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# **Caribbean Disaster Preparedness Seminar**

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## **Executive Summary**

St. Lucia, West Indies  
June 10-20, 1979

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry, no matter how small, should be recorded to ensure the integrity of the financial data. This includes not only sales and purchases but also expenses and income. The document provides a detailed list of items that should be tracked, such as inventory levels, accounts payable, and accounts receivable. It also outlines the procedures for recording these transactions, including the use of journals and ledgers. The second part of the document focuses on the reconciliation process. It explains how to compare the company's records with bank statements and other external sources to identify any discrepancies. This process is crucial for detecting errors and preventing fraud. The document provides step-by-step instructions for performing a reconciliation, including how to identify and investigate any differences. The final part of the document discusses the importance of regular audits. It explains that audits are necessary to ensure that the financial records are accurate and that the company is complying with all applicable laws and regulations. The document provides a checklist of items to be audited and outlines the procedures for conducting an audit. It also discusses the role of the auditor and the importance of maintaining a clear and organized record of all audit findings and recommendations.

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CARIBBEAN DISASTER PREPAREDNESS SEMINAR

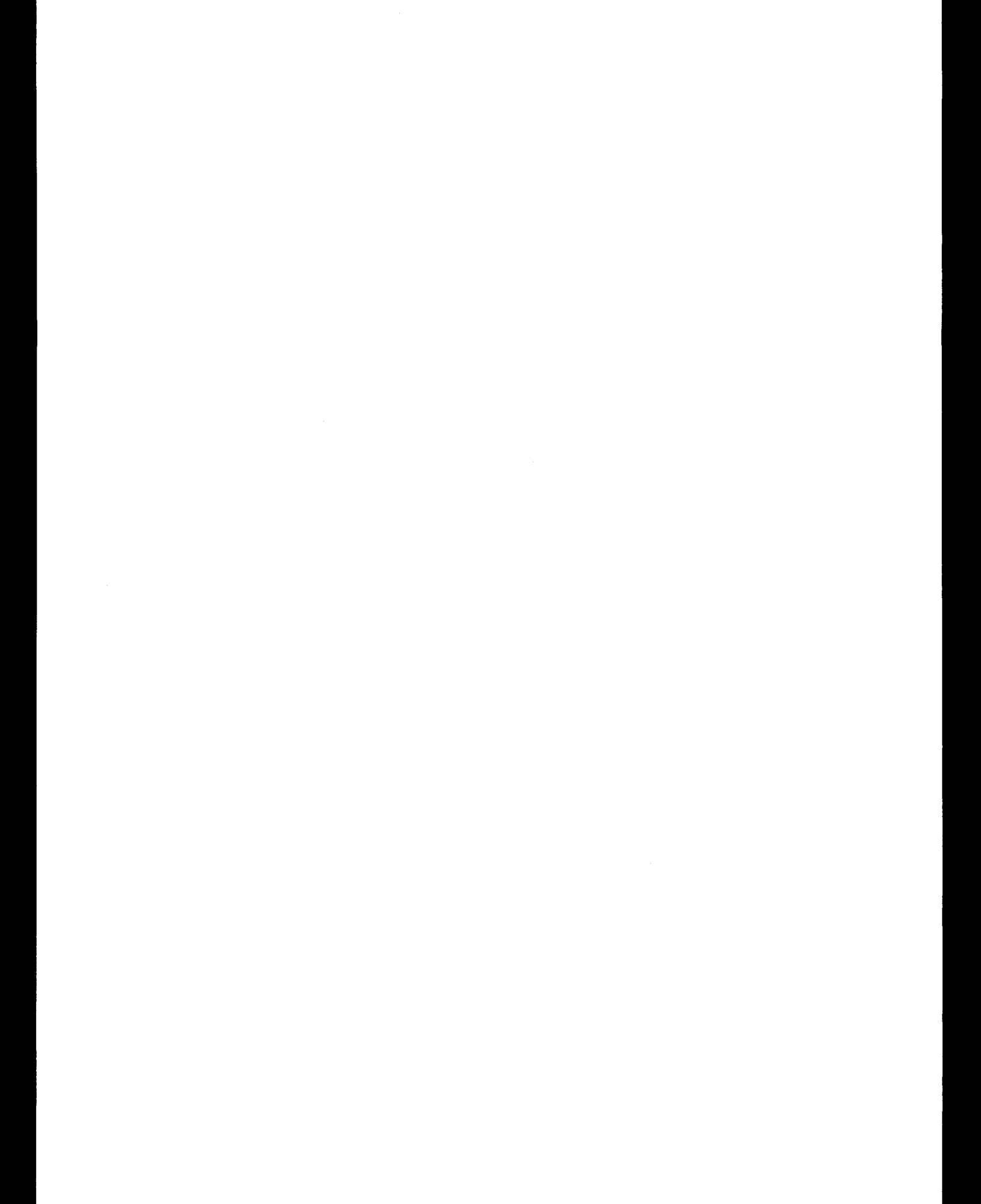
St. Lucia, West Indies

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EXECUTIVE SUMMARY

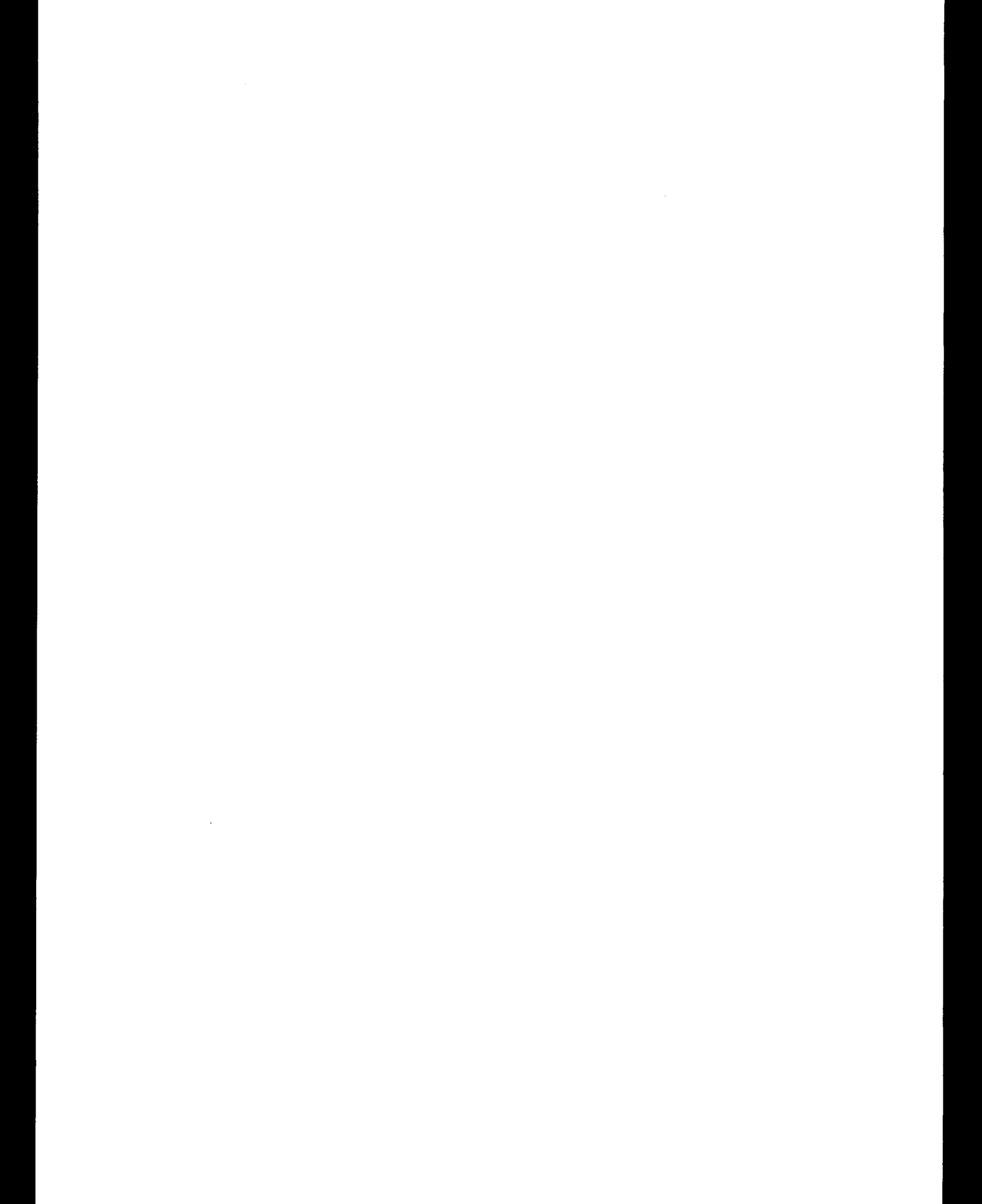
SPONSORING ORGANIZATIONS

The American Council of Voluntary Agencies for  
Foreign Service, Inc.  
The Caribbean Community  
The League of Red Cross Societies  
The Office of U.S. Foreign Disaster  
Assistance, A.I.D.  
The Organization of American States  
The Pan American Health Organization  
The United Nations Disaster Relief Office  
The University of the West Indies



## TABLE OF CONTENTS

- I. Disaster Planning
  - A. General Policy
  - B. Communications
  - C. Planning Information and Acceptable Risk
  - D. News Media Role
  - E. Public Education
  - F. Administrative Structure for Disaster Planning and Relief
  - G. Requirements and Alternatives in Pre-Disaster Planning
  - H. Disaster Threat Awareness
  - I. Disaster Prevention and Mitigation
  - J. Inventory of Essential Facilities
- II. Seismic and Volcanic Preparedness
  - A. Development of National Seismic and Volcanic Monitoring Networks
  - B. Mobile Emergency Monitoring Service
  - C. Preparedness for Continued Operation of Essential Utilities
  - D. Improvement of Volcano Monitoring Systems
  - E. Seismic-Resistant Design and Construction of Private Dwellings
  - F. Regional Communications
- III. Meteorological Preparedness
  - A. Improved Hurricane Awareness
  - B. Improved Weather Warnings
  - C. Improvement of Meteorological Observing Stations
- IV. Health Preparedness
- V. Preparedness for Environmental Disasters
- VI. Preparedness for Oil Spills
- VII. Drought and Famine Preparedness
- VIII. Preparedness for Transport Disasters
- IX. International, Governmental and Non-Governmental Agencies
- X. Regional Cooperation



## FOREWORD

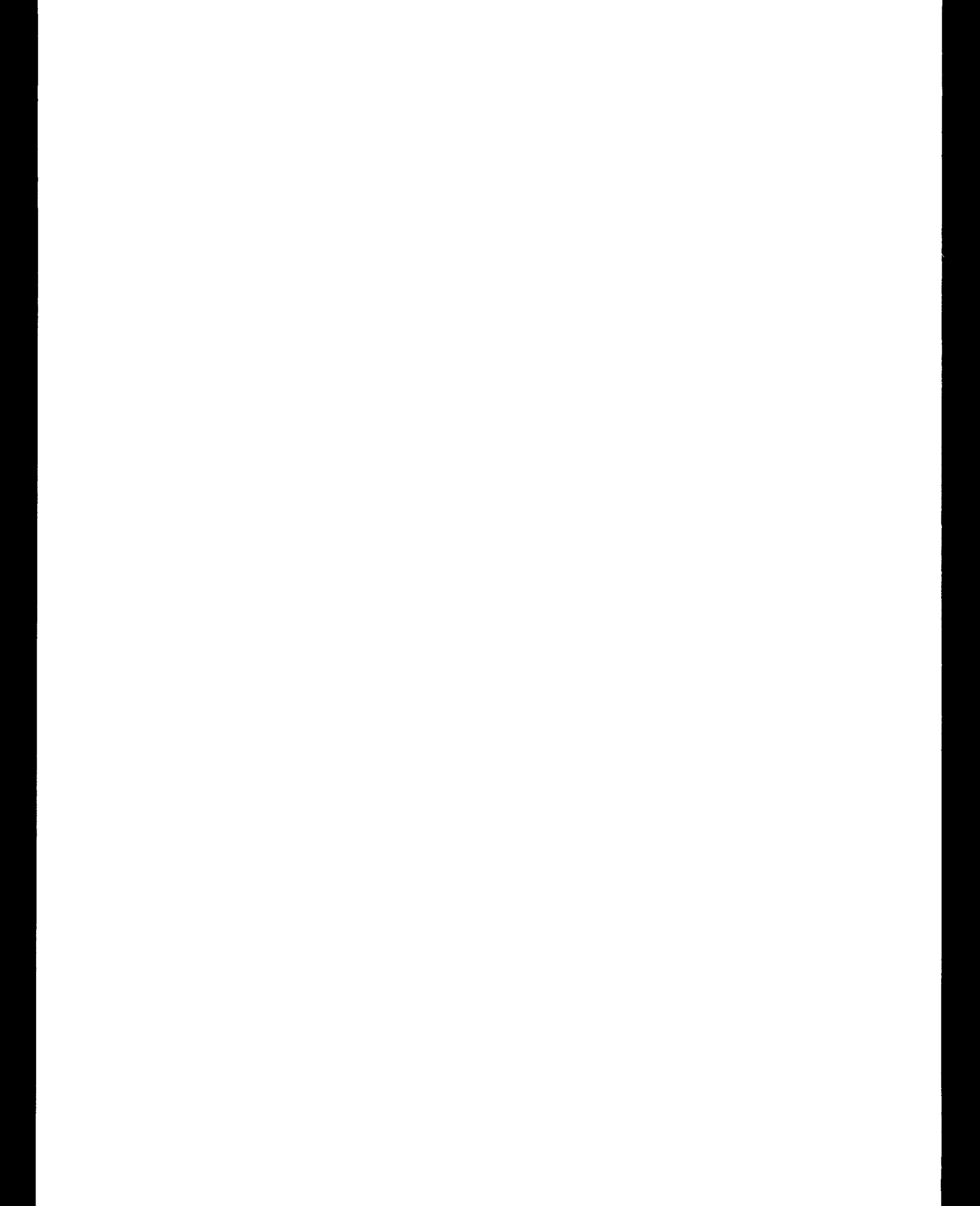
Regional and international disaster preparedness planners have long recognized the Caribbean's high levels of risk from natural and man-made disasters. They agree that preparation for events they consider unavoidable has been insufficient. Reacting to the need for action to minimize the impact of potential catastrophes, planners from Caribbean governments and international organizations designed and held a broad-based disaster preparedness seminar in St. Lucia from June 10 to 20, 1979, for the Caribbean islands and certain adjacent mainland countries.

Seminar objectives were:

- To better understand the disaster threats.
- To highlight areas of special vulnerability.
- To identify problems inhibiting preparedness measures.
- To recommend actions which can be taken to strengthen country and regional preparedness.

More than 150 representatives from twenty-two Caribbean governments, Caribbean and international organizations and scientific or technical fields participated in the seminar. The intensive program reviewed the disaster threats to which the region is vulnerable and the specific preparedness requirements for each. On this basis, participants agreed on a number of preparedness recommendations, which are here summarized.

This report, and the full text of recommendations, have been sent to heads of participating governments and organizations for consideration of priorities and appropriate future action. It is hoped their views can be communicated during the next few months to the interim Caribbean disaster preparedness information exchange which will operate as an adjunct of the Office of U.S. Foreign Disaster Assistance, Agency for International Development, Room 1262A N.S., Washington, DC 20523. A working meeting of national and organizational representatives, tentatively planned for early 1980, will attempt to translate the information received into a detailed program to increase preparedness levels in a number of crucial areas.



## EXECUTIVE SUMMARY

### I. Disaster Planning

#### A. General Policy

The major responsibility for disaster preparedness rests with national governments. Each nation should review and evaluate its disaster responsibilities and establish policies and programs for disaster mitigation, preparedness and emergency action. Advance disaster preparedness planning should include provisions for legislation, funding, education, community participation, national organizations, responsibility distribution, logistics, supplies, communications, coordination of resource agencies, and relations with regional bilateral and international voluntary and non-governmental organizations. National socio-economic development plans should include a section on disaster preparedness.

Since funding is the one element which affects all the others, it must receive particular attention from the beginning. Various possibilities for funding disaster-related activities exist. Governments are urged to study alternative methods of funding as a precondition for an effective disaster assistance program.

#### B. Communications

Each government should establish a communications policy and a reliable disaster/emergency communications system. A national communications planning team should be formed to survey existing communications systems and prepare an integrated disaster communications scheme.

#### C. Planning Information and Acceptable Risk

Governments should define, identify and develop, as necessary, scientific/technical advisory groups from which they can obtain information and recommendations needed to cope with disasters. Governments should also set up effective methods for obtaining scientific and professional knowledge for planning purposes. During crisis periods the information from the scientists monitoring the event should be as comprehensive as possible. Governments should consider whether

acceptable levels of risk and exposure can be determined and whether they would be acceptable to those concerned.

D. News Media Role

Every nation's disaster plan should include a section on the role of the media before, during and after a disaster. Governments should provide a quick, accurate flow of uncensored information to media outlets. Toward that end, a single point of contact for authoritative information should be established. The social responsibility of the media and the media's educational role in preparedness and training should be recognized by government. Media should refrain from publishing unsubstantiated information which may alarm the public or misrepresent conditions.

E. Public Education

Public education has a basic role to play in demystifying disaster threats, in teaching appropriate responses to specific disaster situations and in disseminating information concerning preventive measures and preparedness plans.

F. Administrative Structure for Disaster Planning and Relief

The national agency for disaster planning and relief operations should be under the direct authority of the head of government, who may, however, delegate this responsibility.

G. Requirements and Alternatives in Pre-Disaster Planning

Model pre-disaster and post-disaster preparedness plans should be developed for the countries of the Caribbean region. Individual countries should formulate their own national plans or modify existing plans, taking into account the content of the model. Government interest and commitment to pre-disaster planning could be stimulated by reference to:

1. Recent disasters, including those in neighboring or other countries.
2. The adverse economic, social and political effects of disasters.

3. Availability of international assistance, as well as the possibility of assisting other countries stricken by a disaster.

#### H. Disaster Threat Awareness

Current awareness of disaster threats and mitigation methods should be improved and extended to (1) decision makers, (2) opinion makers and (3) the general public. Media, audio-visual and printed materials (as well as school curricula) should be designed for this purpose.

#### I. Disaster Prevention and Mitigation

Significant reduction of human and economic losses may be achieved by the implementation of building codes and land use policies. Appropriate building codes can reduce losses from earthquakes and hurricanes. Land use zoning based on geotechnical mapping and risk analysis encourages the avoidance of high disaster risk areas for the location of essential facilities. It also identifies safe areas for evacuation sites in the event of meteorological and volcanic disasters.

#### J. Inventory of Essential Facilities

Physical facilities, equipment and supplies required for search and rescue, shelter, life support, mass care and other disaster response activities should be identified. They should then be subjected to critical examination and inventory so that they will function adequately and meet emergency disaster needs. Corrective measures should be taken if inadequacies are identified.

### II. Seismic and Volcanic Preparedness

#### A. Development of National Seismic and Volcanic Monitoring Networks

Earthquakes and volcanic eruptions are capable of causing large-scale disasters. One of the first preparedness essentials is to collect scientific data as basis for risk assessment and for development of predictive capability. A national or subregional seismic network is essential to data collection and evaluation. It is recommended that countries which do not possess such a network take steps to develop one.

B. Mobile Emergency Monitoring Service

A scientific volcanic and seismic emergency team of specialists with regional expertise should be developed and supported by a pool of emergency equipment. This team could be sent at short notice to any country in the region to investigate a potential emergency or advise on technical or scientific aspects of a disaster.

C. Preparedness for the Continued Operation of Essential Utilities

Recent seismic events have illustrated the vulnerability of essential utilities including water supplies, electricity, transportation and communications. This vulnerability should be analyzed and remedial measures should be prescribed.

D. Improvement of Volcano Monitoring Systems

Volcanic eruptions present a major hazard to life and may necessitate large-scale, highly expensive evacuations. The upgrading of permanent monitoring systems of individual volcanoes can generate sufficient confidence in the prediction of future events to substantially reduce the scale of evacuation without increasing risks.

E. Seismic-Resistant Design and Construction of Private Dwellings

Simple guidelines should be prepared to assist small builders in constructing seismic-resistant private dwellings. Model houses should be built to illustrate how to make the best use of available materials and improved construction practices.

F. Regional Communications

A comprehensive regional survey should be made of communications systems. Needed improvements should be made.

III. Meteorological Preparedness

Hurricanes and hurricane-related floods pose a major threat to the Caribbean countries. In view of reported wide-scale misunderstanding of and growing apathy toward the impact of these great storms, governments should give

serious consideration to the specific proposals of the World Meteorological Organization's Hurricane Committee, especially those related to warnings, public education, and preparedness

#### IV. Health Preparedness

A disaster-stricken country depends primarily on its own resources for the first few days following the impact. Greatest emphasis, therefore, should be placed on the optimal utilization of existing health resources to maintain the delivery of primary health care and for the treatment of mass casualties. Although disasters are rarely followed by epidemics, the restoration or improvement of services, water and power supply, sanitation and vector control is of utmost importance.

A senior health official should be designated by each government as part of the national disaster plan to serve on a continuous basis as a focal point for health preparedness and for emergency relief. The health sector should participate actively in the preparation of disaster plans with special attention to the role of health services and hospitals. Health personnel training should have high priority and should include instruction in health management in emergency situations, first aid and disaster medicine. A mechanism should be identified to provide the health officials in charge of emergency preparedness and disaster relief with an opportunity to acquire field experience during emergencies, including service in other countries of the Caribbean or the Americas. Caribbean countries should have reciprocal or regional plans for mutual assistance in time of disasters. Plans should identify regional health professionals available to help in assessment of needs and should provide a mechanism for having them brought expeditiously to the stricken area. Appeals for outside health assistance should await professional assessments.

#### V. Preparedness for Environmental Disasters

Damage to the natural environment by the introduction of new chemicals (pesticides, industrial waste, etc.), the reclamation of wetlands and the removal of natural forests can result in environmental disasters with serious economic consequences. As a matter of urgency, each government should adopt policies and legislation to protect its natural resources and to strengthen national environmental protection institutions. Cooperation among the countries

of the Caribbean should be improved and strengthened in order to establish policies and programs for protection of the environment of the entire Caribbean region.

#### VI. Preparedness for Oil Spills

Caribbean governments, in collaboration with the oil and shipping companies, should develop the capacity (supplies and trained personnel) to promptly clean up small, localized coastal oil spills. A coordinated plan for the Caribbean should be adopted to handle medium-sized oil spills, by pooling cleanup equipment. Major oil spills may require international cleanup resources. The Caribbean countries, through regional cooperation, should have access to and assistance from international bodies.

#### VII. Drought and Famine Preparedness

Each government should recognize the necessity of having special plans to cope with the problems of drought and famine. It is recommended that information on crop monitoring programs be disseminated to meteorologists, agronomists and high-level government officials. Countries which wish to establish crop monitoring programs may request assistance from the following countries and organizations which have considerable expertise: Belize, the Dominican Republic, Jamaica, the Caribbean Meteorological Institute, OAS, FAO, NOAA, USDA, PAHO/WHO.

#### VIII. Preparedness for Transport Disasters

Land, air and sea transportation accidents pose a serious and growing threat to Caribbean countries. Governments should move quickly to promote prevention programs. Letters of agreement between countries should be signed to facilitate availability of experts in the investigation of transportation accidents. Fire prevention and fire fighting equipment should be improved and strengthened. Search and rescue teams should be assisted in maintaining a high level of competence. Regional standards for safety equipment on marine craft should be developed and enforced.

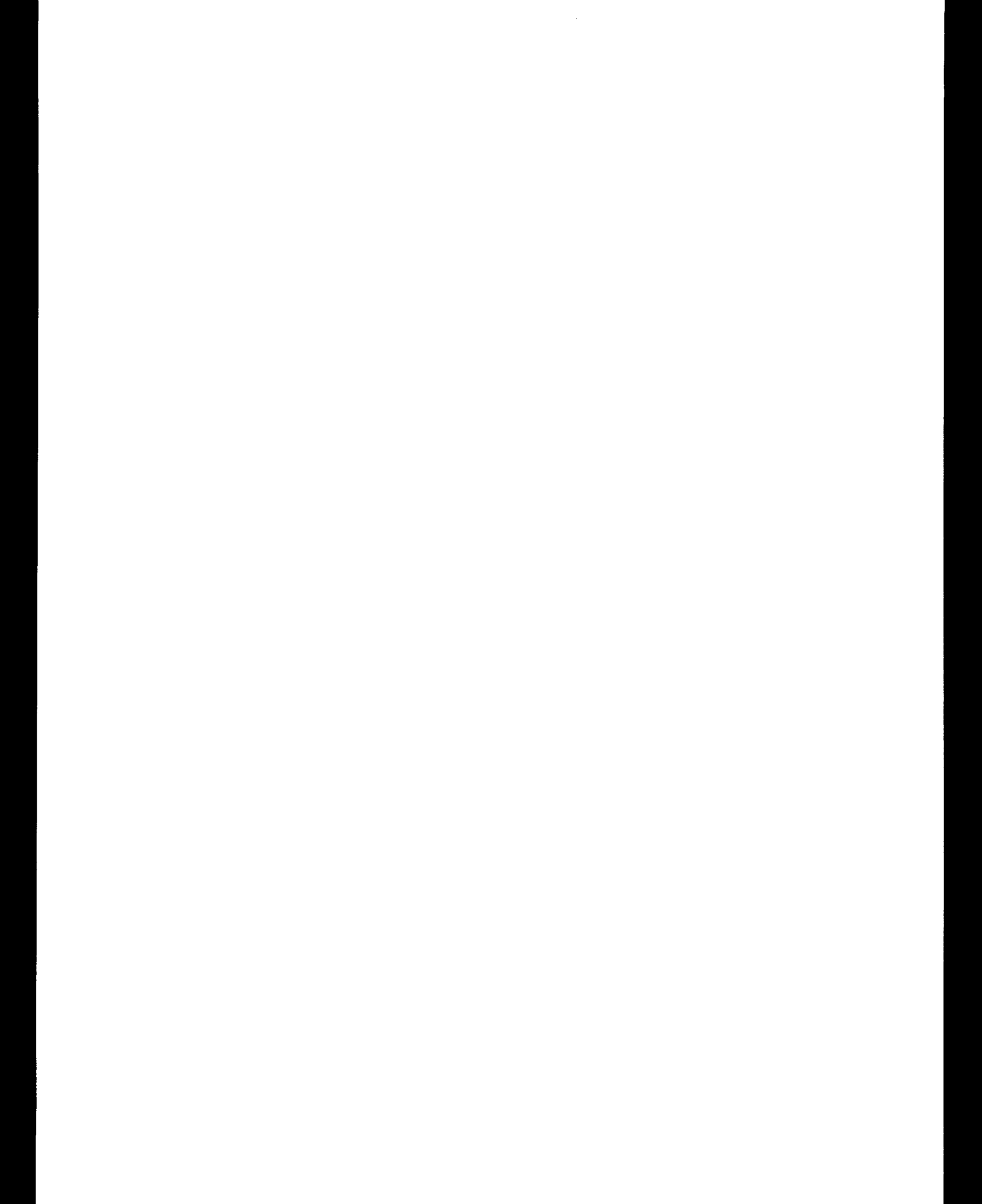
#### IX. International, Governmental and Non-governmental Agencies

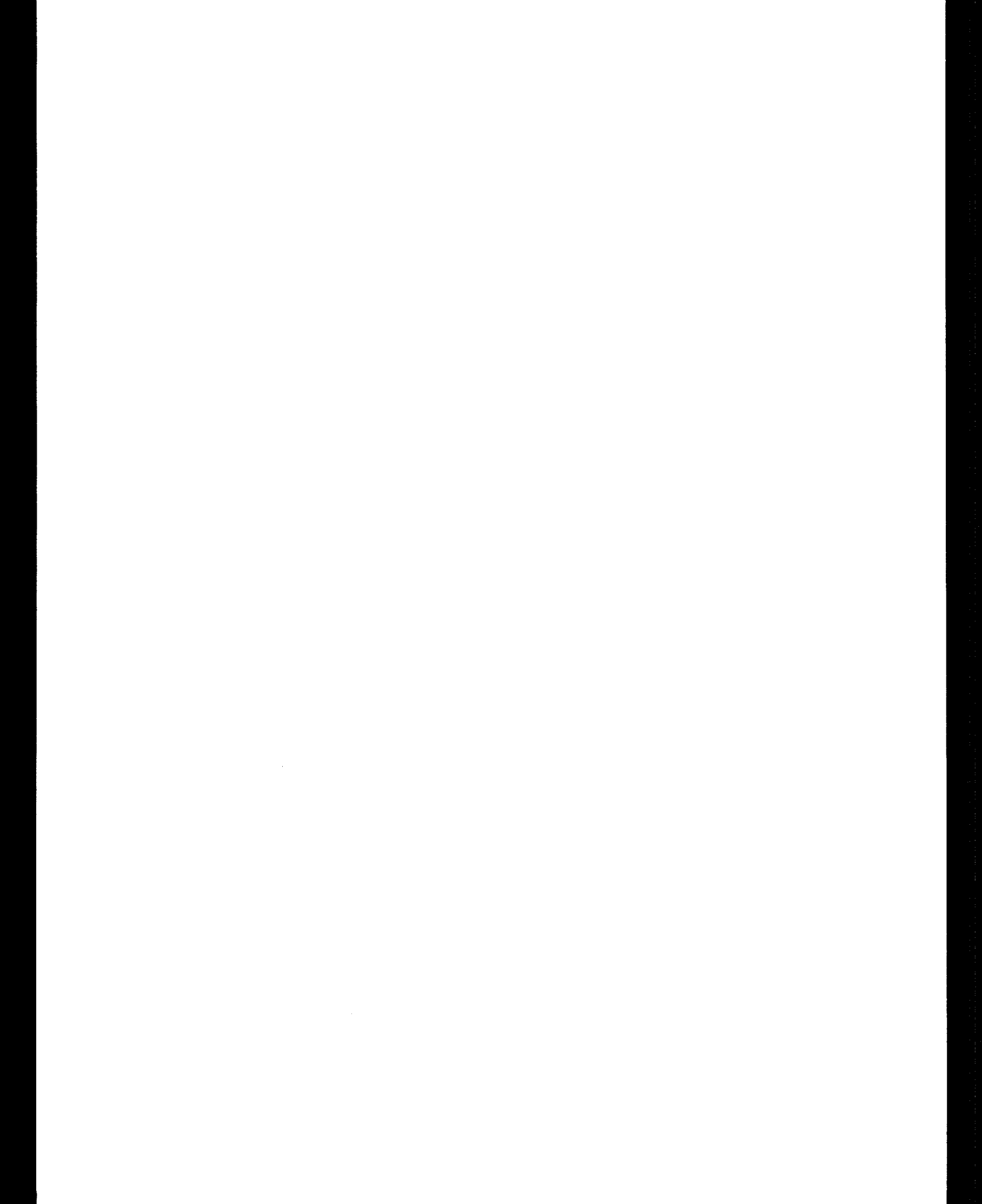
International, governmental and non-governmental private and voluntary agencies should closely coordinate with one another and the governments of the Caribbean countries to promote disaster prevention and preparedness. International agencies should ensure that countries are familiar

with procedures for receiving disaster preparedness assistance. Governmental agencies should actively follow up on the seminar recommendations by working with the sponsoring organizations and by considering preparedness projects for funding.

#### X. Regional Cooperation

Disaster prevention and preparedness have region-wide implications and opportunities to benefit all of the people of the Caribbean. Each Caribbean country should pursue a policy of increasing regional cooperation through appropriate mechanisms. At the regional level, responsibilities should include creating awareness in governments and communities of the need for disaster prevention, planning, preparedness, and relief and for obtaining necessary funding for implementation of disaster plans. The Caribbean countries should carefully consider what mechanism(s) best promotes the goal of Caribbean cooperation and self-reliance in disaster prevention, planning, preparedness, and relief.





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