## PROCEEDINGS

OF THE

# CARIBBEAN DISASTER PREPAREDNESS

PROJECTS CONFERENCE

Including Plenary Summaries, Project Proposals and Collected Conference Papers

> Santo Domingo, Dominican Republic May 19-23, 1980

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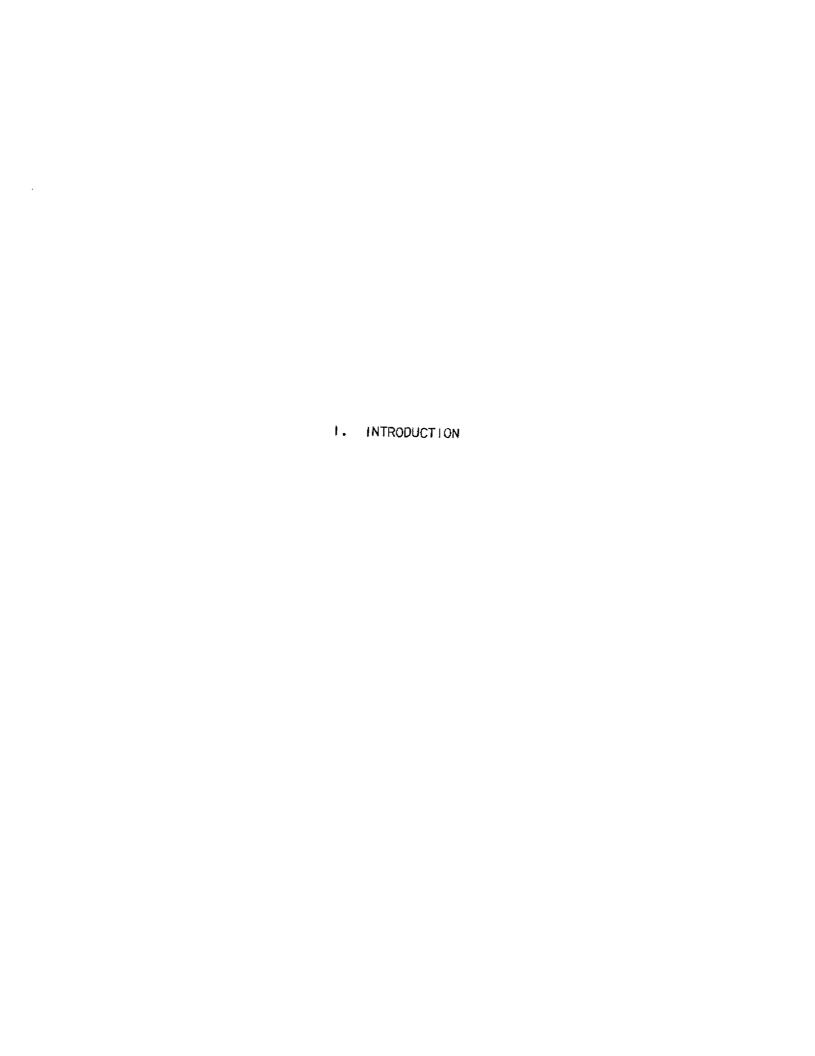
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#### INTRODUCTION

The Caribbean Disaster Preparedness Projects Conference was convened in Santo Domingo, Dominican Republic, May 19 through 23, 1980, at the invitation of the Dominican government. Sponsored by the/Caribbean Disaster Preparedness Planning Group, which comprises the Caribbean Community Secretariat, the Pan American Health Organization, the League of Red Cross Societies, the Office of U.S. Foreign Disaster Assistance, the American Council of Voluntary Agencies for Foreign Service, the Office of the United Nations Disaster Relief Coordinator, and representatives of a number of Caribbean countries, the conference was organized by the Office of U.S. Foreign Disaster Assistance. With the alm of advancing the recommendations of the 1979 St. Lucia Seminar, the conference focussed on outlining feasible disaster preparedness projects, both regional and country-level and determining the priority for executing them. Additional sessions provided information on the current level of disaster preparedness in the Caribbean region, recent preparedness activities of the countries and organizations present. and the potential assistance available from bilateral and international support organizations. The countries hardest hit by Hurricanes David and Frederic, Dominica and the Dominican Republic, reviewed their relief and reconstruction activities.

This report of the conference proceedings summarizes the content of the plenary sessions and presents projects for government and donor examination. Occasional papers prepared for the conference are also included.

The Planning Group hopes to initiate project activities on the most urgent level before the close of 1980 and, ideally, to have some preparedness impact on this hurricane season. Prompt reactions to these projects on the part of Caribbean governments and the support organizations are essential to their early implementation. The lessons of the 1979 hurricane season are clear; the outcome of the 1980 season may depend in part on the response of disaster planners to the findings of this Projects Conference.



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III. CHAIRMAN'S REMARKS AND PRESIDENT GUZMAN'S SPEECH

#### CHAIRMAN'S REMARKS

William Dalton, Meeting Chairman, reviewed the current sequence of activities, which, for the past two years, have been working toward the design and implementation of a comprehensive disaster preparedness and prevention program for all the Islands of the Caribbean. He described the results of the previous year's meeting in St. Lucia, giving particular attention to the large number of recommendations developed, and outlined the preparedness objectives agreed to in St. Lucia and the work done over the past year toward the realization of those objectives. Mr. Dalton proceeded to describe the hopes of the ad hoc Caribbean Disaster Preparedness Planning Group for the current meeting and to explain how the agenda was designed to produce priority project descriptions with the greatest opportunity being provided for the contribution of views by all in attendance. Looking to the future, he outlined the plan, once it was clear that there was sufficient interest on the part of participating governments, to take projects to the international community of donor nations and organizations for their consideration of technical, financial and material support.

In closing, he agreed that the Office of U.S. Foreign Disaster Assistance would continue to serve, on an Interim basis, in a planning/information exchange center role, until more permanent arrangements can be made.

#### SUMMARY OF PRESIDENT'S TEXT

The Honorable Antonio Guzman, President of the Dominican Republic, opened the Caribbean Disaster Preparedness Conference, welcoming all participants. He noted the vulnerability of the Caribbean Region to natural disasters and specifically encouraged participants to review the experience of the Dominican Republic in the case of Hurricane David. Given the frequency of natural disasters in the Caribbean region, President Guzman urged the establishment of a permanent U.N. contingency fund for the region. This resource could be designated for both preparedness and relief activities. President Guzman closed his Introduction with a statement of appreciation for the U.N. and government aid provided during and after Hurricane David. He expressed the hope that all participants would have a pleasant stay in the Dominican Republic and that the conference would prove successful.

(The Spanish text of his speech follows.)

Distinguidos visitantes; Autoridades Civiles y Militares; Señoras; Señores:

En nombre del Pueblo Dominicano y del Gobierno que me honro en presidir, doy la más cordial bienvenida a todos los participantes en a importante conferencia sobre Proyectos de Preparación para Socorro en el Caribe, que se inicia con esta sesión inaugural en la Ciudad Primada de América.

Al proponer nuestro territorio como sede de este evento, lo hicimos convencidos de que podíamos ofrecer al mundo, y en especial a estaregión del Caribe, como aporte positivo a los objetivos de esta reunión, la experiencia adquirida después del paso por nuestro País - del terrible Huracán David y la tormenta Federico, con su trágica - secuela de inundaciones.

Las experiencias obtenidas de las labores de emergencia que se 11evaron a cabo, a raíz de esos trágicos sucesos, y los esfuerzos desa rrollados en los aciagos días que siguieron al paso de esos fenómenos naturales, deben ser una valiosa contribución para los países aquí representados.

Es decir, que el objetivo principal de la celebración de esta Conferencia, es asegurar un mejor y más efectivo auxilio para nuestros - pueblos en casos similares a los que enfrentamos, todos los dominicanos, en el pasado reciente.

Consciente de los riesgos a que están expuestas las naciones, especialmente las que integran el Archipiélago de las Antillas, el Gobierno Dominicano sometió a la consideración de la Organización delas Naciones Unidas, y muy particularmente a la Oficina de las Naciones Unidas para el socorro en casos de desastre, (la creación deun fondo permanente que le permita auxiliar a las Islas del Caribe, en esas dramáticas contingencias.

Esa iniciativa de mi Gobierno fue expuesta durante el Trigésimo -- Cuarto Período Ordinario de Sesiones de la Asamblea General de la -- Organización Mundial.

Al proponerla formalmente al Secretario General de las Naciones Unidas, manifestamos que "Tenía por objeto especial no sólo llevar alánimo de las comunidades que, como la nuestra, habitan ese extenso-Archipiélago del Hemisferio Occidental, el sosiego que para ellas representa en sus periódicas desventuras la solidaridad internacional, sino también canalizar, por vías más expeditas y eficaces, laacción que en estos casos de infortunios colectivos, suelen adoptar las Naciones Unidas".

Los recursos del fondo propuesto estarán destinados a:

- Promover trabajos de investigación científica encaminados a encon trar medios de disolver, aminorar o desviar los huracanes, median te la incorporación de proyectos de esta naturaleza en centros de vigilancia ciclónica ya existentes o en instituciones académicasinteresadas en el desarrollo del tema;
- 2) Auspiciar la elaboración de proyectos pará que las construcciones estén dotadas de características que las preserven de los efectos demoledores de los vientos huracanados y de los efectos destructores de las inundaciones;
- Apoyar estudios para atenuar los riesgos que representan para las zonas aledañas los embalses naturales o artificiales;
- 4) Financiar actividades de socorro para facilitar viviendas prefa bricadas con el fin de albergar, temporalmente, a quienes hayan perdido sus hogares, así como para proporcionar alimentos, medici nas y ropa para las personas afectadas en estos casos.

La iniciativa fue acogida con beneplácito por el Organismo Mundial y esos dos huracanes, paradójicamente, dieron motivos realistas que - han puesto en evidencia la inaplazable necesidad que existe de que - se cree este Fondo de Auxilio Regional.

Hago votos sinceros para que la reunión que hoy inauguro se desarrolle dentro de un espíritu de solidaridad, buena voluntad y deseo deservicio.

Aprovecho esta ocasión para reconocer y agradecer, una vez más, la - inapreciable ayuda que nos prestó la Organización de las Naciones - Unidas, sus agencias especializadas y las del sistema regional, asícomo gobiernos amigos, durante la tragedia que nos tocó vivír hace - apenas nueve meses.

Al dejar iniciada esta Conferencia, deseo que todos los participan - tes tengan una feliz estada en nuestro suelo Patrio y que las deliberaciones sean tan fructiferas como todos esperamos.

Muchas Gracias.

19 de Mayo de 1980.

IV. PLENARY SESSION SUMMARIES

# Plenary Session: Presentations by International Support Organizations

In order to inform the country delegates of the potential for and limitations of bilateral and international donor support available for disaster preparedness projects, the international support organizations were asked to discuss:

- . the scale, regional or national, of projects usually funded:
- . forms of assistance, financial, technical or material:
- . the average time frame for project planning and implementation;
- disaster preparedness and development interests, and the relationships, potential or actual, between the two;
- . the most effective means of requesting funding or assistance.

The support organizations represented at the conference comprised both agencies with a long-standing involvement in disaster assistance (UNDRO, PAHO, CARICOM, LORCS, OFDA, ACVAFS), offering a broad range of support activities, including technical and material assistance, training and some funding; organizations traditionally more oriented toward development programs: UNDP, the EEC, IDB, OAS; and organizations with a primarily technical or scientific focus: ITU, WMO, UNEP.

Several of the latter two groups have recently moved to recognize the relationship between successful economic development and mitigation of the effects of natural disasters. Background papers provided by the IDB, UNDP and EEC all indicate the need for development projects to address disaster hazards, incorporate prevention and preparedness elements in new projects and urge developing nations to consider incorporating disaster preparedness into national development planning. (It should be noted that many donors require that countries in need formally designate that a portion of funds allocated for country or regional development programs be used for disaster preparedness.)

Summaries of the presentations made to the delegates follow. More detailed discussions of individual donor programs can be found in the collected conference papers, Section VIII.

OFDA's Director, Joseph Mitchell, the session chairman, observed that his organization prefers to draw on the expertise available within the U.S. government to provide technical assistance or equipment rather than funding; however, OFDA would join with other organizations to assist disaster preparedness programs. He noted that the success of the present initiative depends on the level of commitment of Caribbean governments and the involvement of support organizations.

The EEC's Graham Kelly stressed two major points: EEC assistance is complementary to and may be granted in addition to that from its nine member countries; and such assistance is only granted in response to a specific request from the state in need. Funds are available under the Lome Convention, Article 59, for immediate and short term ald for disaster relief; disaster preparedness would have to be funded under European Development Fund regional programs — so far countries have not identified disaster preparedness projects for funding in this context; proposed projects already total almost twice the amounts available. Caribbean governments must determine their own needs, identify projects and establish priorities. In the case of regional funds, the EEC considers that two or more countries may constitute a region. Mr. Kelly text is included in Section VIII.

The UNDP provides technical assistance and, in support, equipment, to further economic and social development by building human resources, transferring technology and developing institutions and services. Assistance includes provision of technical experts and training activities, but not loans or grants. Programming is based on a 5-year cycle, according to national per capita income and population size. 15-20% is allocated for regional rather than country projects. Project size varies from \$30,000 to about \$2 million. Recent emphasis on disaster preparedness: UNDP resident representatives should emphasize the economic benefits of preparing for disasters and see that prevention is addressed in formulating country programs. Mr. Erikson's paper is also included in Section VIII.

UNDRO assistance also falls into the technical category—provision of experts, granting fellowships for nationals of disaster—prone countries to study preparedness abroad, and organization of regional seminars. UNDRO has the advantage of flexibility in the form of and ways to provide assistance; though it has limited funds of its own, it has established access to resources of other agencies and bilateral donors. Its Caribbean activity is currently focused on developing a regional project in the Eastern Caribbean to develop and implement preparedness and prevention activities, along with individual country projects.

Because all national Red Cross societies are auxilliary to their governments, they are often an integral force in the preparation of disaster plans. The League has the responsibility for the funding of its projects—this funding is often a mixture of government and Red Cross monies. Most assistance takes the form of provision of technical personnel, equipment and training in preparedness and relief both to societies and to governments. Project duration ranges from a few months to several years within a 2 year budget and project cycle. Requests for assistance should be made through national Red Cross societies, in their absence, to Geneva. A Red Cross staff appraisal is a prerequisite. The League has special relationships with some UN agencies, especially UNDRO.

PAHO has a permanent office for disaster preparedness in its Washington regional office. As a technical cooperation agency, it provides assistance in the form of planning, resource inventories, training, preparation of manuals, visual aids, teaching materials, seminars, etc. Individual fellowships to study disaster preparedness and grants to analyze requirements after disasters are a so possible. Project duration varies from a few months to 5 years. Funds may be allocated by a country after discussions with the PAHO country representative from health funds assigned to the country or from extra-budgetary funding; requests are normally channelled through the Ministry of Health. To summarize: PAHO has technical expertise but limited funding capacity. Dr. de Ville provided delegates with background papers, included in Section VIII.

The IDB works closely with international organizations concerned with disaster preparedness and prevention, but its primary concerns are long and medium term loans for development of infrastructure, agriculture and industry. However, experience has demonstrated that large disasters affect the development and progress of Bank projects. The effectiveness of the IDB in addressing disaster assistance is limited by the difficulty of incorporating ad hoc responses into long term programs. Recently, the IDB has moved to approve a set of policies and procedures designed to promote close cooperation with disaster preparedness organizations, strengthen civil defense systems, encourage governments to identify disaster risks and safe sites and use disaster-resistant construction techniques, as well as investigating disaster causes and analyzing damage and addressing immediate needs following a disaster to restore the pre-disaster status. These and related recommendations are aimed at predicting disasters and preparing for emergencies, preferably on a regional scale. Bank constraints: resources can only be used for Bank member countries; projects must be approved by and put forward by member countries' governments and approved by relevant Bank departments; no provision is made for general purpose and grant funds, though non-reimbursable technical assistance for specific projects in a specific country or countries is available. Project "gestation" ranges from 8-12 weeks for technical assistance to 6-12 months for major development projects. A nation's Central Bank, Ministry of Finance or local IDB representative can aid in preparation of requests for assistance--this approach will facilitate processing. Mr. Coore's presentation can be found in Section VIII.

The WMO is very active in providing technical assistance in meteorology and operational hydrology; however, it more often acts as an executing agency, particularly for UNDP projects, rather than as a funding agency. WMO funding operates through a voluntary cooperation program under which donor member countries provide the funding. Full information on this program is available for member states. Education and training projects are also implemented from limited funds within the organization's budget. The WMO Tropical Cyclone Project was recently upgraded to a Tropical Cyclone Program which includes four regional bodies. The Hurricane Committee of the Area Four Regional Body (North and Central America) developed an operational plan, which functioned well in the 1979 hurricane season, and a technical plan to define requirements and projected activities needed to implement them, with special reference to hurricane warning systems. Applications for assistance are submitted through the director of the National Metereological Organization; implementation is relatively rapid.

The ITU provides both technical and financial assistance. Recognizing that disaster communication needs are unlikely to be solved by conventional telecommunication, ITU adopted resolution SPA-213, authorizing the use of earth stations without the prior frequency regulations normally required. ITU recommends satellite communications in disaster situations, because the conventional system is usually destroyed. ITU played a key role in the passage of a resolution authorizing government use of Radio Amateur Frequency Bands as a back-up communications network in emergency situations. Applications for assistance should be made by each country through the Minister in charge of telecommunications. M. Dubret provided background technical documents.

CARICOM provides technical and administrative assistance to member states after emergencies. Along with other international organizations (UNDRO, UNDP, PAHO) CARICOM is proposing a Caribbean sub-regional plan of action for disaster prevention, preparedness and relief. A coordinating center for disaster preparedness and relief activities and information is contemplated as part of this plan. CARICOM is also interested in promoting a building code to ensure implementation of proper construction techniques to prevent or reduce damage to buildings. Conference delegates should discuss disaster preparedness project opportunities and priorities with their ministries and governments and contact the CARICOM Secretariats concerning projects they wish to be considered at the annual EEC and CARICOM meeting on programs of regional significance. Mr. Noel should be contacted for additional details.

Though the OAS is primarily development oriented, program funds may be used for certain preparedness activities if they are included in a country's annual designation of priorities. Technical assistance as well as funding is available. Limited grant funds for relief may be obtained for member states from FONDEM.

The Caribbean Science and Technology Cooperation Committee coordinates OAS scientific and technical activities within the region. Oil Spill contingency planning has high priority; a preliminary oil spill plan has been drafted, and in 1980, with the technical cooperation of IMCO and contributions from UNEP, AID, the MAB program and the U.S. Coast Guard, it will be elaborated and expanded to include all Caribbean island territories. 1980 activities include assessment visits to the smaller Caribbean islands; a meeting of the smaller islands to introduce plan concepts and identify needs; a meeting of experts to formulate a final plan for approval; a second technical mission to gain acceptance of the plan by the islands; and a workshop for training of on-scene coordinators in techniques of oil spill control and elements of cooperation within the regional plan.

UNEP has limited funding available to stimulate, accelerate and coordinate environmental programs; it is not an executing agency, but relies on UNDRO or PAHO for project execution. The newly launched ACTION program for the wider Caribbean includes the bordering countries of South, Central, and North America as well as the Caribbean islands. Mr. Sanvincenti provided copies of the draft ACTION program, which will be considered by an interministerial meeting in Jamaica early in 1981. Its recommendations are based on those of the St. Lucia seminar and will not duplicate existing activities.

### HIGHLIGHTS OF QUESTIONS FOR DONORS

- With regard to potential EEC-funded projects: In the interests of regional integration, projects should be coordinated through CARICOM or the CDB and included on a final list presented to the EEC. It was stressed that projects must be initiated by the recipient government.
- CARICOM plays a catalytic role, responding to the expressed needs of member states, in preparedness for the 1980 hurricane season.
- The IDB rate of interest was identified as 8-8.5% for ordinary capital and 2-4% for special funds, depending on the type of project and the state of development of the country requesting loans. Generally rates are very low for reconstruction and rehabilitation.
- The possibility of establishing a special or post disaster fund in disaster-prone countries for immediate use without assessment was reviewed. At present UNDRO can allocate \$30,000, UNDP \$25,000 and the US Ambassador \$25,000 for immediate relief, though all three require some type of assessment. Country efforts should focus on disaster preparedness so as to reduce damage and the need for disaster relief funds.