Some Natural Disasters:
Earthquake, drought, hurricane, landslide, volcanic eruption, flood, epidemic, tidal wave.

Some Man-related Disasters
Fire, explosion, pollution, power failures, civil strife, war, nuclear fallout, exposure to radiation, aircraft accident, oil spills.

Countries Participating in the Project
1. ANGUILLA
2. ANTIGUA AND BARBUDA
3. THE BAHAMAS
4. BARBADOS
5. BELIZE
6. BERMUDA
7. BRITISH VIRGIN ISLANDS
8. CAYMAN ISLANDS
9. CUBA
10. DOMINICA
11. DOMINICAN REPUBLIC
12. FRENCH GUIANA
13. GRENADA
14. GUATEMALA
15. GUYANA
16. HAITI
17. JAMAICA
18. MARTINIQUE
19. MONTserrat
20. NETHERLANDS ANTILLES
21. PUERTO RICO
22. ST. LUCIA
23. ST. KITTS/NEVIS
24. ST. VINCENT AND GRENADINES
25. SURINAME
26. TRINIDAD AND TOBAGO
27. TURKS AND CAICOS ISLANDS
28. US VIRGIN ISLANDS

Yet another tool.....

Objective #7 of the PCDPPP is “to serve as a clearinghouse and depository for all information related to disaster preparedness needs, activities or projects in the Caribbean”.

In pursuance of this objective, and with the able assistance of staff from the Documentation Centre of the CARICOM Secretariat, the groundwork has been laid for a Project library containing reference works, magazines, reports, scientific articles, as well as films, video material, slides and photo material.

Apart from providing the Project with more than half of its written documentation, the Pan American Health Organization’s Emergency Preparedness Unit has made available an IBM-XT Personal Computer, as another tool for improving information management.

Information is further being disseminated by the Project during training seminars, workshops, conferences and also in between these meetings.

Yet another tool is today being added to already existing ones. This Newsletter forms a second type of forum for Caribbean Disaster Preparedness Officials to exchange views on the different technical issues of importance to their countries.

But most important of all, is the part this Newsletter hopes to play in fostering TCDC, Technical Cooperation among Developing Countries of the Caribbean sub-region in disaster management.

For, in future years the Governments of the Caribbean are to accept greater responsibility for their country’s disaster preparedness, they will be greatly assisted in doing so by sharing technical expertise and information to which this Newsletter may make a substantial contribution.

The inaugural issue of this newsletter is also the appropriate forum in which to express the deep appreciation of Project staff, participating Governments and, of course, my own appreciation, to the many cooperating agencies involved in the PCDPPP.

Agencies such as the United States Agency for International Development (USAID), the Canadian International Development Agency (CIDA) and the Commission of the European Communities (EEC), have become much more than mere donor agencies. Their genuine interest in the project, and empathy with the problems of the region in working towards disaster preparedness, have identified them as “cooperating rather than “donor” agencies.

The vital support management functions of the CARICOM Secretariat, the United Nations Disaster Relief Office, the League of Red Cross Societies and the Pan American Health Organisation complete the foundation upon which this Project will continue to build.

It is with a sense of pride at being at the centre of this development, and a happy anticipation of the future that I ask you to join with us in the launching of yet another tool of regional and international cooperation.

Deryck Heinemann
EDITORIAL

When Hurricane David struck the island of Dominica in August 1979, the victims represented every level of socio-economic life on their island.

When Mt. Soufrière erupted in St. Vincent in 1979, the population in emergency shelters ranged from major employers to the unemployed in the island.

These two events were undoubtedly disasters. Alas, for most of us, disasters are things we hear about, read about, or see on television. They are events which happen to other people in other countries. In recent years, the level of awareness of disasters and their effect on the social life and economies of the countries of the Caribbean has dramatically increased among technical personnel and decision-makers in the region. Proof of this is their sanctioning and subsequent support of the Pan-Caribbean Disaster Preparedness and Prevention Project, PCDDPP, with its Headquarters in Antigua.

But this is just the first step. The more difficult step is to develop a disaster preparedness attitude, life style, and ethic, in the average citizen of the Caribbean.

This task will entail interaction and public education and public awareness activities between specialists, at the national and regional levels, and the many publics which make up the population of the Caribbean. It will not be a simple task, but one to be pursued vigorously, as disaster preparedness is one of the very few, if not the only activity aimed at bringing about social and attitudinal change, which must be addressed at every social and economic level of the society simultaneously. Unlike science, arts, humanities, sports, international finance etc., which have their own audiences, disaster preparedness information, exercises and communication are survival areas, and present a formidable challenge to those devising the training courses, seminars, workshops and public information material to address this wide spectrum audience.

In this inaugural issue, we at the Pan-Caribbean Disaster Preparedness and Prevention Project, PCDDPP, urge you to help us in the task of sensitisation, through comments, written contributions, and other forms of feedback, thereby helping this newsletter to serve and grow, rather than merely exist.

MCM VII

The Management Committee of the project holds its seventh meeting at the Jolly Beach Hotel in Antigua, 6-8 December, 1984.

These meetings, held twice a year, provide a forum for participating Governments and executing agencies, to assess the work of the project and approve work programmes for the period leading up to the next meeting.

Funding agencies are - The US Agency for International Development through its Office for Foreign Disaster Assistance (AID/OFDA), The Canadian International Development Agency (CIDA), and the European Economic Community (EEC).

Executing Agencies are - The Caribbean Community and Common Market (CARICOM), The UN Disaster Relief Office (UNDRO), the Pan American Health Organization Regional Office of the World Health Organization (PAHO/WHO), and the League of Red Cross Societies (LORCS).

BELATED “HAPPY BIRTHDAY”, OFDA!

The Project and this inaugural issue of the Caribbean Newsletter, take this opportunity albeit belatedly, to say “Happy Birthday” to a close friend and benefactor, OFDA.

On 18th September, The United States Agency for International Development’s Office for Foreign Disaster Assistance celebrated its 20th Birthday.

Many Caribbean Governments sent messages of congratulation and appreciation for “the very substantial support for disaster preparedness and relief activities” in the region.

Some specifically expressed gratitude to OFDA for its financial assistance to the PCDDPP.

We at the project have received more than financial assistance from OFDA. We have received guidance and counsel also.

Once again, Happy Birthday, OFDA!

PCDPP ACCOMMODATION

The Government of Antigua and Barbuda has informed the project Manager of moves to provide more suitable accommodation for the project headquarters.

In a letter to Dr. Heinemann, Health Minister Christopher O’Mard who also holds responsibility for disaster preparedness said that part of what is known as “the intrade Building” can now be made available to house the headquarters. As a first step, the Permanent Secretary in the Ministry of Health and the Project Manager will inspect the building, identify work to be done, and identify in so far as possible, the date when the building could be occupied.

The Antigua Health Minister has reiterated his Government’s commitment to hosting the project and to the broader concept of disaster preparedness as a development tool at the regional level.

COMMUNICATION

The PCDDPP is well on the way to developing one of the vital areas of disaster preparedness a DISASTER COMMUNICATION NETWORK.

The project has obtained the services of Mr. Barney Thompson as Telecommunications Consultant for the third phase of the activity, and the Canadian International Development agency (CIDA) through the United Nations Disaster Relief Office, has provided comprehensive state-of-the-art telecommunications equipment to the sub-region.

The equipment has been distributed to all countries participating in the project with the objective of establishing this disaster communications network. To this end there are twice weekly practice sessions, on Tuesdays and Fridays at 9.30 a.m. Atlantic standard time, with Mr. Thompson as anchor person in the Antigua Headquarters, calling members of the network in sequence, using mainly weather conditions as the discussion topic.

In addition to Caribbean access, the network has been granted access via satellite ATS-3 to the Pan American Health Organisation in Washington, and other parts of the world.

Mr. Thompson sees the most urgent needs, in relation to the network, as the development and monitoring of simulation exercises at the local and regional levels, and the training of personnel in addition to those now involved in the network. He sums up the network as “a contingency against the failure of everything else”.

2
PAHO AND THE PCDPPP

by Mervyn Henry
PAHO CARIBBEAN PROGRAMME COORDINATOR

Being asked to write an article on the relationship between PAHO and the PCDPPP, was similar to being asked to write a recommendation or character reference for a favourite off spring.

I will try, however, to be as objective as one so closely connected to this Project can possibly be.

In October 1976 the Directing Council of PAHO requested that the Director set up "a disaster unit with instructions to define the policy of the Organization, to formulate a plan of action for the various types of disasters, to make an inventory of the human and other resources available, to train the necessary personnel, to prepare and disseminate the appropriate guidelines and manuals, and to promote operational studies to meet the needs of the countries in disaster situations, and to ensure that this unit establish effective coordination with the United Nations Disaster Relief Coordinator the International Red Cross, and other national bodies providing disaster assistance."

Current epidemiological data indicated that health effects of disasters were particularly severe in poor rural areas where housing conditions are unsatisfactory. Small children and women were the population groups found to have been at disproportionately high risk of mortality and morbidity. It was felt, generally, that an effective emergency preparedness programme at national level should benefit these vulnerable groups.

In 1977 PAHO established at Headquarters a unit to assist with the development of a disaster preparedness programme in member countries and to this end, action was proceeding in the Caribbean through the office of Caribbean Programme Coordination.

However, following a series of natural disasters, the eruption of the Soufriere volcano in St. Vincent, hurricane David in Dominica, floods in Jamaica and Belize, and the recognition of the state of unpreparedness of the countries, a major special project was initiated and the multi-disciplinary, multi-agency organization, the Pan Caribbean Disaster Preparedness and Prevention Project, with its headquarters in St. John's, Antigua, came into being in 1981. Agency participation includes, UNDRO, CIDA, EEC, OFDA, LORCS, PAHO and CARICOM.

The Project is stimulating public awareness of the need for national disaster preparedness policy and programmes, it is strengthening national institutions for management of disaster preparedness programmes, it is arranging appropriate training for program managers and other key personnel, it has cooperated in updating the curriculum of health professionals, it has arranged for vulnerability analyses of buildings in LDCs and is reviewing recommendations for early action, and has prepared a portfolio of research projects.

PAHO assistance in the conduct of national workshops and simulation exercise, and the refining of the concept of a front-line team for rapid response to countries stricken by disaster, are among the many examples of the Organization's participation in the PCDPPP, and contribution to the region.

PAHO FRONT LINE TECHNICAL TEAM

In 1984 the Governing Bodies of PAHO identified the assessment of health needs and the formulation of rehabilitation projects as a priority for PAHO Technical Cooperation which should be provided in a coordinated and comprehensive manner by a multidisciplinary team in close liaison with other agencies and sectors. The team comprises a Leader, Epidemiologist, Sanitary Engineer, Nutritionist, and Nursing Advisor.

Subject to the priorities to be established by relief authorities of the affected country, the Front Line Team will assist in:-

- Collecting objective data, interpreting them and reporting to national authorities PAHO/WHO and UNDRO, on outstanding needs for assistance in the health field.

- Coordinating requests for external emergency assistance.

- Establishing surveillance systems of communicable diseases and environmental health, and monitoring food services and drug supplies in order to facilitate decision-making at national and international level.

- Developing preliminary project proposals for rehabilitation/reconstruction to help secure early pledges from external sources.

- Other technical cooperation as requested in the health field.

Another, and perhaps the most significant aspect of PAHO's involvement in disaster preparedness is the Emergency Technical Cooperation Agreement between PAHO and Caribbean Governments in case of major natural disaster. "Natural disaster" in the agreement, means, any natural event causing damage and ecological disruptions on a scale sufficient to warrant an emergency response from outside the affected community.

Under this unique and enlightened agreement, as long as it is determined that a disaster has struck, PAHO need not wait formal invitation from the Government before sending in a technical team to liaise with national relief authorities in:

- Assessment of health needs and determination of priorities.

- Formulation of emergency projects and coordination with prospective services of assistance.

- Surveillance of communicable diseases and outbreak prevention.

- Inventory and distribution of relief supplies.

- Survey of water supply systems and other sanitary services.

- Survey of damages to existing health facilities.

PAHO has been, and will continue to be, involved in disaster preparedness work in the Caribbean for a very long time, but its commitment to support the PCDPPP is firm. It is not surprising therefore that the organization readily agreed to a request from the Caribbean Community Secretariat to have PAHO advisor Dr. Deryck Harremann assigned to the PCDPPP and spend some fifty percent, now much more, of his time as Project Manager.

It is clear that the relationship between the Organization and the project will continue to grow stronger, through cooperation between the PAHO Office of Caribbean Programme Coordination on the one hand and the Office of Emergency Preparedness in Washington, under the direction of Dr. Claude de Ville on the other, with the Project.

PAHO is proud to be associated with the PCDPPP and congratulates the Project on the launching of their Caribbean Newsletter.
WORKSHOPS

EMERGENCY PLANNING FOR ENVIRONMENTAL HEALTH AND WATER SUPPLY:

PCDPPP is continuing a series of workshops on Environmental Health Planning and Water Supply.

In May and June 1982, the PAHO - component of the Project sponsored a series of two-day workshops in Water Supply and the Environmental Health Management aspects of disaster management in Dominica, St. Lucia, Grenada, St. Vincent, and Antigua. Participants were drawn from all Eastern Caribbean countries, and the workshop content structured to provide a general introduction to the subject. The participants recommended to Haitian course Director Pierre Leger that follow-up training be pursued.

That follow-up became a reality this year with workshops in Antigua in March, and St. Kitts in September, as part of a programme supervised by Mr. Robert Swart, PCDPPP Environmental Health Engineer. The participants were drawn primarily from Ministries of Health and Water Authorities in the Caribbean sub-region, and the workshop content aimed at:

a. Sensitizing participants to disaster planning.

b. Training participants in vulnerability assessment and development of preventive measures.

c. Strengthening of emergency operations plans.

Programme coordinator, Mr. Swart envisages the monitoring of the activities of the participants after the workshops, with a view to assisting them, where necessary, with the implementation of plans and programmes.

The next series of workshops is planned for St. Lucia, 20-23 November 1984, and Jamaica, February 1985.

HURRICANE PREPAREDNESS EMERGENCY RATIONS SCHEDULE

Upon the announcement of a ‘HURRICANE WATCH’ i.e. the second warning each Officer in Charge listed in the attached Emergency Food Distribution sheet will assemble his loaders and drivers and proceed to draw emergency rations for two days and effect delivery to the Central Ration Store (Plymouth) and the 15 District Ration Stores.

It should be noted that ration distribution is calculated for approximately one third of the population supported by each ration Store. This calculation is predicted on the presumption that the majority of the population will provide their own emergency rations.

Should a disaster actually occur, an additional seven days rations will be drawn and distributed by each officer in charge.

Ration Stores are coded in categories A through C which correspond to the columns for two days ration.

<table>
<thead>
<tr>
<th>COMMUNITY</th>
<th>STD PACK</th>
<th>NUMBER OF PACKS OF RATIONS REQUIRED PER DAY PER RATION STORE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>STAPLES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rice (12 x 5 lb)</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Flour (100 lb)</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Macaroni (36 x 1 lb)</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Commical (18 x 2 lb)</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Oatmeal (24 x 1 lb)</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Peas/Beans dried (100 lb)</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>FATS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooking Oil (1 Gal.)</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Margarine (24 x 1 lb)</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>MILK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dried or (24 x 1 lb)</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Evaporated (24 x 14 oz.)</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Infant (24 x 1 lb)</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>MEAT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corned Beef or Luncheon Meat (24 x 1 lb)</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>FISH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mackerel or (45 x 15 oz)</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Sardines (50 x 8 oz)</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Tuna (24 x 12 oz)</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>MISC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cheese (6 x 5 lb)</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Cocoa/Milk (12 x 1 lb)</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Salt (24 x 2 oz)</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Sugar (100 lb)</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Tea (100 bg/bx)</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

In the event that a hurricane does actually occur officers in charge are advised to multiply each standard pack item by 3 to arrive at the quantity sufficient to meet the requirements for 7 days. In that event, it may be necessary to use more than a single vehicle depending on specific needs.
EMERGENCY RATION DISTRIBUTION IN MONTSERRAT

by Franklyn Michael

The Ministry of Agriculture has specific responsibility for the distribution of food during the hurricane season. This responsibility is laid down by H.E. The Governor in the Annual Montserrat Hurricane Instructions. It may be useful for us to examine this responsibility in terms of (a) The rationale (b) The methodology. (c) Problems and possibilities.

(a) THE RATIONALE

The rationale for food distribution has many facets. First of all, people going to emergency shelters may not be in a position to take stocks of food with them. Secondly, Montserrat is an island deeply incised by “ghasts” or ravines. The possibility of villages becoming isolated if major bridges are destroyed is very real indeed. In addition, it makes sense to spread the available stock of food on the island. Spreading the stock of food also means that commercial warehouses (usually located near the major port) will be in a position to store items which are provided as food aid in the event that food aid becomes necessary.

(b) METHODOLOGY

For purpose of food distribution, the island is divided into 16 ration stores. The largest is at the police Compound in Plymouth. Each ration store in the rural areas is the responsibility of a particular member of the “Area Hurricane Community.”

A list of rations was developed with the assistance of the Nutrition Officer. Food from each of the major groups is included. The majority of the foods are packaged items of rather long shelf life.

Each ration store is coded according to the size of the population in its environs. In broad terms this is done based upon the distribution of houses and the nature of their construction. A figure is arrived at which represents the number of people likely to seek shelter in the hurricane shelter associated with each ration store.

The quantity of food required for each ration store is then determined by a calculation which reflects two days food requirements. The recommended quantity is then attached to the ration store code.

Normal procedure regarding distribution is that food is only to be taken out during the second hurricane warning or “hurricane watch”. The second warning indicates that a storm is likely to pose a severe threat to Montserrat within 24 hours. Staff is mobilised and supervised by the Director of Agriculture who is accountable for the entire process of collection and delivery.

(c) POSSIBILITIES AND PROBLEMS

There are points of merit both positive and negative as regards emergency food distribution.

Lest look at the negative first:

(1) It is difficult to know how many persons may actually seek shelter and therefore the number of people that may draw initial rations from a ration store.

(2) The hurricane season is of 5 months duration. If there are several “hurricane watches” which do not produce a real threat the public may become complacent and emergency rations distribution seen as a waste of time.

(3) A “hurricane watch” may be announced at a most inconvenient time for ration collection and distribution eg. 7:30 pm. If there is only a storm warning in the force before that time what course of action should be followed?

(4) Merchants may have some difficulty maintaining a “rolling stock” of hurricane rations. In principle rations are to be sold as normal sales and replenished with fresh stock such that the quantum required is always available fresh. This presents additional store keeping burdens on the merchant.

(5) Merchants have a considerable investment tied up when food is collected. A single merchant may have as much as EC $4000.00 tied up. This may affect his working capital position.

(6) The logistics of collection and distribution must be efficiently managed. Suitable vehicles, adequate numbers of loaders and supervisors must be available. A simple, rapid but accurate accounting system has to be provided to eliminate any prospect of fraud. There must be checks built into the system at each collection, or distribution phase.

Staf must be capable and committed so that work under pressure does not result in a fiasco.

The following are the major benefits of an emergency distribution system such as ours:

(1) The populace is assured that food stocks are spread throughout the island in the event that some areas are cut off.

(2) In a small island community like ours, the entire process takes less than 3 hours.

(3) The rations which may be consumed in an emergency are nutritionally sound having been selected by Nutritionists and Agriculturists.

(4) A cadre of workers of proven responsibility and experience is available for the distribution of emergency food aid should the need arise.

The most recent “test” of the plan took place on July 31st of this year. The entire procedure went very smoothly distribution completed within 2 1/2 hours after initial assembly of staff. Staff had been assembled and briefed within 1 hour of the decision to distribute.

Franklyn Michael is Montserrat's Director of Agriculture, and consequently Officer responsible for Food Distribution in emergencies.

SEE MONTSEBRAT SCHEDULE ON FACING PAGE
MEET THE PEOPLE AT P

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PAHO/WHO

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Red Cross Adviser
BRCS/LORCS

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Lt. Col. Glann Mignon
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ST. LUCIA
Dr. James St. Catherine

ST. KITTS-NEVIS
Dr. Franklyn Lloyd

EDITOR'S NOTE

We wish to claim editorial privilege in this inaugural issue, and say a special "thank you" to some of the people in collaborating agencies whose personal input and concern in the project, have helped tremendously in our development.

Eldon Mathurin - CARICOM
John Tomblin - UNDRO
Johannes Terhaar - EEC
Claude De Ville - PAHO
Mervyn Henry - PAHO, now
CARICOM
Franklyn McDonald - ODP Jamaica
Roger Blake - CIDA
Ollie Davidson - USAID/OFDA
Charlesworth Edwards - ECCM/OECS
Graham Kelly - EEC
Paul Belle - PAST PROJECT
MANAGER
Wynand Petterson - PAST PROJECT
MANAGER
Jean-Claude Levy - UNDRO
HURRICANES DAVID AND ALLEN - A LESSON

Research into the impact of hurricanes David (1979) and Allen (1980), by project Prevention Adviser Al Wason has led to a number of conclusions and lessons which deserve regional attention. Mr. Wason focusses on the key areas of Public Education, Government Involvement, construction, Schools and public utilities, as follows:

(i) Public Education

There must be a public awareness of the extent to which bad building practices increase losses caused by hurricanes. The programme of information and education of the public must be a continuous one. All groups of building officials - the architects, engineers, foremen, master carpenters and master masons - must be taught that it is possible to provide aesthetically acceptable buildings constructed in such a way that damage by hurricanes would be minimized.

(ii) Government involvement

a) Building regulations based on building codes such as the Caribbean Uniform Building Code (CUBIC) now being drafted should be enacted. The regulations should include provisions for ensuring compliance with simple measures needed to mitigate hazards from natural disasters. The regulations should be enforced.

b) Building inspectors must be established and adequately staffed. The inspectors must establish simple rules for design and construction of buildings and must have the authority to issue stop order for any construction not complying with the rules.

c) The Inspectorate should be mandated to pursue a continuous programme of on-the-job education for small builders in the proper techniques of building hurricane-resistant homes. The Inspectorate would therefore have a positive role in the building process and not merely a negative one.

d) Governments must set the example in their own building programmes by producing hurricane resistant designs.

e) There should be a careful review of building programs which are sited on land with problems of foundations, or on land which is really a flood plain and subject to flooding by heavier than rainfall.

(iii) Construction

There is a need to:

a) Make roof pitches steeper -- 25° to 30°.

b) Build hip instead of gable roofs.

c) Cut out overhanging completely, and build canopies and sun shades over doors and windows instead.

d) Use heavier gauge sheeting (22 ga rather than 26 ga) and check that contractors are supplying what is specified.

e) Provide more frequent fixings in areas known to have higher wind suction, especially ridges, eave purlins and gable ends.

f) Where appropriate, consider the inclusion of ridge ventilators to adjust internal pressures. As simple ridge ventilator can be constructed for low income housing.

g) Pay careful attention to securing roofs to walls, walls to floors, stanchions to their bases.

h) Reinforce all concrete block walls and construct reinforced concrete rings beams on top of walls.

(iv) Schools

There should be no difficulty in making schools hurricane resistant, especially as schools are often designated as emergency shelters. Because of international funding for school construction, the design and construction measures needed to provide hurricane-resistant construction appear to be administratively easier to accept than those for low income housing. There appears to be less emotional resistance to the construction of concrete roofs and to the incorporation of the appropriate structural system on schools. Designers should therefore be instructed to provide hurricane resistant school building regardless of the source of funding.

(v) Public Utilities

a) There should be a conscious attempt to design transmission and distribution systems for swift reinstatement after a hurricane. Important utility building such as power plants and telephone exchanges must be carefully designed so as to be free from hazards. Other important Government centres and hospitals should, as far as possible, be connected to the main power plants and switching stations by underground services.

b) There should be standby electric plants at each of the important Government buildings and hospitals. Water pumping stations should also be equipped with standby power plants.

c) At least a three-day supply of water should be stored in tanks at each hospital, school (which will be used as a shelter) and Government office.

d) There should be Disaster Units within each utility properly manned and equipped with adequate tools and basic spares.

According to Mr. Wason, if these simple rules are followed, the resistance of structures to hurricanes would increase significantly, and the ability of the State to recover from a hurricane would be enhanced.

Old timber house with shingled sides and galvanized iron roofing. The high pitch of the roof and the relatively firm connection between the house and the ground probably saved this house from complete disintegration.
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Chairman, Central Emergency Coordinating Committee
C/o Prime Minister’s Office
Independence Hill
Belmopan
Phone: 08-2345

BERMUDA
6. The Chief Medical Officer,
Ministry of Health and Social Services
Health Dept.
Hamilton
Phone:

BRITISH VIRGIN ISLANDS
7. Mr. Robert Creque
National Disaster Coordinator
Office of the Deputy Governor
Government Headquarters
Tortola
Phone: 43701

CAYMAN ISLANDS
8. Mr. D. H. Foster
Chief Secretary and Head of National Emergency Organization
Office of the Chief Secretary
Government Administration Building
Grand Cayman
Phone: 9-4844

CUBA
National Representative for Natural Disasters
Calle B 23 e/fra y 3ra, Vedado
Havana
Phone: 295766

CURACAO
10. Dr. C. Eliaasals
Ministry of Health
Willemstad
CURACAO
Netherlands Antilles
Phone: 614555

COMMONWEALTH OF DOMINICA
11. Mr. Jerome Lloyd
National Disaster Coordinator
Prime Minister’s Office
Roseau
Phone: 2883

DOMINICAN
12. Mr. Alfonso Julia Mera
National Disaster Co-ordinator
Civil Defence Ministry
Santo Domingo
Phone:

FRENCH GUIANA
13. Director
Departmental de L’Action Sociale
Cayenne
Phone:

GRENADA
14. Ms. Patricia Pascall
National Disaster Co-ordinator
Ministry of Information
St. George’s
Phone: 461

GUADELOUPE
15. Mr. Max Vincent
Civil Defence Unit
Point-a-Pitre
Phone: 810040

GYANA
16. Mr. F. M. Cumberbatch
Executive Officer
Civil Defence Commission
Public Building
Georgetown
Phone: 72632

HAITI
17. Col Theodore
Coordonateur, OPDES
Ministère de la Santé Publique
Port-au-Prince
Phone: 29528

JAMAICA
18. Mr. Franklin McDonald
Director, Office of Disaster Preparedness
Prime Minister’s Office
2a Devon Road
Kingston 10
Phone: 92-94400-4

MARTINIQUE
19. Director
State Civil Defence
front de France
Phone:

MONTSERRAT
20. Governor David Dale
Designated National Disaster Coordinator
Government House
Plymouth
Phone: 2409

ST. KITTS AND NEVIS
21. Mr. Calvin Fairer
Permanent Secretary and National Disaster Coordinator
Ministry of Home Affairs
Government Headquarters
P.O. Box 186
Basseterre
Phone: 2688 or 2521

ST. LUCIA
22. Mr. Stan James
National Disaster Co-ordinator
Prime Minister’s Office
Government Building
Castries
Phone: 2016

ST. VINCENT AND THE GRENADINES
23. Ms. Irma Young
National Disaster Co-ordinator
Ministry of Home Affairs
Kingston
Phone:

TRINIDAD AND TOBAGO
24. Mr. Michael Borell
Secretary/Manager
National Emergency Relief Organization
Ministry of National Security
Government Buildings
Knox Street
Port-of-Spain
Phone: 62-38004, 62-3211

TURKS AND CAICOS ISLANDS
25. Mr. Hartley Coabrooke
National Disaster Coordinator
Chief Minister’s Office
Grand Turk
Phone: 2300 ext. 69

SURINAME
26. Director
Bureau of Public Health
P.O. Box 767
Rode Kruislaan
Paramaribo
Phone:

VIRGIN ISLANDS
27. Coordinator, Disaster, Preparedness Office,
Civil Defence and Emergency Services
Office of the Governor
P.O. Box 1208, St. Thomas
Phone: 00601
PREPARATORY PROGRAMMES
FOR
REFUGEE CAMP/DISASTER RELIEF PERSONNEL

June 10 - 14, 1985 - Toronto, Ontario

Political situations and environmental tragedies force thousands of persons every year to be displaced. These programmes will better equip the participants to meet the vital needs for both survival and rehabilitation of persons not able to help themselves. Effective response demands preparation. Only through knowledgeable and well co-ordinated teams can these excruciating effects be minimized. Involvement in these programmes will enhance the contribution of you and your team.

WHO SHOULD ATTEND

- Multi-discipline Personnel
- Camp Directors
- Directors of Disaster Relief Teams
- Representatives from Recruiting Agencies
- Logistics Personnel
- Doctors
- Nurses
- Engineers
- Nutritionists
- Pharmacists

THE PROGRAMME WILL PROVIDE

A guest faculty reflecting experienced representation by key international agencies offering services to displaced communities.

PROGRAMME DEVELOPMENT

The programmes are being developed in consultation with:

- Canadian International Development Agency.
- International Red Cross.
- London School of Hygiene and Tropical Medicine - Refugee Health Group.
  (WHO Collaborating Centre for Health of Refugees and Other Displaced Communities.)
- Laboratory Centre for Disease Control - Health & Welfare Canada.
- Oxfam Canada - Ont.
- Pan American Health Organization.

as well as agencies identifying a need for these programmes.

REQUEST FOR INFORMATION

Further details confirming guest speakers, programme format, registration fee and accommodation will be circulated in December 1984. To secure programme information and an application form, fill in the form below and return it to Seneca College as indicated.

Name: ..............................................................
Organization: ....................................................
Address: ................................................................
City: ...................................................................
Country: .........................................................Postal/Zip Code: ..........................................
Telephone: ........................................................


PCDPPP AND ANTIGUA DROUGHT RELIEF

The project's first activities in the area of drought relief took place this year, and began in January when the Government of Antigua and Barbuda, the project's host country, declared a national water emergency, and asked the Project to assist.

By May, reservoirs were dry, livestock were dying, and there were fears for the effect on human life and other sectors of the economy such as tourism, and industry.

The Project contributed at a number of levels...

(a) Project Manager Dr. Deryck Heinemann headed a multi-disciplinary needs assessment team which also explored options for coping with the situation.

(b) When it was finally decided that the only solution was to barge water into the island, the project was asked by the Government and the aid donors (USAID, BDD, CIDA, and EEC) to monitor water quality and certify compliance with contract, conditions prior to the contractor being paid for delivery.

(c) The Project provided the services of a Public Awareness Consultant, Mr. Carlton James, to assess the public awareness needs in the situation.

Based on a report and recommendations the consultant was contracted to execute the short term phase of the recommendations which involved the production of audio visual material. The material was widely disseminated and regularly used.

The main product was a thirty minute video taped feature entitled "The Long Day Spell." Others were a radio documentary in two parts entitled "A time to conserve" and posters in from different designs.

The government of Antigua has written expressing its gratitude to the Project for its assistance.

Note: Enquiries about the above-mentioned material should be directed to The General Manager, Antigua Public Utilities Authority, St. John's Antigua or Dr. D.W. Heinemann, PCDPPP, Antigua.

INTERNATIONAL CONFERENCE

Chief of the Office of Disaster Preparedness and Emergency Relief Coordinator in Jamaica, Franklin McDonald, and his staff, play host to some fifty delegates from developing countries for a five-day conference on the implementation of programmes for natural hazards mitigation in developing countries.

The conference, to be held at the picturesque Jamaica North Coast resort of Ocho Rios, will include participants from three categories. These are:

(a) Officials in public and voluntary organisations with specific experience in mitigation programme design, development, implementation, and evaluation.

(b) Researchers with specific experience in Natural Hazards mitigation and development planning.

(c) Representatives of by organisations active in the support of mitigation activities in disaster-prone developing countries.

ODP Prime Director Mr. Donald stresses that mitigation activity is quite different from relief. "It is a part of planning, involving different professions and agencies, and involves a different time scale."

The lead taken by the ODP in conducting national disaster management efforts is widely seen as a worthwhile model for the region.

The conference proceedings will be edited and a collection of successful model mitigation programme plans prepared for publication. This publication is intended to be of immediate practical value to officials responsible for the development of natural disaster mitigation programmes.

ARE YOU PREPARED?

UNDP - PCDPPP Disaster Preparedness & Prevention Project.
LIST OF ACRONYMS

PAN CARIBBEAN DISASTER PREPAREDNESS AND PREVENTION PROJECT

CARICOM - Caribbean Community
CIDA - Canadian International Development Agency
ECCM - East Caribbean Common Market (now OECS)
ECLAC - Economic Committee for Latin America and the Caribbean
EDF - European Development Fund
EEC - European Economic Community
LORCS - League of Red Cross Societies
OECS - Organization of East Caribbean States (former ECOM)
PAHO/WHO - Pan American Health Organization/World Health Organization
PCDPPP - Pan Caribbean Disaster Preparedness and Prevention Project
SIDA - Swedish International Development Authority
UN - United Nations
UNDP - United Nations Development Programme
UNEP - United Nations Environment Programme
UNDRO - United Nations Disaster Relief Office
USAID/OFDA - United States Agency for International Development/Office of Foreign Disaster Assistance.
BDD - British Development Division in the Caribbean

DIARY

OCTOBER

19: Antigua Planning Meeting PCDPPP and PAHO/WHO on Health Services Organization in Disaster Training for Dominica, St. Kitts/Nevis and Barbados.

: St. Kitts/Nevis: National General Disaster Management Workshop sponsor - PCDPPP

22-26: St. Kitts/Nevis: Regional Search and Rescue Workshop Sponsor - PCDPPP

02-05: Conference - Emergency '84 - Geneva

09-11: Washington: Working Meeting on Development of Training Material for Environmental Health (PAHO/PCDPPP)

NOVEMBER

12-16: Jamaica - International Conference on Disaster Mitigation Programme Implementation - sponsor AID/OFDA


DECEMBER

06-08: Antigua- Seventh Meeting of the Management Committee of the PCDPPP, Sponsor - PCDPPP.

IN OUR DECEMBER ISSUE

- UNDRO in the Caribbean
- Focus on the International Conference on Disaster Mitigation.
- A look at the November floods in the North of Barbados.
- CERO, part of the network...
- Regional Mass Casualty Management Issues.
- Projections for regional disaster management.