

ANNEX 4.4

UNDRO ADMINISTERED COMPONENT

UNDRO ADMINISTERED COMPONENT

PAN CARIBBEAN DISASTER PREPAREDNESS & PREVENTION PROJECT

Introduction

The Pan Caribbean Disaster Preparedness and Prevention Project is a Regional Project designed to assist governments to better prepare for and to protect their population against disasters and disaster threats. The Project was initiated by Caribbean governments and is supported by regional and international organizations, and other interested governments outside the region. The Project has several major components which are administered by different organizations: project management and activities in Member States by CARICOM Secretariat; preparedness and prevention by UNDRO; health preparedness by PAHO; Red Cross Society preparedness; and first aid by LRCS.

Scope

This Project component, administered by the United Nations Disaster Relief Office (UNDRO), is responsible for the provision of long and short technical services in disaster preparedness and prevention to all Caribbean governments. A complete description of the Project is in accompanying documents; specific details of UNDRO's responsibility are contained in this annex. The proposed activity under this component covers a 21-month period, beginning approximately April 1983.

General Objective

The long-range objective of the comprehensive intersectoral Pan Caribbean Disaster Preparedness & Prevention Project is to develop the capacity of the participating countries, individually and collectively, to prevent or mitigate the effects of potentially disastrous situations and to cope with disasters when they do occur. The long-range objective of this component of the Project is to contribute to the social and economic development of the countries served by improving mechanisms of prevention and preparedness, and thus reducing losses due to disasters.

Specific Objectives

The immediate objectives are to promote and facilitate the adoption of particular preparedness and prevention measures at the national and regional levels, as follows:

1. To assist governments to plan preparedness and prevention programs. Such programs are to be based on existing hazards and the impact of disasters on the development of the countries concerned. They are to include in particular the formulation of emergency plans, the establishment of a national relief coordination apparatus and the support of prevention measures.
2. To cooperate with governments in implementing preparedness and prevention programs, based on previously agreed upon priorities and the availability of resources from within and outside the countries concerned. The fields to be covered include, but are not limited to: all aspects of disaster prevention, preparedness and relief; warning systems; vulnerability analysis; land-use legislation; zoning laws; building techniques and codes; public information; restoration of natural resources; and environmental management. The training of personnel in these fields is included as an implementation activity.
3. To recommend to governments new means of solving their disaster problems using their own, regional and/or external resources. While encouraging governments to become independent of outside resources, UNDRO will assist them, when needed, in obtaining external resources.
4. To train regional personnel in aspects of disaster planning and response. Training could be accomplished through workshops, seminars, and on-the-job experience with other disaster organizations.
5. To periodically re-evaluate risks in the Caribbean on the basis of improved resource inventories and progress made in disaster prevention.

UNDRO Commitments

UNDRO will provide technical support to the project through its Prevention and Support Services Branch.

It will select, recruit, or second, staff according to the United Nations rules and regulations, and with the approval of the funding agency and the other members of the Pan-Caribbean preparedness and prevention project management committee.

UNDRO will recruit short-term consultants to carry out specific tasks within the project, according to identified needs and recommendations made by the Project Manager and UNDRO technical staff. UNDRO will provide the technical supervision of the short-term consultants through the Project Manager, and UNDRO technical staff.

UNDRO may also provide occasional short-term services through staff members, depending on availability and funding.

Technical Cooperation and Consultative Services

Project activities will be carried out by a Project Team of experts recruited as permanent staff by the executing agencies for the duration of the Project. They will be assisted by a number of short-term consultants (see comprehensive Project description). Project activities will be supervised and coordinated by the Project Manager recruited by CARICOM.

UNDRO will recruit, employ and technically supervise the performance of two specialists--one in disaster preparedness and one in prevention--as permanent staff. It will also recruit, employ and technically supervise a number of short-term specialists, and fund training activities and country level projects.

Permanent Staff

Disaster Prevention Specialist

The expert shall have a university degree in civil engineering or physical planning and good experience in activities aimed at preventing the potentially disastrous effects of natural phenomena. He/she shall have experience, in particular, in such fields as risk analysis, the formulation of land-use legislation and zoning laws and the implementation of other preventive measures. As the physical planner on the team he will advise the participating countries on the best ways of adapting existing national legislations to specific disaster risks and of making use of the work of the experts in seismology, volcanology, hydrology, meteorology, geology and vulnerability analysis; he will cooperate closely with the national agencies in charge of regional and urban planning.

Disaster Preparedness Specialist

The specialist in this field will have extensive experience in emergency relief operations, the formulation and implementation of emergency plans (including logistical aspects such as communications, transport, stockpiling of emergency supplies and rubble removal, training of personnel in all facets of disaster relief, short-term rehabilitation, etc.), the establishment of warning systems, the organization of evacuation operations, the assessment of relief needs, the co-ordination of relief, etc. He/she will have wide international experience, particularly in developing countries.

Short-term experts

The short-term experts to be provided under this contract shall be recruited as required by the work program (see activities described in Section ____).

Description of Proposed Activities

This component will provide, on request, technical cooperation and support to initiate and/or develop the activities described below. The descriptions identify specific activities and, in some cases, for specific countries. They are nonetheless applicable to all countries participating in the PCDP, and national disaster preparedness authorities are encouraged to consider them or alternatives activities, according to need.

Activity A. Vulnerability of Public Utilities/Emergency Services

In Saint Lucia during hurricane Allen (1980), important public utilities were not resistant to hurricane damage. (One hospital building lost its roof, and there were problems of water supply in many rural areas). Water supply was a special problem in several countries following the same hurricane. A need was also evidenced to review electricity generation and distribution systems, in order to identify points of vulnerability to hurricanes or earthquakes (there should be, for example, automatic sensors to shut off the electricity supply at main distribution points in response to strong ground shaking).

In addition, a careful examination should be made of the seismic resistance of key structures, such as fire station buildings, hospitals and ambulance garages, and to ensure the safety of vital public archives.

It is proposed that this activity could be particularly appropriate for Saint Lucia. It is proposed that six person-weeks be spent in each country, involving a consultant in structural engineering, to work with the PCDP Prevention Officer and at least one senior local public works engineer.

Activity B. Hurricane Shelter Assessment

Community shelters or "safe" structures are usually designated by Disaster Preparedness Committees and incorporated into hurricane preparedness evacuation plans. Such shelters are usually public buildings, churches or factories. Their designation as a safe shelter is based on little more than casual observation of the structure having weathered a previous hurricane. The concentration of human lives in such shelters during emergencies underscores the need for a critical assessment of these buildings to ensure their structural integrity and that their locations are free from flood or surge risk.

The PCDP Prevention Officer and at least one local public works engineer would participate actively in a field study regarding shelters and prepare a report on the findings. Eight person-weeks of work are estimated to be necessary.

St. Vincent is proposed as a target country for primary attention in this area. Due to the fact that it has been spared truly devastating hurricanes in recent years, this country has not gained practical experience of the potential damaging effects, nor has the capacity of designated hurricane shelters to perform adequately been tested.

Workshop on Hurricane Shelter

It is proposed that a workshop be held on this subject in any country chosen for this detailed study, on a date which immediately follows the completion of the field survey and report. The objective of this workshop would be to illustrate the problems identified and the solutions recommended for the particular case, to public works and disaster officials from other countries of the Region. The workshop would be held for some 20 participants, for a period of approximately five days.

Activity C. Vulnerability of Predominant Housing Types

The vulnerability of housing--particularly "non-engineered" or vernacular housing--to the effects of hurricane and earthquakes has been demonstrated in several Caribbean countries (hurricane David in Dominica and Allen in Haiti, Jamaica and Saint Lucia). In several of the impacted countries (Dominican Republic, Haiti, Jamaica), the experience led to reviews of the type of housing proposed.

Similar studies may be particularly appropriate at this time for Grenada, Saint Lucia and Trinidad. Of these territories, only Saint Lucia has in recent years been affected by a major disaster (Allen, 1980). The need therefore exists for an audit covering the effects of all hazards (including earthquakes) on housing in these territories. Grenada is of interest since a comprehensive rural housing improvement project has been undertaken and the effect of such projects on reducing vulnerability needs to be assessed. The project should also produce an action plan for the integration of the recommendations into the building sector. This project is complementary to the ongoing activities related to the creation of a Caribbean Uniform Building Code.

This activity will require at least 10 person-days for each of the Eastern Caribbean States and at least 20-25 person-days for Trinidad. A housing officer from each country and territory should be encouraged to support the project activity on a full-time basis.

Activity D. Volcanic Emergency Preparedness

It is recommended that the countries of Dominica, Montserrat, and St. Kitts-Nevis be given priority attention in this aspect of disaster preparedness. All three countries have volcanoes with a high potential for violent eruptions, high risk to large sections of the population and the probability of large-scale social and economic disruption.

None of these countries has had volcanic emergencies in the immediate past that have motivated the preparation or resulted in the practical testing of volcanic emergency plans.

It is proposed that for each country, a three-person, two-week mission be carried out by a specialist in each of the three following disciplines: volcanic early warning systems; volcanic hazard assessment; and social and economic impact and emergency management issues.

Activity E. Hurricane Risk Maps for Coastal Areas

Antigua, Barbados and Belize are countries in which a considerable proportion of the population and investment in property is close to sea level and, therefore, specially subject to hurricane and tsunami damage. This activity will complement the proposals developed at the WMO regional meeting held in Jamaica in December 1981, to consider problems of storm surge.

It appears that to date relatively little attention has been given in the Caribbean to reviewing the extent or details of historical losses due to the sea (surge and wave action) related to hurricanes or to tsunamis. This would be desirable as a basis for future hazard and risk evaluation. There is also a need for the development and application of a methodology for estimating surge and tsunami wave heights as a function of the physical parameters of a hurricane (e.g., barometric pressures and wind speeds) or an earthquake (magnitude and hypocentral distance) which can now be determined from existing networks of scientific instruments. This is an immediate high priority activity which will complement proposals under discussion to develop more precise models (SLOSH/SPLASH, etc., a surge action in various Caribbean islands in coordination with the wind).

Resources available within the region include those of the Caribbean Meteorological Institute in Barbados, for hydraulic engineering aspects and in the field of hydrology. Contact should also be made with the Regional Hurricane Committee of WMO and with the National Hurricane Center in Miami, Florida.

A study including field surveys and historical data searches of six person-weeks duration in each of these countries is proposed.

Activity F. Public Awareness and Education Seminars

This proposal to increase the sensitivity of professionals and decision makers to the disaster prevention and management issues is very strongly endorsed. In order for the objectives of the program to be realized, however, the range of subjects for public education seminars should be significantly widened to include issues of common interests to professionals (including physical planners, engineers, architects, housing officers, meteorologists, insurance brokers, seismologists, journalists, agriculturalists, social workers).

It is therefore suggested that seminars be organized at the (a) national and (b) regional levels. The national level seminars could focus on past local disaster experience, status of building enforcement, local criteria for selection of safe development sites, building standards in common usage, adequacy of emergency facilities and public utilities. The main objective of this national level activity is to promote disaster awareness in the professional group, extend the activity beyond the "Relief Committee" concept, and promote communication and interaction between disciplines. The national seminar, if well managed and monitored, could prove a useful source of information contact for both PCDDPP and National Coordinators. It will give the national disaster system good exposure to a very influential audience.

The regional seminars would deal with more complex issues and should bring together professionals working on related similar problems bearing on disasters as well as international experts in the topic.

In addition to the topic proposed (Improvement of Engineering Design Criteria), the following are suggested as topics for future regional seminars:

- 1) "Review of Risk Mapping and Physical Planning Measures to reduce Disaster Impact in the Caribbean"
- 2) Review of experiences in assessing vulnerability and improving the resistance of vernacular housing to disasters (Dominica, the Dominican Republic, Guatemala, Haiti and Jamaica have all executed surveys of the housing subsector, and a variety of strategies have been tried in these States)
- 3) "Strategies for reducing Disaster Losses and promoting Rapid Recovery in the Agricultural Sector"
- 4) Review of the monitoring documentation and analysis of extreme events in the Caribbean and the selection of appropriate engineering standards

5) "Media Management and Public Response to Environmental Forecasts and Emergency Warning in the Caribbean"

The regional seminars may be held in conjunction with other appropriate regional gatherings, such as the Regional Hurricane Committee, Caribbean Council Engineering Organization Building Code Review Committee, the PCDDPP Steering Committee, etc. Representatives of regional professional organizations will be encouraged to participate as appropriate.

Activity G. Construction Industry Workshops

It is proposed that this project be divided into three stages, as follows:

Stage 1

The preparation, at PCDDPP Headquarters, of public display materials (including panels of photographs and diagrams illustrating good and bad construction details), and of handouts. For this, two weeks of work by three specialists is envisaged, namely: a public education specialist; a structural engineer; and a seismologist with experience with and documentation on local damaging earthquakes and earthquake hazards.

Stage 2

This will immediately follow Stage 1, and will also take place in Antigua. It will consist of a three-day workshop for construction industry and Government public works officials from Anguilla, Antigua, Montserrat, and St. Kitts-Nevis (and other neighboring countries, if judged appropriate). At least one-and-a-half days of the workshop will be devoted to field visits to structures or construction sites in Antigua which provide practical examples of good (or bad) construction details and practices.

Stage 3

Stage 3 will consist of a repeat of Stage 2 in St. Vincent, to include participants from Dominica, Saint Lucia and Grenada.

Activity H. Public Information through Dissemination of Documents

The PCDPPP should devote more attention to duplicating and disseminating not only its own field studies and workshop or seminar reports, but also any reports from other sources relating directly to hazard assessment, risk mitigation, and disaster preparedness.

It should take the initiative to seek from regional institutions, including university departments, professional associations, international agencies and government offices involved in disaster-related studies, copies of documents likely to be of interest to disaster preparedness and prevention officials. The PCDPPP should seek permission to duplicate and circulate such documents within the Region.

The above task will require the part-time attention of one of the UNDR0 permanent Project staff members on a continuous basis, both for collection of the material and for preparation and regular updating of circulation lists.

A special request should be made to all consultants and technical advisors to the PCDPPP, to bring and deposit at the PCDPPP library copies of all relevant documents published by them or their institutions.

Activity I. Training in Emergency Management and Damage Assessment

The national Emergency Office in Jamaica (ODIPERC) is now well established, and provides a model of the lines along which other national emergency management services should be developed. It is proposed to hold, in Jamaica, a one-week training seminar and practical demonstration of office procedures for emergency management officers from the region as a whole. Approximately 10 foreign participants can be expected.

The one-week general orientation and training course would be followed by a one-week review, and practical (field) demonstrations of damage assessment methods.

Activity J. Support for the Evaluation of Emergency Procedures by Simulation or Drills

In order to objectively ascertain the adequacy of existing procedures as well as those developed as a consequence of the PCDPP Project activities and to assist disaster coordinators in the evaluation of the state of preparedness of their Emergency Response Teams, regular realistic drills and simulations are desirable. These exercises require that persons and organizations assigned roles in the plans for emergency operations execute their function and be evaluated on their performance. Drills and simulations also enable revision and improvement of response plans to be affected.

It is proposed that the PCDDPP assist coordinators in executing such drills and simulations by providing the services of experts relevant to the emergency plan being tested.

One area of need for such expertise has been identified by Jamaica, which is proposing Aircraft Emergency Drills at its International Airport and foresees the need for an expert to participate as an observer in the exercise, to provide critical comments in the debriefing after and report in written form later.

Training Activities

While the experts working within the framework of other project components will, in the course of their activities, have an important training role in respect of the personnel of the cooperating agencies, the shortage of qualified staff in certain disaster-related fields may make it necessary to provide additional training support. The main purpose of such training will be to make it possible for nationals from Caribbean countries to benefit from the knowledge and experience of others.

Training may consist of the following:

- (a) participation in disaster prevention and preparedness seminars and courses, or support of such seminars and courses, in cooperation with other international, regional or national bodies.
- (b) training of personnel from Caribbean countries in disaster prevention and preparedness, through their integration in the Project Team;
- (c) the organization, in cooperation with national or subregional institutes, of subregional seminars dealing, for instance, with:
 - i) the organization and coordination of disaster relief;
 - ii) problems related to the prevention of, and preparedness for, disasters which may result from hurricanes, floods, land erosion, etc.;
 - iii) prevention of, and preparedness for disasters of seismic or volcanic origin;
- (d) provision of fellowships for nationals of participating countries.

The participation of United Nations agencies, Member Governments and other international agencies will be sought for these activities.

Emergency Equipment Needs

Frequently, equipment or spare parts are needed to respond to an emergency. A fund will be established and made available to all participating countries, through the Team, to respond to the emergency needs described below. Administration of the fund will be by the Project Manager, in collaboration with Team specialists. The fund will be utilized if no other funds are available or if funds cannot be available rapidly enough to meet the emergency need.

The type of situation for which the fund could be utilized is illustrated below:

- communication equipment needed to evaluate or coordinate emergency medical situations (search and rescue, localized disease outbreaks);
- to purchase emergency medical or vector control equipment;
- to rent or purchase specialized equipment (hazardous materials disposal or industrial accident response);
- to provide public education/information materials and equipment during a crisis (evacuation during volcanic emergency);
- to ensure a supply of electricity, water or vital service to critical public facilities.

In order to manage disaster and emergency situations, rapid access to a body of information on the resources (facilities, equipment, human resources, demographic situation, etc.) in a country is required in order that appropriate decisions can be made. Critical resource lists can be compiled and maintained by means of small computer systems which are inexpensive and do not require that the users have specialized knowledge of computer systems.

Data base and inventory software capable of managing the critical inventory lists of small countries are now available. Jamaica has structured its critical list files so that they can be handled by a small (64k RAM) computer. A pilot application of a micro-computer data base in Jamaica is therefore proposed for an evaluation of its applicability in the region.

Supervision and Evaluation of the Component

General supervision and coordination of all components is the responsibility of the Project Manager. Technical supervision of and support to this component will be provided by the UNDRO's Prevention and Support Services Branch.

Interim progress reports will be prepared by the UNDRO team staff members and submitted to the Project Manager for his review and integration in the overall project report. Reports to agencies funding this component will be compiled by UNDRO on the basis of the interim progress reports and submitted to the respective agencies.

Budget

The total cost of this component is estimated at US\$733,700 for the 21-month period ending in December 1984.

Considering the complex nature of this multiagency project, flexibility should be allowed in the management of this component. This will permit the transfer of any saving from one category to another.

The attached budget covers the following:

- (a) all costs of the full-time disaster prevention and preparedness experts recruited by the UNDRO (salary and social benefits, as per UNDRO staff rules);
- (b) the cost of one secretary (including overtime and office supplies);
- (c) duty travel of the professionals assigned to the above posts;
- (d) cost of consultants/contractual services and for activities as described in Section _____;
- (e) training activities organized or cosponsored by the UNDRO in the Caribbean or the participation of Caribbean officials in training activities or meetings organized by UNDRO or other institutions outside the Caribbean. It may include the cost of the development and/or dissemination of training materials and services of instructors or experts;
- (f) supplies and equipment, including furniture, computer hardware or software, audiovisual equipment and other items required by the Project;

- (g) contingencies to cover unexpected cost increases or unbudgeted elements required for the successful implementation of the component activities.

In addition to the costs mentioned in this budget, UNDRO support and supervisory services (administrative and/or technical) are estimated at over % of the direct cost, that is, approximately US\$ over the 21-month period of Phase II.

BUDGET

(US\$)

22 November 1982

Salaries (permanent staff)	
Disaster Prevention Specialist (21 months)	140,000
Disaster Preparedness Specialist (21 months)	140,000
Proposed activities (A through J)	143,000
Details in Section _____	
Training (Seminars & Workshops)	72,000
Emergency preparedness equipment	80,000
Duty travel	57,000
Administration	
Secretarial staff (one fulltime) (21 months)	21,000
Supplies and materials	14,000
UNDRO overhead (10%)	<u>66,700</u>
Total Cost	US\$733,700

UNDRO contribution to this Project (21 months) \$

Caribbean countries contribution
to this Component \$

ANNEX 4.5

PAHO/WHO ADMINISTERED COMPONENT

PAHO/WHO ADMINISTERED COMPONENT

PAN CARIBBEAN DISASTER PREPAREDNESS AND PREVENTION PROJECT

Introduction

The Pan Caribbean Disaster Preparedness and Prevention Project is a regional Project designed to assist governments to become better prepared for and to protect their population against disasters and disaster threats. The Project was initiated by Caribbean governments and is supported by regional and international organizations, and other interested governments outside the region. The Project has several major components which are administered by different organizations: project management and activities in Member States by CARICOM, preparedness and prevention by UNDRO, health preparedness by PAHO/WHO, and Red Cross Society preparedness and first aid by LRCS.

Scope

This component includes the technical cooperation and training activities related to disaster preparedness in the health sector of all participating countries. It covers areas such as health care delivery, including medical and nursing care, and organization of health services and public health measures, including disease control and prevention, sanitary engineering, vector control, nutrition, management of health personnel and medical supplies, etc.

This component will also provide support to the promotion of first aid (component administered by the League of Red Cross Societies).

Specific Objectives

1. To assist in the formulation of health emergency plans at national and regional levels that are to be essential components of national disaster plans.
2. To provide basic emergency health care training to health officials at all levels and to assist national authorities in the development of human resources.
3. To assess the vulnerability of health and related services and to strengthen their operational capacity in the event of disaster.

Technical Cooperation and Consultative Services

Permanent staff

This component will entail the assignment of a PAHO/WHO specialist in public health to Antigua as part of the permanent PCDDPP staff. Full-time services of a sanitary/civil engineer will also be secured by PAHO/WHO, through recruitment of an "associate expert" (at no cost to the Project), UN volunteer (at low cost to the Project), or regular staff member (depending on availability of funds in this or another component of the project). Travel to participating countries by these staff members will be contingent on prior approval of the Project Manager, PAHO/WHO supervisors and the health authorities of the countries to be visited.

Short-term Specialists

Short-term services of specialists in the technical areas covered by this component will be provided in order of priority, by funding the cost (per diem, travel) of temporary services of PAHO/WHO experts, recruitment of short-term consultants from the Caribbean subregion --or, if these are not available, from other developing countries-- and short-term missions by specialists from developed countries. Consultants will be recruited, subject to PAHO/WHO rules and regulations, upon receipt of concurrence from the country and the PCDDPP Project Manager.

Proposed activities

This component will provide, on request, technical cooperation and support to initiate and/or develop the following activities,

1. Strengthen or establish a health sector disaster plan
 - a) Review existing plans, legislation and regulations relevant to the health sector,
 - b) Formulate technical and administrative health plans with attention to high level officials and specialized institutions, such as hospitals, water authorities, etc.,
 - c) Train designated officials responsible for the program,
 - d) Provide specific technical support (professional staff or short-term consultants), on request.

2. Develop human resources

- a) Organize prototype training activities which will create a multiplier effect and will be followed by national or multinational training activities;
- b) Develop local guidelines, training or educational material directed to health professionals;
- c) Develop (on a pilot and limited scale) simple disaster-related educational material to be disseminated by health educators and other health professionals. This activity will be closely coordinated with the Secretariat of CARICOM, the agency responsible for the promotion of public awareness;
- d) Stimulate and support the inclusion of disaster preparedness in the curricula of professional health schools (medical, public health, nursing, engineering schools and universities, etc.). Lend assistance in the design of the course materials to be used in these schools, and provide training support and materials to their libraries;
- e) Promote and support the scientific community's participation through applied research and technical evaluation of programs (through, for example, modest grants to Caribbean nationals, especially for operational research to be conducted following disasters).

3. Vulnerability analysis of health systems

- a) Assist in surveys to determine the physical vulnerability of health facilities and utilities and recommend measures for their improvement to resist serious damage and/or disruption of services following disasters;
- b) Promote the use of disaster-resistant standards in the design of new health sector facilities, especially those facilities that are to be funded entirely or partially by the international community.

Supervision and Evaluation of the Component

General supervision and coordination of all components is the responsibility of the Project Manager. Technical supervision of and support to this component will be provided by the PAHO/WHO Emergency Preparedness and Disaster Relief Coordination Office with the support of the PAHO/WHO office of Caribbean Program Coordinator in Barbados.

Interim progress reports will be prepared by the health team staff members and submitted to the Project Manager for his/her review and integration in the overall project report. PAHO/WHO will compile reports to agencies funding this component on the basis of the interim progress reports, and submit them to the respective agencies.

Objective evaluation of the health component will be carried out following completion of Phase II of the Project (first half of 1985). Evaluation will include visits to selected countries by PAHO/WHO supervisor(s) and representative(s) of the main funding agencies.

Budget

The total cost of this component is estimated at US\$637,958 for the 21-month period ending in December 1984. Funding is sought for a 5-year period in order to ensure continuity of the health disaster preparedness activities beyond Phase II of the current Project and during the initial phase of the proposed permanent Caribbean Disaster Preparedness Organization.

Considering the complex nature of this multiagency project, flexibility should be allowed in the financial management of this component. This will permit the transfer of funds saved in one category to another category.

The attached budget covers:

- (a) all costs of the PAHO/WHO public health expert attached as a permanent staff member (salary and social benefits, as per PAHO/WHO staff rules).
- (b) The cost of secretarial support (including overtime) and office supplies.
- (c) Duty travel of the professional assigned to the above post, of the projected associate expert sanitary engineer and PAHO/WHO support or supervisory staff.
- (d) Cost of consultants/contractual services, including the services of the sanitary engineer (associate expert, UN volunteer or, if necessary and possible, regular PAHO/WHO staff member).
- (e) Training activities organized or cosponsored by PAHO/WHO in the Caribbean, and/or the participation of Caribbean officials in training activities or meetings organized by PAHO/WHO or other institutions outside the Caribbean. This may include the cost of the development, reproduction and/or dissemination of training material and services of instructors or experts.

- (f) Supplies and equipment, including furniture, computer hardware and/or software, audiovisual equipment and other items required by the Project health component.
- (g) Contingencies to cover unexpected cost increases or unbudgeted elements required for the successful implementation of the component activities.

In addition to the costs mentioned in this budget, PAHO/WHO support and supervisory services (administrative and/or technical) are estimated at over 35% of the direct cost, that is, approximately US\$195,000 over the two-year period of Phase II.

PAHO/WHO ADMINISTERED COMPONENT
(Health Disaster Preparedness)

Estimated Costs
(in US\$)

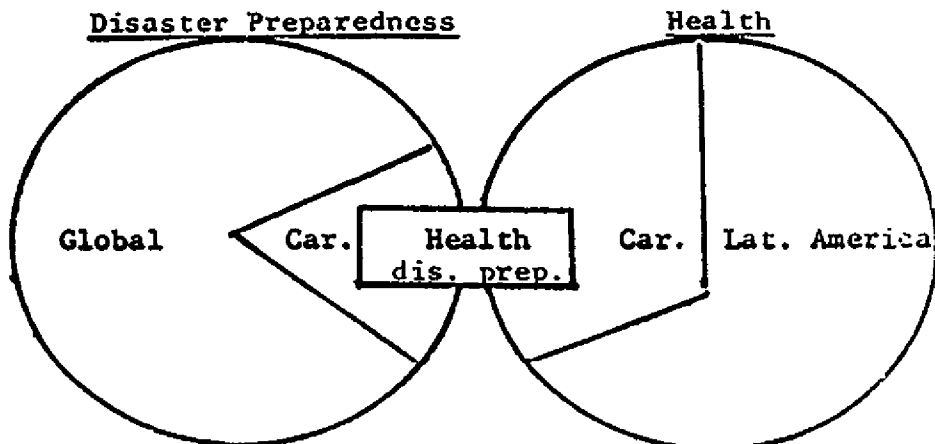
	First year (1983)	Second year	Third year	Fourth year	Fifth year	TOTAL 5-years
Public health expert, P.5	80,000	89,500	100,000	112,000	125,000	506,500
Secretarial support	12,000	13,500	15,000	17,000	19,000	76,500
Duty Travel	19,000	21,000	23,000	25,000	28,000	116,000
Consultants/Contractual Services including possible operational research grant	40,000	45,000	45,000	40,000	40,000	210,000
Training (seminars, courses, fellowship, etc.)	85,000	85,000	85,000	70,000	50,000	375,000
Supplies and equipment	10,000	6,000	7,000	7,000	6,000	36,000
SUB-TOTAL	246,000	260,000	275,000	271,000	268,000	1,320,000
CONTINGENCIES	24,600	26,000	27,500	27,100	26,800	132,000
TOTAL DIRECT COSTS	270,600	286,000	302,500	298,100	294,800	1,452,000
Including Program Support Cost (13%)	305,778	323,180	341,825	336,853	333,124	1,640,750

PHASE I RELATIONSHIP BETWEEN*
PAHO Health Team Member
and
UNDRO Project Manager

**"El documento original
se encuentra ilegible."**

1. Objectives

- a) to ensure the coordination of the health activities and integration within the general preparedness activities carried out in the Caribbean.
- b) to maintain the health disaster preparedness in the Caribbean as an integral part of the health technical cooperation and the regional program of disaster preparedness in the health sector.



2. Supervision of disaster preparedness activities

Formal administrative authority on health team members lies with PAHO according to its staff rules and regulations (recruitment, promotion, leave, etc.).

The overall technical supervision remains with the PAHO Emergency Preparedness Office.

First level supervision: Project Manager recruited by UNDRO

Second level (administratively binding):

- a) PAHO Caribbean Program Coordinator for the West Indies, Barbados.
- b) Country Representative and HQs for other Caribbean countries.

Annual appraisal of the team members will not be made without the Team Leader's written opinion.

*The current relationship between PAHO and UNDRO as executing Project agencies has been established for the duration of Phase I of the Project. The relationship set out in this document may serve as a guideline or be maintained, as appropriate, for Phase II.

UNDRO Project Manager, first level supervisor, will:

- . clear
 - health work plan
 - travel plan and actual travel
 - annual leave plan
- . transmit
 - same for formal administrative PAHO approval
 - technical reports to PAHO
- . be informed and consulted - on all requests for assistance received from the health sectors through normal PAHO channels or other direct means.
- . inform and refer for technical decision to health team members - all requests received by the team or agencies on matters regarding health aspects (medical, nutrition, sanitation, including water, health premises, etc.)
- . ensure necessary mutual exchange of information and proper consultation among team members on matters regarding health and other fields (structural, safety and health structure, water supply system vulnerability, first aid...)
- . transmit, upon request from PAHO, appraisal of the performance of the health team members for consideration by PAHO supervisors.

PAHO may request the health team members, in consultation with the Project Manager, to:

- . travel to HQS, regional or subregional places for periodic briefing or consultation, meetings, provided reasonable notice is given.
- . participate in relief coordination in case of major disaster outside the Caribbean area following consultation with the Project Manager.

3. Coordination in case of disasters

Resolution 2816 adopted by the U.N. General Assembly in 1971 and the Memorandum of Understanding between UNDRO and WHO define the terms of cooperation between the two agencies.

In case of disaster, the PAHO Director may formally place the health team member at the operational disposal of the UNDRO coordinator. Within overall U.N. coordination, the health team member would be responsible for mobilizing PAHO resources through PAHO regular/emergency channels and according to standing disaster procedures.

ANNEX 4.6

LRCS ADMINISTERED COMPONENT

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PAN CARIBBEAN DISASTER PREPAREDNESS AND PREVENTION PROJECT

Introduction

The Pan Caribbean Disaster Preparedness and Prevention Project is a regional project designed to assist governments to better prepare for and to protect their population against disasters and disaster threats. The Project was initiated by Caribbean governments and is supported by regional and international organizations, and other interested governments outside the Region. The Project has several major components which are administered by different organizations: project management and activities in Member States by CARICOM Secretariat, preparedness and prevention by UNDRO, health preparedness by PAHO/WHO, and Red Cross Society preparedness and first aid by LRCS.

Background

Disaster preparedness, an integral part of development for the Red Cross Societies for the Caribbean Region, is a priority of the League of Red Cross Societies (LRCS) for several years. A project, to improve disaster preparedness in the Region, was presented by the League in 1978 which contained three phases:

- a) Seminar on Disaster Preparedness
- b) Placement of Disaster Preparedness Specialist in the Region
- c) Development of Regional Operational capacity.

In 1980, an additional component dealing with emergency first aid was presented and introduced as part of the PCDPPP.

In the second phase, the League Disaster Preparedness Delegate was placed in the Region in May 1981 and was integrated into the PCDPPP in September 1981. The First Aid Training Specialist begun his tasks at the same time. The Field Officer of the British Red Cross Society for the Region was incorporated into the Project the same year.

Scope

The Red Cross administered component includes assistance to the Red Cross Societies of the Region in evaluating their existing disaster plans, establishing plans where they do not exist as well as assisting them with training activities and developing the necessary human resources to participate actively and efficiently in disaster preparedness and relief.

Within the first aid component, the scope projects the creation of a Caribbean Emergency First Aid Manual for the training of sufficient instructors to promote it as an individual disaster preparedness.

Objective

To promote a better understanding of disaster relief preparedness, to increase cooperation and coordination in disaster relief and to make known to governments, Red Cross Societies and other disaster relief organizations, the resources and assistance available within and outside the Caribbean Region in times of disaster.

Specific Objectives

I. Red Cross Disaster Preparedness

- 1) Develop operational capacity of Red Cross Societies in time of disasters
- 2) Develop and evaluate Red Cross disaster plan in the Region
- 3) Provide expertise to national Red Cross Societies in disaster preparedness
- 4) Provide technical assistance from within the Region
- 5) Assist Societies with training personnel to manage disasters matters
- 6) Assist Societies with implementation of disaster preparedness projects

II. Emergency First Aid

- 1) Organize and conduct national training courses for instructors and instructor training
- 2) Evaluate guidelines for instructors, handbooks and public relation material with national training officers
- 3) Print and distribute guidelines for instructors and instructor trainers
- 4) Provide retention studies in each of the countries having emergency first aid programs
- 5) Assist governments and Red Cross Societies in planning, maintaining and evaluating national training programs in emergency first aid as part of preparedness measure of each country
- 6) Assist national training officers to achieve project goal to train at least 5% of country population over the next five years
- 7) To create a team of regional instructor trainers available to the PCDFPP

Permanent Staff

This component requires a disaster preparedness specialist and a first aid training specialist based in Antigua.

Short-Term Consultants

Short-term consultants recruited by the LRCS will be available or recommended by either the disaster preparedness or first aid training specialist. Whenever possible, recruitment should be done within the Region.

Supervision and Evaluation of the Component

The technical supervision of this component will be provided by the League of Red Cross Societies through the Director of the Disaster Preparedness Office in Geneva in coordination with the League Regional Officer for the Area.

The coordination of all components is the responsibility of the Project Manager with the permanent and short time staff.

Monthly reports are submitted to the LRCS Director of Disaster Preparedness Office with a copy to the Project Manager for his and the team members review. Report to agencies funding this component will be provided by the LRCS on the basis of the interim progress reports.

An evaluation of this component will be carried in the latter part of 1984 and in 1985 by the LRCS and other Project members. This will include contact with National Red Cross Societies by LRCS staff.

Budget

The cost of this component is estimated to be US\$400,950 for the 21-month period ending in December 1984. Funding is sought for two-year period to ensure continuity in the Red Cross disaster preparedness activities and coordination with the PCDPDP of these activities.

Considering the complex nature of this multiagency project, flexibility should be allowed in the financial management of this component. This will permit the transfer of funds saved in one category to another category.

Cost of professional posts will include salaries, social benefits, duty travel, and any other related expenses necessary to support the activities of the professionals.

DETAILED BUDGET

(US\$)

Professional posts

Red Cross Disaster Preparedness Specialist (Antigua), 2 years (80,000/year)	160,000	
First Aid Training Specialist (Antigua), 2 years (80,000/year)	<u>160,000</u>	320,000

Training (by short-term consultants)

Shelter management in Bahamas, Guyana and Jamaica	6,000	
Warehousing in Haiti, Bahamas, Guyana and Dominican Republic	8,000	
Disaster management training to designated officials responsible for Red Cross disaster preparedness plans in the Region	4,000	
Radio communication courses in the Bahamas and Jamaica	<u>1,000</u>	19,000

Workshops in disaster preparedness

Bahamas - February and April 1983, and February 1984	3,000	
Jamaica - February and May 1983, and one in 1984 to be determined	3,000	
Dominican Republic - April and May 1983, and two in 1984	4,000	
Haiti - June 1983	1,000	
Guyana - March 1983 (with members of PCDDPP for the Civil Defense coordinated disaster preparedness committee), and two in 1984	3,500	
Barbados - two in 1983 and two in 1984	<u>4,000</u>	18,500

Exercises

Bahamas - radio communication	3,000	
Jamaica - shelter	2,000	
Dominican Republic - desk exercise with disaster preparedness committee	<u>2,000</u>	<u>7,000</u>

Administrative and technical support by LRCS: 10%

364,500
36,450

TOTAL 400,950

PAN CARIBBEAN DISASTER PREPAREDNESS AND PREVENTION PROJECT

