedures for the mandated relationships;
2. NRCA and agencies to mutually define and reconcile their roles and functions;
3. Communication of procedural information to various user groups;
4. Development of a reciprocal information system for the collection and dissemination of relevant information; and
5. Use an inter-agency coordination committee as a focal point for establishing rationale for multiple committee relationships.

In conclusion, the role of NRCA will vary between different agencies. Identifying the precise role of NRCA will depend on the resources and relationships identified as part of the overall system. Moreover, it is critical that the relationships between the various agencies remain flexible to accommodate the evolving roles of the different agencies.

2.3.4 Group 4: What measures can be taken to develop and implement a regulatory and enforcement system?

Group 4 recognized that NRCA's most immediate and primary role was one of a regulatory agency; therefore, it is important that NRCA be independent of other organizations whose actions it may be regulating. The NRCA's general mandate, as specified in the Act, is to manage parks and regulate environment.

The function of acting as lead regulatory agency related to environmental management can be divided into three areas: regulatory development, monitoring, and enforcement.

NRCA's success in developing a strategy in each of these areas has three key elements:

1. In developing regulations, NRCA must take a participatory approach, involving those organizations that will be affected by the regulations;
2. NRCA should establish an enforcement unit of environmental "policemen" (within 3 months), with the appropriate training; and
3. NRCA should promulgate and regulate, while partially delegating enforcement power, i.e., citizens can bring suit in infractions.

REGULATORY DEVELOPMENT

NRCA cannot depend on delegation as a strategy for developing regulations; it must develop a core capability.

Procedures for promulgating regulations include:

1. Drafting regulations

2. Seeking Public consultation: comment by affected groups, e.g. tourism, firms, NGOs. Discussion, through Green Paper, should get wide circulation with time for comment.

A recommended timetable for regulatory development includes:

- | | |
|-------------------|--|
| Immediately: | Draft priority regulations, to be completed within 6 to 12 months.
Develop Environmental Impact Assessments (EIA) procedures and guidelines |
| Within 2 months: | Begin drafting regulations for watershed protection; air pollution; and water pollution |
| Within 12 months: | A timetable should be set for the promulgation of all regulations, standards and guidelines. |

Additional urgent items for regulation include environmental health and other natural areas, such as coastal wetlands.

MONITORING AND ENFORCEMENT

NRCA must develop a methodology of enforcement (delegation, etc.). The NRCA Act gives enforcement responsibility to the NRCA (Crown bound). The Town Planning Department (TPD) and Environmental Control Division (ECD), as two examples, have an unfortunate history of enforcing legislation. However, there are not enough people within NRCA to carry out all enforcement. Those committing infractions of environmental regulations concentrate on avoiding detection rather than compliance. Therefore monitoring is critical. NRCA's role in enforcement should be twofold: (1) to facilitate and coordinate groups with the potential to become involved in enforcement and (2) to delegate enforcement responsibility as stated in the NRCA Act.

While an environmental ethic is needed, there will not be compliance unless NRCA has the muscle to carry out enforcement, e.g., trucks stealing beach sand is even done by other government. Moreover, sometimes it is necessary to enforce the enforcers, e.g., customs.

NRCA needs to be seen as independent of Government, to be credible in enforcement. Government contravenes its own regulations, but it is difficult for a government agency to be seen as independent, for example government agencies rarely do anything that might embarrass another government agency. Therefore, private citizens should be called upon to be environmental monitors (such as game wardens). ECD has tried to mix government and citizen involvement, e.g., cleaning up trash in gullies. However, the fact that the trash cannot be permanently eliminated attests to the need for education (for people to use trash bins) to accompany citizen action. A major role for NRCA, therefore, should be to encourage growth and increased strength of community-based environmental organizations.

CONCLUSIONS

Monitoring and enforcement, with regulations, require immediate attention by NRCA.

Will government give information to citizens to enable them to participate in the monitoring and enforcement process? The public should have access to information. This power must be assigned either by law or policy, which raises the issue of the Public Information Act.

The NRCA Board needs to be strong enough to act independently and decisively. There have been cases in which this lack of independence has caused problems. For example, when the ombudsman took a stand, he got no staff. Therefore, NRCA needs a strong constituency, primarily NGOs.

Decisive action leads to public credibility. Strategies for enforcing infractions should include negotiation, ticketing, notice, and warnings. For example, in the context of harbour pollution, enforcement of the tax code offers a good model.

The Litter Act is an example of the very important role of the media in public education. The media seeks news potential--advertising.

Sanctions are critical for enforcement, and they should be significant.

2.3.5 GROUP 5: What measures can be established to support and promote private sector involvement and compliance?

Group 5 identified a ways in which NRCA can support and promote private sector involvement and compliance. Examples of potential support from NRCA include:

1. Creating strong links with private sector groups and companies in order to facilitate communication and encourage joint action;
2. Publicly supporting private sector initiatives to demonstrate action and direction
3. Trimming bureaucracy; and
4. Encouraging and facilitating private management of resources, via leases etc.

Promotion of private sector involvement and compliance can be facilitate by:

1. Involving the private sector in the development and promotion of clear realistic and practical regulations;
2. Keeping the private sector fully informed of programmes etc, and interpret regulations also ways to obey them, provide technical information;
3. Providing subsidies for adopting sustainable practices and taxing bad practices, i.e., polluter pays on amount of pollution produced; e.g. sewage;
4. Publicizing environmental performance, e.g., green and red stamp approach could be used as a programme stamp of environment operating approval.
5. Supporting economically sound education programmes; and
6. Monitoring and visibly enforcing regulations.

2.3.6 Group 6: How should the NRCA be financed?

Group 6 identified two types of funding objectives: base funding for NRCA and program implementation. The following guidelines are offered to direct the formulation of NRCA's financing objectives:

1. Funds should be in excess of demand/expectations of those of GOJ financial capacity;
2. NRCA financing must not only consider NRCA's financial needs, but must also consider requirements of the supporting, linked agencies National Water Commission (NWC), Underground Water Authority (UWA) and ECD; and
3. Core functions and priorities must be established in order to determine the extent of financing needs (regulatory framework, preparation, and enforcement; EIA standards and review; education). Source of money.

GOJ's financing responsibility is for basic, core functions funding. Sources of revenue can include:

1. Beneficiaries from use of environment (beaches, user fees, licenses, waterways, water resource) including the tourist industry and farmers;
2. Despoilers (polluters) fines, compensatory payments. such revenues generated should be used for closed-loop types of activities, i.e., specific programmes. Such revenues will go via NRCA to environmental projects/programmes;
3. Voluntary programmes - companies, community groups, NGO's;
4. Non-core government support for projects [debt swaps Environmental Foundation of Jamaica (EFJ) trust funds]; and
5. Donor financing (specialized institutional support, project specific).

2.4 MAPPING JAMAICA'S ENVIRONMENTAL MANAGEMENT SYSTEM

Participants were divided into five groups according to their professional affiliation: NRCA Board and staff; other Government agencies; donor agencies; private sector and NGOs; and training and research organizations. Each group was asked to assess the role it should play in the environmental management system by (1) articulating the desired results from the system, (2) identifying the resources it brings to the system, and (3) determining what it requires from others in the system to fulfill its responsibility.

2.4.1 GROUP 1: NRCA BOARD AND STAFF

DESIRED RESULTS

1. To ensure credibility of the NRCA by developing regulations and standards; identifying specific projects; emphasizing public education and public relations; and creating an effective enforcement unit;
2. To identify clear priorities and tackle/complete discrete projects in watersheds; water pollution; coastal zone management plan; and wildlife protection;
3. To commit to institution building for long-term mandate by acquiring adequate competent staff in the shortest possible time; satisfactory physical accommodation and equipment; and adequate funding; and
4. To coordinate and rationalize an institutional framework which identifies players, defines roles and establishes coordination mechanisms.

POTENTIAL CONTRIBUTIONS

1. Legal mandate and primacy of NRCA;
2. Potentially effective structure;
3. Power to demand EIA's and monitor projects;
4. Power to prosecute for breaches; and
5. Technical expertise and data.

NEEDS FROM OTHERS IN THE SYSTEM

1. Cooperation in achieving common goals by Government agencies eg. Urban Development Corporation (UDC), Lands Department, Parish Councils
2. From NGOs and the private sector:
 - Link between NRCA and communities
 - Early information at conceptual stage of development
 - Support of the private sector in carrying out NRCA's mandate

- Meaningful community outreach programmes from larger companies
 - Leadership in observing regulations
3. From donor agencies:
 - Technical and financial support (in particular in training programmes) development of regulations
 - Greater role in decision-making related to projects
 - Access to data systems
 4. From Research and training institutions:
 - Effective data sharing
 - Focused tertiary environmental research/education programme
 - Networking in accessing data information systems.

2.4.2 GROUP 2: OTHER GOVERNMENT AGENCIES

DESIRED RESULTS

1. Involvement--contributing to the solution of identifying environmental problems:
 - a clear statement of what needs to be done;
 - a strategy to carry out what is to be done;
 - coordinated activities amongst implementing agencies; and
 - facilitated communication and sharing of data amongst agencies.
2. Involvement in development issues to prevent environmental degradation and enhance sustainable development:
 - specific guidelines for EIA;
 - environmental inputs to assist land use decisions; and
 - Promotion of the preparation of environmental standards water quality, hazardous waste, industrial wastes, solid waste disposal, sewage effluents, and air pollution.
3. Monitoring and enforcement;
4. Public Education;
5. Involvement of all sections of the society in environmental issues; and
6. GOJ to be the focal point for up-to-date environmental information and thinking.

POTENTIAL CONTRIBUTIONS

1. Industrial agencies to provide inputs (technical expertise and experience);
2. Agencies will ensure that their own activities will accord with and support of the objectives of NRCA;
3. Agencies to provide vehicles through which selected environmental mandate can be implemented;
4. Support for the NRCA for the carrying out of environmental projects in requesting funding from Ministry of Finance & Development (MOF) and external agencies; and
5. Agencies can share information with NRCA.

NEEDS FROM OTHERS IN THE SYSTEM

1. Skilled staff--training;
2. Greater coordination between agencies to redress gaps;
3. Greater commitment/vision to optimize use of resources;
4. Public support; and
5. Support from the informal media.

2.4.3 GROUP 3: DONOR AGENCIES

DESIRED RESULTS FROM GOVERNMENT

1. An overall policy framework for sustainable development and for environmental projects;
2. Government prioritization of activities in environment with reference to NRCA and related institutions;
3. Strengthened Institutional capabilities (NRCA, Planning Institute of Jamaica (PIOJ), UWA etc.); and
4. Effective Coordination among the agencies involved.

DESIRED RESULTS FROM NRCA

1. Priorities for addressing issues;
2. A proactive role for NRCA in environment, bringing all shareholders into the process;
3. Clarification of NRCA's role in relation to development projects and programmes; and
4. Identifiable successes to increase credibility.

DESIRED CONTRIBUTIONS FROM NRCA

1. Rationalization of donor assistance in terms of financial and human resource demands (more focus); and
2. Assistance in strengthening institutional capabilities of NRCA and related agencies.

2.4.4 GROUP 4: PRIVATE SECTOR AND NGOS

DESIRED RESULTS FROM GOJ

1. Environmental plan
 - Widescale acceptance and participation of all stakeholders
 - Effective leadership--priorities, focus, direction
 - Successful implementation, accountability
 - National institutional framework for continuity (all stakeholder, roles, responsibilities)
 - Periodic review mechanisms
 - Government role confined mainly to regulation and general resource management. Private sector to play major role in resource management and project implementation
 - Published--staffing resources available, objectives, etc.
 - Long-term perspective--short-term discrete activities- projects
2. Taking responsibility to ensure "own house in order"
 - Providing funds for implementation
 - Provision of expertise, training, human resource development
 - Assist in monitoring and enforcement participation in national framework
 - Vehicle for public participation, public education at community and national levels.
 - Advocacy, lobbying, problem identification and solution, and vision
3. Training/Research/Information
 - Appropriate technology (environment friendly, relevant research findings)
 - Accessible database

- Training programmes
- Expertise
- Cost/benefit analysis incorporating all environmental factors (quality and quantity)

NEEDS FROM DONORS

1. Funds with mutually acceptable conditions (no strings);
2. Clear guidelines for sourcing funds; and
3. Sensitivity to local priorities, maximum use of local expertise and resources.

NEEDS FROM OTHER GOJ AGENCIES

1. Acceptance of an agreed role within the national framework;
2. Preparedness to collaborate meaningfully;
3. Commitment to be environmentally responsible;
4. Transparency and credibility; and
5. Services more accessible to rural population.

2.4.5 GROUP FIVE: EDUCATION, TRAINING, AND RESEARCH

EDUCATION AT THE NATIONAL LEVEL

Desired results are: overall awareness; changed values/attitudes to social development ethic; renewed commitment; and participation/involvement.

Potential contributions of educational system to overall environmental management include:

1. promote changes to curricula in schools, training colleges, and universities;
2. provide opportunities in informal programmes;
3. inform and interact with the media, community groups and other NGO's and interest groups;
4. improve documentary output on environmental issues;
5. hold workshops on sectoral bases/informal programmes for special interest groups dependent on a particular resource base; and
6. mount demonstration programmes.

Needs of education from other groups are:

1. clear policy and priorities;
2. funding;
3. an open mind to new proposals; and
4. reliable information on their activities.

TRAINING

Desired results are development of array of technical skills to improve environmental management and strengthening of institutions/support services, eg. business administration, computer operation, leadership skills, and management.

Potential contributions are facilities; equipment; expertise/personnel; and access to funding.

Needs from other groups are reliable information; definitions of roles and responsibilities; and commitment and co-operation.

RESEARCH

Desired results include:

1. Quality, relevant and timely information;
2. Improved understanding of natural resources of Jamaica;
3. Understanding of the relationships between global systems and Jamaica;
4. Socio/Economic/Political significance of resource use and characteristics;
5. Acceptance and application of innovative techniques in environmental studies, eg. biotechnology; and
6. Trained "hot shots".

Potential contributions include expertise; facilities; techniques; methodology; and training, both formal and informal.

Needs from others include collaboration; funding; opportunities; and information.

2.5 ACTION PLANNING AND NEXT STEPS

Participants were divided into four groups to begin identifying short-, medium-, and long-term action items which address some of the major goals arising during the workshop. Specifically, groups were asked to identify next steps to:

1. Ensure that the strategic planning process is continued after the workshop,
2. Ensure local and community involvement in environmental management,
3. Develop a national programme for environmental education and information
4. Establish NGO/private sector collaboration in support of the monitoring and enforcement function of the NRCA.

2.5.1 GROUP 1: INSTITUTIONALIZING STRATEGIC PLANNING, ENSURING THE CONTINUATION OF THE PROCESS

To what extent can the existing process be improved upon? NRCA should concentrate on legislation, policies, programmes, and projects. From a planning perspective, NRCA should identify priorities among environmental concerns, based on environmental degradations. Many agencies exist to achieve these objects, including organizations up to cabinet level.

POLICY DEVELOPMENT

1. NRCA should identify policy needs and draft policies;
2. NRCA should participate in consultation with stakeholders; and
3. Draft policies sent to Board for approval.

PROGRAM DEVELOPMENT

1. NRCA and inter-agency technical group should develop programmes and plans;
2. NRCA should attempt formal consultations with tourist agencies, NGOs, donors, and community groups that are not NGOs; and
3. NRCA should ensure that project preparation takes place. Action by NRCA. The project implementation phase could possibly involve NRCA or other agencies.

2.5.2 GROUP 2: ENSURING LOCAL GOVERNMENT AND COMMUNITY GROUP PARTICIPATION

Group 2 recognized that local government has some responsibilities for environmental management. Specifically, local authority approves local development actions through building authorities and is responsible for overseeing health issues, solid waste management. General objectives include the following:

1. NRCA should look for opportunities to enhance existing responsibilities of localities. Examples of some new areas include monitoring and enforcement of environmental regulations for sand, mining, and watersheds.
2. The broad objective should be to involve local leadership and communities in community environmental management. Use existing structures such as service clubs, service groups, and the private sector.
3. Local authority employees could be authorized to take on additional responsibilities for enforcement building inspectors and litter wardens. Others who travel locally could be given additional responsibilities such as wildlife protection, sand mining, and watersheds management.
4. Local organizations can be involved in observing and reporting breaches, in areas such as wildlife protection.
5. NRCA could support sensitizing communities to environmental issues to facilitate the development of community-based projects to enhance environment. If the community appreciates that environmental degradation contributes to economy deprivation, support of environmental initiatives would increase.
6. NRCA to provide technical support and offer pilot projects, and project formulation of pilots from other areas. Also financial support.

METHODOLOGY

1. Inclusion of NRCA in current programs to create an integrated community network and approach--an attempt to eliminate waste and duplication, with a rational process. Each community agency could feed in its own perspectives.
2. Inclusion of Local Government in environmental and strategic planning.
3. Training and orientation for local leadership to increase awareness of the roles that they can play to become involved in environmental management.
4. Design and execute pilot projects, as examples for local communities. Example: watersheds could be better managed if the community is sensitized. Needs to address fundamental issues/ causes of degradation.

RESOURCES NEEDED

1. Communities and local staffs are already in place;
2. Technical support from NRCA, University of the West Indies (UWI), others; and
3. Financial support from external donors.

TIME SCHEDULE

Short and medium-term. Most mechanisms for increasing local and community involvement are in place and could be carried out with few additional resources. NRCA needs to deepen the present process.

2.5.3 GROUP THREE: DEVELOPING A PROGRAMME FOR ENVIRONMENTAL EDUCATION AND INFORMATION

Group three suggested a practical separation is helpful in identifying action items for education from action items for information dissemination.

ENVIRONMENTAL EDUCATION

Goal: Increase public awareness and knowledge to influence attitudes, to promote action, and to increase understanding. The process of increasing understanding is different from information dissemination.

Target: Local and national groups.

Strategies:

1. Modalities and mechanisms must be appropriate to specific targets. Nationally, environmental education should deal with media and existing education infrastructure, from primary to tertiary, and community organizations.
2. Develop and select programmes and content of programmes most appropriate to each group. Content of each must be relevant to each group. Eg, fisherman different from tertiary level.
3. NRCA is not responsible for developing a programme itself, but defining the main issues in such a programme.

NRCA responsibilities: NRCA should define and prioritize the main issues that need to be addressed through an education programme that would be implemented by all of the institutions involved in education, and all key players (UWI, Ministry of Education, NGOs).

INFORMATION DISSEMINATION

Goal: improve process of decision-making by which we define priorities. Improve documentation of environmental information.

Target: A whole range of constituencies.

Strategies:

1. Give recognition to and build on work that is already being done. Don't re-invent the wheel. Many examples exist of solid environmental education and information dissemination.
2. NRCA's role should be to address and prioritize information dissemination.
3. Use a wide range of mechanisms: media, seminars, awards, workshops, compilation of directories, and database of appropriate network structure to disseminate information.
4. Resource should be programme-specific in terms of manpower, money, management, machinery and equipment.

Time: Immediate--No debate with programme duration ongoing.

2.5.4 GROUP FOUR: ESTABLISHING NGO/PRIVATE SECTOR COLLABORATION IN SUPPORT OF THE MONITORING AND ENFORCEMENT FUNCTION OF THE NRCA

Group four identified the following general methodology for monitoring and enforcement. Monitoring and enforcement requires three essential functions steps:

1. conceptualization
2. preparation
3. support

Assumptions: The priorities for regulations were established in previous days small group sessions; therefore, it is assumed that all the parties involved would collaborate on the development of regulations.

To restate the general process for developing regulations, NRCA should:

1. Call a meeting of all concerned actors;
2. Prepare and circulate first draft to concerned parties;
3. Meet to discuss comments and generate second draft; and
4. Promulgate regulations.

This process, based on the previous days discussion, is expected to take between 6-12 months. Moreover, NRCA should identify resources required for monitoring and enforcement during the period of regulatory development.

MONITORING

There are four basic types of monitoring:

1. Self monitoring (single entities, including NRCA monitoring the monitors)
2. Industry monitoring
3. Public monitoring
4. NRCA monitoring

Self, industry, and public monitoring. The NRCA Act requires that individual entities establish environmental accounting procedures. To assist with this responsibility NRCA should establish a database, identify staff needs and resources, and facilitate access to appropriate technologies.

NRCA monitoring requires accessibility of public to monitoring and enforcement issues, which requires (a) establishment of an information and monitoring hotline, (b) regional offices, (c) vehicles and other equipment, and (d) use of contractors.

Other vital components of the monitoring and enforcement system include:

1. Emergency response
2. Training and Education
3. Environmental audits

ENFORCEMENT

NRCA's role should be the following:

1. Encourage entities to report infringements (implies training need)
2. Initiate legal action
3. Public information dissemination on enforcement reporting
4. Training of wardens
5. Lobby for environmental court
6. Sensitizing the legal system

METHODS OF NON-LEGAL ENFORCEMENT/COMPLIANCE

1. Professional/industrial self sanctions;
2. Public exposure of polluters and "good guys," e.g., green/red stamps;
3. Mechanism for NRCA to receive feedback from public; and
4. Environmental information dissemination on appropriate action, behavior, and procedures

3.0 OTHER ISSUES RAISED

3.1 MAJOR THEMES

1. There is an urgent need for strong environmental leadership and acceptance of NRCA as a source of leadership.
2. NRCA's leadership role should focus more on results and how to get there, than on NRCA's own role.
3. NRCA needs to take the lead to establish regulations and guidelines. It should take the lead in collaboration with others in environmental monitoring.
4. NRCA needs to be sufficiently independent to take strong regulatory stand.
5. NRCA cannot function alone within the government. Thus there is need for extensive inter-agency collaboration among NRCA and other agencies.
6. There is an important environmental management role for NGOs, but their responsibilities and lines of communication between them and government are not clear.
7. There is need for external resources for the environmental system as a whole. NRCA is a key conduit.

3.2 MAJOR ISSUES OUTSTANDING

Two major issues were placed in a "parking lot" because it was recognized that they were too complex to be addressed during the short duration of the workshop:

1. The focus of sustainable development planning for Jamaica and the role of NRCA in support of PIOJ's overall responsibilities; and

2. The role of private, non-governmental organizations such as JCDDT in direct management of public lands and parks.

4.0 SUMMARY AND CONCLUSIONS

During the closing session there was discussion of the constraints imposed by the Official Secrets Act and the need for wider public dissemination of environmental data. Some ongoing programs, such as those of RADA, have incorporated an environmental ethic. Increasing the dialogue will make the synergy more intense.

In closing, Amb. Donald Mills thanked the participants for their interest, which had made the workshop a very successful encounter.

The rising level of comment about environmental matters in Jamaica made the workshop timely. Although there have been comments about negative environmental changes, interest among donors, the Earth Summit in Rio, and Agenda 21 are positive steps.

The exhaustive discussion, with the good ideas and proposals it produced, will be useful to the Board for its retreat planned for October. NRCA needs to attain a greater degree of competence and focus. There needs to be a better arrangement for cross-sectoral discussions at the Cabinet level, on issues such as watersheds. NRCA is the lead central agency, moving other actors, create partnership.

We need to review and re-focus environmental priorities from time to time. In 20 years, surely there will be a transition. If we are successful, communities will be taking on their own responsibilities. If NRCA is still in the same position then that it is now, then I would say we were not successful.

ANNEX A: AGENDA

Friday, 11 September

- 1500- 1630** **Registration**
- 1630- 1745** **Plenary: Introduction to the Workshop**
- Opening address (Hon. Donald Mills)**
**Desired results, context and roles of participants and
resource persons (Franklin McDonald)**
Warm-up activity
Agenda and suggested norms (Alan Hurwitz)
Agenda and logistics (Claudette Walker)
- 1745** **Plenary: Strengths, Weakness, Opportunities and Threats (SWOT)**
- Importance of feedback and identification of leverage
points (Franklin McDonald)**
Overview of activity (Alan Hurwitz)
Initial SWOTs (Conrad Douglas/Alan Hurwitz)
- 1800** **Small groups: SWOTs**
- 1830- 1900** **Plenary: Posting of results**
- 1900- 1930** **Cocktail reception**
- 1930- 2100** **Dinner**

Saturday, 12 September

- 0845- 0900** **Plenary: Introduction to strategic questions**
- Context; NRCA challenge (Franklin McDonald)**
Overview of the activity (Alan Hurwitz)
- 0900- 1045** **Small groups (6): strategic questions exercise**
- Alternatives; plusses and minuses; sense of the group**
- 1045- 1100** **Break**
- 1100- 1230** **Reports from small groups and discussion**

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- | | |
|-------------------|---|
| 1230- 1400 | Lunch (break) |
| 1400- 1430 | Mapping of Jamaica's environmental management system |
| 1430- 1630 | Small groups, by sector: Mapping activity- results; contributions; needs |
| 1630- 1645 | Break |
| 1645- 1800 | Reports from small groups and discussion |
| 1800- 1900 | Break |
| 1900- 2100 | Dinner, followed by donor panel
(UNDP, UNEP, WORLD BANK, IDB, CIDA, USAID) |

Sunday, 13 September

- | | |
|-------------------|---|
| 0830- 0900 | Synthesis of results and proposed directions
(Hon. Donald Mills & Franklin McDonald) |
| 0900- 1030 | Small groups: action plan exercise |
| 1030- 1100 | Break |
| 1100- 1230 | Plenary: reports from small groups and action plan discussion |
| 1230- 1330 | Workshop summary and identification of next steps |
| 1330 | Lunch and closing |

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ANNEX B: LIST OF PARTICIPANTS

Ministry of Tourism and Environment

**Mrs. Leonie BARNABY
Mr. Learie MILLER
Mr. Richard THOMPSON**

NRCA Board

**Hon. Donald MILLS, Chairman
Mr. Leo LAWSON, Vice Chairman
Mr. George CAMPBELL
Mrs. Sybil RENDLE
Mr. Hosford SCOTT**

NRCA Staff

**Mr. Franklin McDONALD, Executive Director
Ms. Michelle DUNN
Ms. Murine GARVEY
Ms. Karen MORGAN
Mr. Jacob TAYLOR
Mrs. Claudette WALKER**

Consultants to NRCA

**Mr. Conrad DOUGLAS, Conrad Douglas & Associates
Ms. Joy DOUGLAS, Conrad Douglas & Associates**

Town Planning Department

Mr. Colin POWELL, Deputy Town Planner

Ministry of Agriculture

Rural Agricultural Development Agency (RADA)

Dr. Garnett BROWN

Ministry of Mining

Mines and Quarries Division

Mr. Hulson WALTERS

Ministry of Health

Environmental Control Division (ECD)

Ms. Ghislaine Ho Yorck KRUI, Scientific Officer

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Ministry of Public Utilities

Underground Water Authority (UWA)

**Mr. Thorant HARDWARE, Managing Director
Ms. Michelle WINT**

National Water Commission

**Dr. Wayne REID, Chairman
Mr. Paul MORGAN**

Ministry of Local Government

Mr. Keith MILLER

Planning Institute of Jamaica (PIJ)

**Mrs. Marjorie HENRIQUES, Deputy Director
Mr. Hopeton PETERSON, Urban and Regional Planner**

University of the West Indies

**Prof. Gerald LALOR, Principal
Prof. Ian BALL, Zoology Department
Dr. Jeremy WOODLEY, Marine Sciences
Ms. Wendy VAN BERNAVELD, Discovery Bay Bio. Lab**

Jamaica Conservation Development Trust (JCdT)

Dr. David SMITH, Executive Director

National Environmental Societies Trust (NEST)

Mr. Michael WHITE, Board member

National Development Foundation of Jamaica

Dr. Blossom O'Meally-Nelson

Caribbean Research and Development Institute (CARDI)

Dr. Janice REID, Executive Director

Private Sector Organization of Jamaica (PSOJ)

Dr. Barry WADE, Environmental Solutions Ltd.

Annex B, List of Participants, pg. 3

Jamaica National Heritage Trust

Mr. Ainsley HENRIQUES, Executive Director

United Nations Development Programme (UNDP)

Dr. Denis BENN, Resident Representative

United Nations Environment Programme (UNEP)

Mrs. Beverly MILLER, Acting Chief, CEP/RCU

World Bank

Ms. Amolo NG'WENO, Economist, Caribbean Operations

Inter-American Development Bank (IDB)

Mr. Edward FAHRNWORTH

Canadian International Development Agency (CIDA)

Mr. Hunter MCGILL

Mr. Ross NOBLE

Ms. Valerie GORDON, Environmental Adviser

Mr. Simon MILES, Consultant

U.S. Agency for International Development (USAID)

Ms. Marilyn ZAK, Deputy Mission Director

Mr. Stephen REEVE, Environmental Adviser

Consultants: EPAT Project Team

Dr. Jesse McCORRY, Team Leader

Mr. Alan HURWITZ, Workshop Facilitator

Dr. Winston McCALLA, Legal Adviser

Ms. Jeanne MALTBY, Editor

Dr. David Read BARKER, Tech. Asst. Coordinator

The Nature Conservancy

Dr. Gina Green, Director, Jamaica Country Program

RANKING OF ENVIRONMENTAL ISSUES QUESTIONNAIRE

Which of the following environmental management issues are the most important for NRCA/GOJ to address over the balance of the century? Please evaluate each on a scale of 1-10, with 10 representing the greatest importance.

-
- Address soil loss and deforestation of important watersheds depended on by urban populations for water supply.
-
- Reduce near shore coastal water pollution in key tourism areas to remove risk of foreign exchange loss.
-
- Protect coral reefs from further degradation with improved pollution control, fisheries management, mangrove protection, etc.
-
- Protect important natural areas (often small in scale) such as flood plains, mangroves, erosion prone lands, water sources and wildlife habitat from inappropriate resource harvesting, informal settlement, etc.
-
- Establish national parks to protect nationally significant natural areas (usually larger in scale) such as Black River Morass and the Cockpit.
-
- Address environmental components of typhoid and other environmental health issues in specific geographic areas of greatest concern.
-
- Improve solid waste management (including recycling and waste collection and disposal) in key urban centers where problem is most critical.
-
- Protect economically significant agricultural and forestry lands in areas under greatest pressure.
-
- Clean important coastal water bodies such as Kingston Harbour and Montego Bay and reduce industrial and agricultural pollution of water courses.
-
- Encourage environmental improvements within cities to include protection of remaining natural areas, creation of urban parks and open space, proper location of new settlement, and expansion of infrastructure.
-

Address growing ground water pollution problems in areas adjacent to most rapidly growing cities.

Address air pollution problems growing from industrial emissions and unregulated burning of trash and fields.

Improve the management of toxic and hazardous waste.

Establish an effective monitoring and enforcement system.

Other:

Other:

Other:

COMMENTS:

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