

Agency for
International
Development

11th
Report

Foreign Disaster Emergency Relief

Fiscal Year
1971

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ACKNOWLEDGMENT

This report is based upon information provided from a great variety of sources. The Disaster Relief Coordinator wishes to particularly acknowledge the contributions made by U.S. Missions from around the world, other Federal Agencies, U.S. voluntary agencies, the American National Red Cross, United Nations, League of Red Cross Societies, International Committee of the Red Cross, World Council of Churches, Caritas International and Lutheran World Federation.

Special thanks should also go to U.S. Missions, the Department of Defense, the National Oceanic and Atmospheric Administration, Catholic Relief Services, Church World Service, and the American National Red Cross, for many of the photographs which appear throughout this report.

STATEMENT OF THE FOREIGN DISASTER RELIEF COORDINATOR

As previous recipients of these annual reports know, its foreign disaster case studies are limited to those in which the U.S. Government has provided some degree of assistance. Although essentially a fiscal year report, liberties have been taken with the period of its coverage to provide full information on disasters occurring during fiscal 1971 but also carrying over into fiscal 1972. These include East Pakistan civil strife, India refugees, Chad and worldwide cholera and Chilean storms. We are also extending the reporting period to provide comments on more recent developments, including the reorganization of A.I.D. and in particular its Office of Foreign Disaster Relief Coordination, significant disaster coordination developments in the United Nations and certain preparedness projects.

The publication date of the report has always been an unpredictable event since its composition necessarily must be subordinated to the emergency operations of the office. To overcome this problem we now plan to issue individual disaster case studies on a more current basis—that is, as soon as an emergency period is over and sufficient information has been assembled from Missions and other sources. In this connection it would be helpful if those organizations which provide us with data keep the new plan in mind and submit their material as early as possible.

Individually issued disaster case studies will in content be essentially the same as those contained in previous annual reports. To round out a year's activities a brief fiscal year

summary will be issued, providing disaster statistics, data supplemental to previously issued case studies, and a brief description of major developments and highlights in the field of disaster assistance.

Strengthening U.S. Foreign Disaster Relief

On January 24, 1972, Dr. John A. Hannah, Administrator of the Agency for International Development, announced an internal reform for A.I.D., which included the establishment of a new Bureau for Population and Humanitarian Assistance which would consolidate activities relating some of the most urgent needs of people—help in disasters, hunger, and over-population.

The new Bureau was directed by the Administrator to “strengthen A.I.D.’s disaster relief capability by providing higher level policy direction, better coordination of public and private responses to requirements, and increased competence in effectively coordinating U.S. activities through the United Nations.”

Some actions have already been taken to meet this goal. They include approval by the Administrator of the following recommendations made by Dr. Jarold A. Kieffer, newly appointed head of the Bureau for Population and Humanitarian Assistance:

1. To elevate A.I.D.’s foreign disaster relief function to become one of the three principal offices of the new Bureau, to be known as the “Office of the Foreign Disaster Relief Coordinator.”
2. To establish a professionally planned and equipped

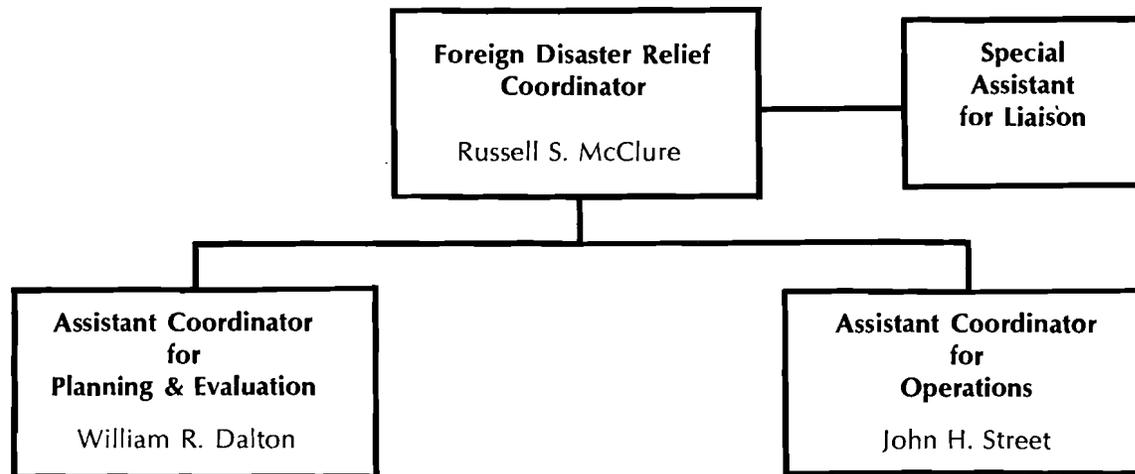
Foreign Disaster Operations Center and Information Exchange.

3. To effect a modest increase in personnel to strengthen external liaison activities, improve reporting and fiscal control and staff the disaster information exchange center. The liaison effect will be served by a Special Assistant to the Coordinator who will be responsible for establishing and maintaining systematic liaison with all interested public and private entities, including international organizations.

Other activities designed to strengthen U.S. foreign disaster assistance are under active consideration.

Simultaneous with the creation of the new Population and Humanitarian Assistance Bureau, A.I.D.'s Disaster Relief Division also underwent organizational changes designed to give full attention to both the planning and operations functions.

**BUREAU FOR POPULATION AND HUMANITARIAN ASSISTANCE
OFFICE of FOREIGN DISASTER RELIEF COORDINATOR**



Foreign Disaster Relief Coordinator Preparedness Activities

Training—The third AID/FDRC sponsored international seminar in disaster planning and preparedness convened on May 8, 1972. For the first time in the annual series attendance reached the maximum number considered practical for this kind of program. Seventeen are expected to participate in all or part of the five-week activity. Of this number fourteen participants are representing: Brazil, Colombia, Costa Rica, Guatemala, Honduras, Iran, Mexico, Nicaragua and Peru. Later in the program two delegates from Japan are expected to join the group, providing a description of disaster prevention and fire fighting in that country. We are pleased also to have representatives present this year from the United Nations, the Organization of American States and the Pan American Health Organization.

The previous seminar, second in the current series, held in the fall of 1970 was attended by representatives from Barbados, South Korea, East Pakistan, Philippines, Turkey and Venezuela.

In addition to a basic program of disaster planning and preparedness, these seminars provide an opportunity for participants to meet with counterparts from other countries to share their independently-developed solutions to disaster problems common to all; review recent scientific and technical advances in the field of disaster planning and assistance; and analyze and test national disaster plans with a view toward their improvement.

Medical Supplies—A long recognized need for a Disaster Medical Supply Component List that would enable USG overseas Missions to evaluate requests for drugs made by disaster countries has been realized. Developed by Miss Virginia Worsley of the Department of Health, Education and Welfare, for FDRC, such an inventory has now been distributed to all Missions setting forth basic medicines, antibiotics and equipment against which judgments can be made and costs determined. The list provides recommended amounts needed to meet the emergency needs for 10,000 and 25,000 population units. The A.I.D. Foreign Disaster Relief Coordinator has arranged for storage of all items on the list, except vaccines, in the Panama Reserve sufficient for a population of 10,000.

Additional Disaster Reserves—Plans are being advanced to pre-position stocks of disaster relief supplies in the Western Pacific region. Consideration is also being given to the establishment of similar regional supply depots in the Near East as well as South Asia.

United Nations Disaster Relief Coordination

During the past year the UN has shown its willingness to play a significant role in the coordination of worldwide responses to major disasters and has demonstrated its value in this role in a complex humanitarian relief program in Bangladesh. The U.S. Government will continue to cooperate in furthering future multilateral coordination. At the same time, bilateral arrangements appear to be necessary in many instances, especially for smaller disasters.

FY 1971 also marked a major breakthrough in efforts to establish a permanent international central mechanism to plan for and coordinate disaster relief through the UN. The General Assembly in December 1971 passed a comprehensive resolution that created the UN Office of Disaster Relief Coordinator. On January 14, 1972, the UN announced the appointment of Faruk N. Berkol, formerly Ambassador for Turkey to Belgium, as the first UN Disaster Relief Coordinator. Ambassador Berkol arrived at UN headquarters in Geneva the latter part of March to take up his new duties and responsibilities. The office is to direct international relief efforts in cases of natural or other disasters, promote the prevention and prediction of natural disasters, provide advice to governments on pre-disaster planning and disseminate information relevant to disaster relief.

Months before authorization of the Office of the UN Disaster Relief Coordinator, the UN had become involved in coordinating the large-scale multilateral relief effort in Bangladesh (formerly East Pakistan). The Secretary-General assumed this responsibility in May 1971 following the outbreak of civil strife in East Pakistan in March. Considerable progress had been made by the UN by the end of 1971. Even though its operations were disrupted by violence and war, UN officials remained in the area and practically all of the UN relief equipment and supplies were retained in country or in Singapore for prompt resumption of emergency relief after the fourteen-day war.

In March 1972 Sir Robert Jackson of Australia was appointed by the UN Secretary-General Kurt Waldheim, to direct the United Nations Relief Operations—Dacca

(UNROD). The UNROD staff consists of 116 people in Dacca, including UNICEF. A massive effort on the part of the world community, coordinated by the UN in cooperation with the Government of Bangladesh, is underway to import food and to provide internal transport, which is the critical requirement in order to distribute food supplies to an estimated 30 million of the 75 million population.

For this new program, the U.S. Government, as of April 15, 1972, had made food commitments to the UN of 500,000 metric tons of rice, wheat and oil valued at \$73 million; had made a cash grant to the UN for \$31 million to assist with transportation and internal logistical requirements, charter inland waterway vessels and aircraft, purchase agricultural and housing reconstruction equipment and materials, and for administrative purposes. Another \$4 million has been obligated to purchase and ship relief supplies and vehicles as requested by the UN.

International Committee of the Red Cross

During FY 1971, ICRC also was involved in multilateral coordination of aid for victims of civil strife in Jordan. ICRC administered the Jordan relief operation utilizing the combined resources furnished by the League of Red Cross Societies, voluntary agencies and nineteen contributing countries.

ICRC is also involved in assisting minority groups in Bangladesh and in administering prisoner-of-war provisions of the Geneva Convention. It is receiving worldwide assistance for its program from national societies.

The U.S. Government has made a cash grant of \$500,000 and earmarked an additional \$500,000 for the ICRC relief program.

In retrospect, looking at the developments which occurred in the field of U.S. foreign disaster relief during the reporting period and in the last few months, both within and outside of Government and in the UN, it is clear a new level of momentum has been achieved which holds promise for both the immediate and long-range future.

A handwritten signature in black ink, appearing to read "Russell S. McClure". The signature is fluid and cursive, with a prominent initial "R".

Russell S. McClure

REGIONAL REVIEW

Africa

As in past years, drought/food emergencies were the major focus of U.S. emergency relief. Of particular note was the establishment of a cooperative grain stabilization program between the governments of four chronic drought countries in West Central Africa and A.I.D., with the aim of preparing in advance for anticipated droughts and alleviating food shortages before they can develop into disaster situations. The program is being directed by the Food for Peace Division of A.I.D.

An unfortunate development in Africa during fiscal year 1971 was the outbreak of cholera in seventeen countries below the Sahara. A.I.D. is supporting the World Health Organization in a continuing surveillance of the spread, prevention and treatment of cholera.

Asia

The greatest disasters generating the largest number of victims occurred in the South Asian region during fiscal 1971. The cyclone which struck East Pakistan (now Bangladesh) in November of 1970 was the worst disaster of this century in terms of the number of lives lost. Four months after the cyclone, civil strife erupted in East Pakistan resulting in almost 10 million Bengalis fleeing across the border into India—the greatest movement of refugees within the time frame of a few months ever crossing from one country to another. The situation

culminated in war between India and the Central Government of West Pakistan. These three events took a minimum of 505,560 lives and seriously affected some 30 million people. Of the \$206 million in U.S. assistance for 51 disasters in fiscal year 1971, 75% was directed toward emergencies in East Pakistan and India. There remains now the problems of providing shelter, food and medical help for the refugees who have returned to Bangladesh from India and the additional millions who remained in the country but were displaced by the civil strife and war.

Asia—East

The five typhoons which struck the Philippines between August 31 and November 19, 1970 demonstrated the tragedy of inadequate warning in one instance and its importance in saving lives in another. The newly established Philippines National Disaster Control Center was surely tested beyond normal expectations and it performed effectively. An innovation for disaster relief following the first typhon, "Fran," was the distribution of nutribuns. These were introduced in the Philippines through an A.I.D./voluntary agency-assisted school nutrition program, using USG Food for Peace commodities. The high protein, extra nutritious roll created to tackle the problem of undernourished children in elementary schools. Its read-to-eat state and nutritional values makes it a particularly valuable food source for disaster victims temporarily without cooking facilities.

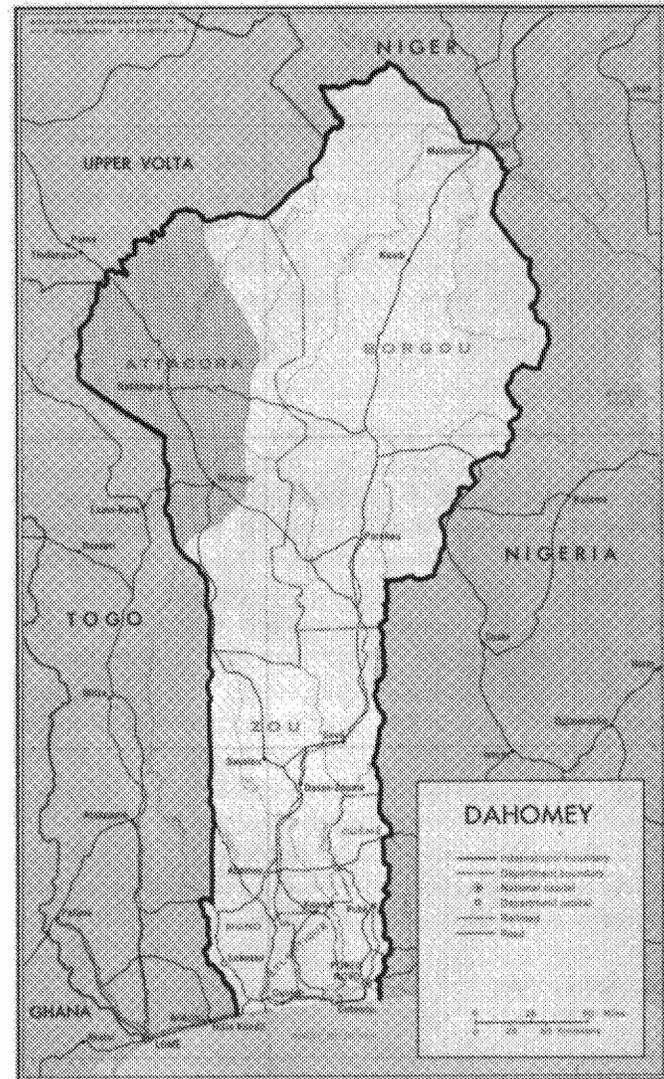
Latin America

While the magnitude of the disasters and the amount of U. S. assistance required was considerably less than for

the NESAs (now ASIS) region, Latin America again had the most disasters. There were seventeen, eleven of which were floods or storm disasters. Areas where disaster planning and preparedness programs are operational continue to show increased capability to handle disaster relief operations and to rely less often on U. S. or other outside assistance. Experience gained following the May 31, 1970 Peru earthquake—the worst disaster even to strike the Western Hemisphere—was reflected in the speed and effectiveness with which the Government of Peru and its relief organizations were able to the response to later disasters in FY 1971, including an earthquake and several floods.

Europe

A flood in Genoa Province of Italy was the only European disaster during FY 1971 in which U. S. help was requested. This was a particularly destructive disaster caused by torrential rains, but the Government of Italy demonstrated a good disaster relief capability that was responsive to the needs of the flood victims. Italian self-help exceeded \$120 million. U. S. help was minor in terms of dollar costs, but the immediate dispatch of trucks, specialized cleaning equipment and U.S. Military personnel from nearby bases to assist in clearing oily residue was timely and deeply appreciate.



ZAMBIA

Mine Disaster— September 25, 1970

... kills 89 workers. President Kaunda proclaims week of mourning and establishes a disaster aid fund for 500 dependents.

U.S. Government Assistance\$350

DETAILS:

The Mufulira copper mine suffered a massive cave-in, killing 89 miners. All but four were married, leaving a large number of children fatherless.

A 300-meter sink-hole developed, and over a million tons of sand and water entered the mine shafts. Copper production losses for Fiscal Year 1972 were expected to run to 150,000 tons.

ACTIONS TAKEN BY THE GOVERNMENT OF ZAMBIA AND LOCAL ORGANIZATIONS:

Efforts made by skilled rescue teams of the Copperbelt to reach the trapped miners were hopeless.

An aid fund called the "Mufulira Disaster Fund" was established for families of the victims. Contributions poured in from both governmental and private groups.

ASSISTANCE PROVIDED BY THE U. S. GOVERNMENT:

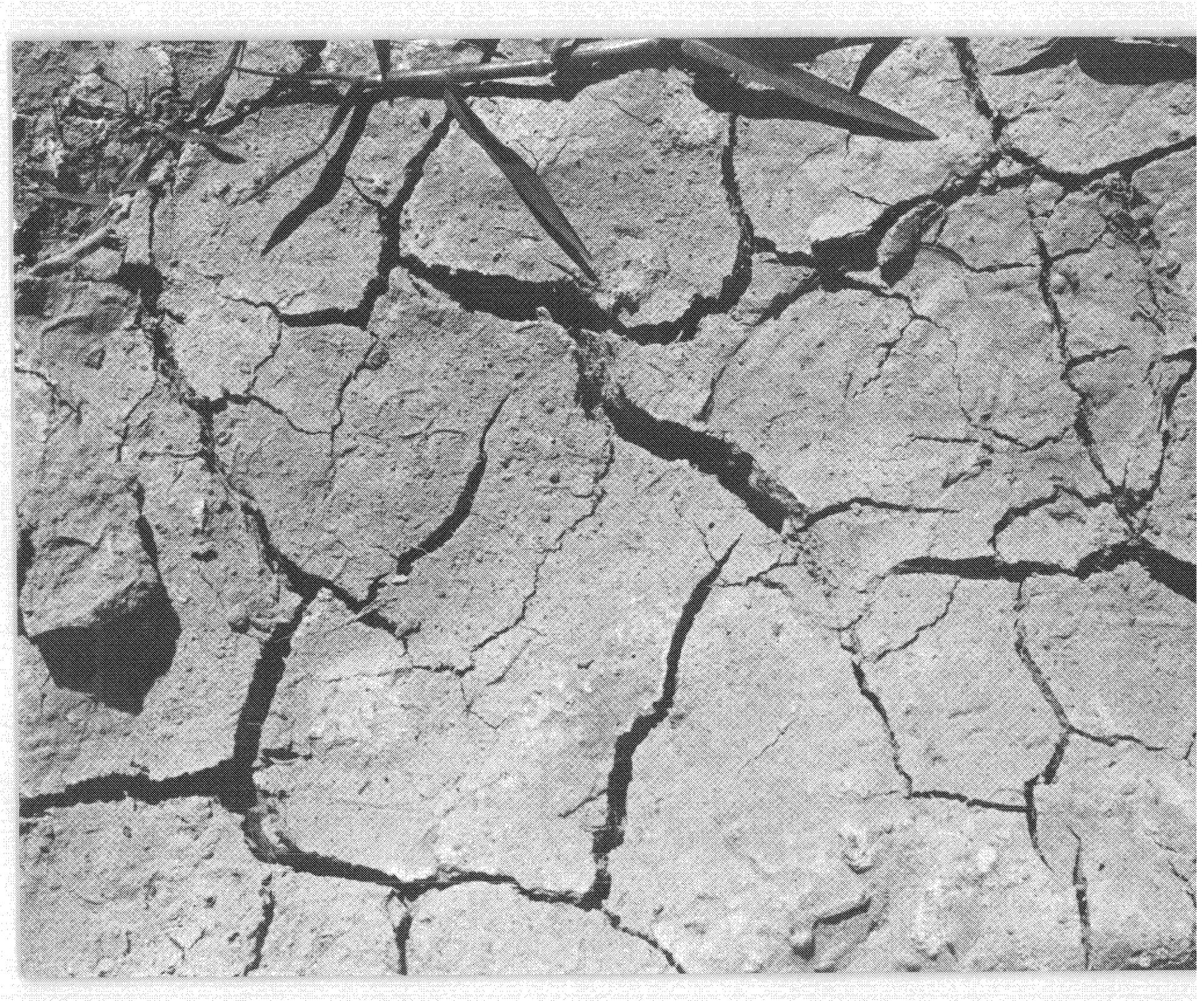
The American Ambassador exercised his disaster relief authority and presented a local currency check to the Fund in the amount of\$350

ASSISTANCE PROVIDED BY U. S. VOLUNTARY AGENCIES:

None reported.

ASSISTANCE PROVIDED BY OTHER NATIONS AND INTERNATIONAL ORGANIZATIONS:

None reported.



**CAMEROON - GAMBIA - GHANA - KENYA -
MALI - MAURITANIA - MOROCCO - NIGER -
RHODESIA - SENEGAL - TOGO - UPPER VOLTA**

**Drought
FY 1971**

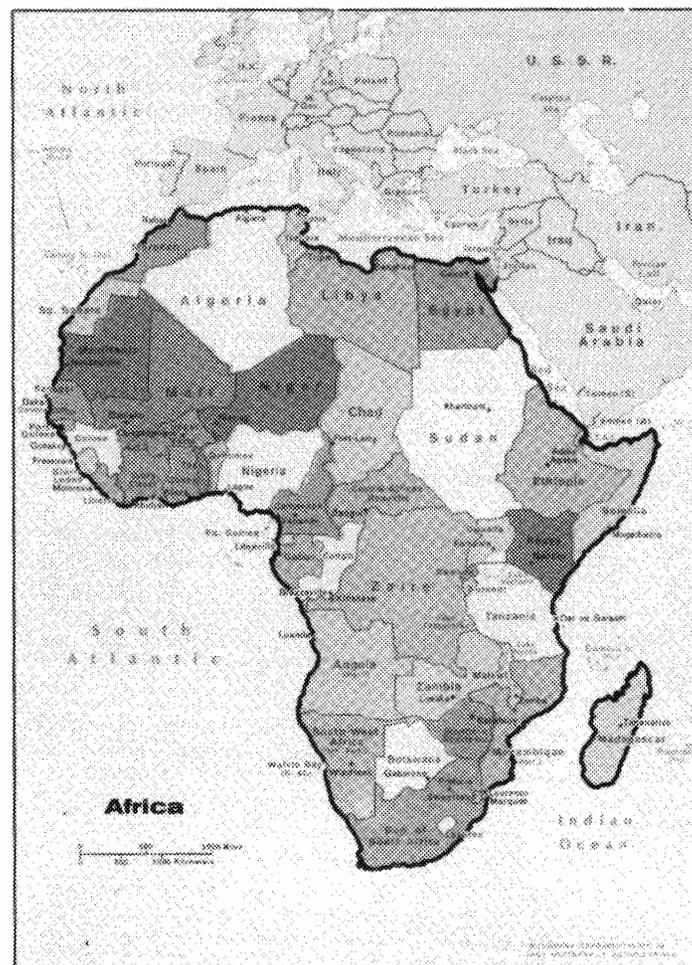
... creates food emergencies in 12 countries. Over 1.5 million are affected. To counter the annual African food shortage problem, the USG institutes a four-country experimental grain stabilization program in addition to regular P. L. 480 food grants.

Value of USG Food Assistance\$13 million.

DETAILS

Many African countries are plagued by droughts year after year. When severe, outside assistance is sought. During the last three years, 17 African countries declared drought emergencies, some more than once. During FY 1971, food crises were reported in 12 countries; all but Rhodesia asked for and received USG food under its Food for Peace Program.

	<u>Number of People Receiving USG Food Aid</u>
Cameroon	400,000
Gambia	150,000
Ghana	12,000
Kenya	150,000
Mali	52,000*
Mauritania	505,000
Morocco	137,000
Niger	*
Senegal	5,000*
Togo	150,000
Upper Volta	*
	<hr/> 1,561,000



*Information not available on the number of people benefiting from grain stabilization food grants. Where number of victims is shown under countries where grain stabilization program is in effect, they are those people receiving food aid through World Food Program (WFP).

ACTIONS TAKEN BY THE GOVERNMENTS OF MALI, GAMBIA, NIGER, SENEGAL, UPPER VOLTA, CAMEROON, GHANA, KENYA, MAURITANIA, MOROCCO AND TOGO:

After declaring emergencies, all governments asked for outside assistance. Requests for food were made to other governments and the World Food Program. A special arrangement to tie food grants to the regional Grain Stabilization Program to alleviate food deficits in the future was made between the United States and the Governments of Mali, Niger, Upper Volta and Senegal. Details are described below. Information is available only for self-help in two countries—Kenya \$700,000 and Mauritania \$218,000 for silo and warehouse repairs.

ASSISTANCE PROVIDED BY THE U. S. GOVERNMENT

As previously indicated, Mali, Niger, Upper Volta and Senegal received P. L. 480 food grants under a special arrangement whereby they could sell the commodities in food deficit areas. Local currency proceeds, above the costs of distribution, were to be deposited in special accounts to be used eventually for financing regional programs in food grain production, marketing and stabilization.

Since provisions of Manual Order 1571.3 normally prohibit sales of Title II commodities, approval of the AID Administrator was obtained for this program. Justification for this exception follows: *The U.S. Government has consistently provided costly food assistance to needy populations in this part of Africa when drought conditions have curtailed food production. While this type of assistance satisfies an immediate need, it does not contribute toward solving the problems which make food donations essential. The concept of the proposed Grain Stabilization Program is to provide food grain to certain countries during the next five years to alleviate food deficits while simultaneously using the proceeds from sales of the grain to improve their ability and capacity to produce, store, transport and market food crops.*

The remaining seven governments were provided P. L. 480 food either through Title II government to government grants or through the World Food Program. Following are the amounts and values of P. L. 480 food commodities donated for drought relief in Africa for Fiscal Year 1971.

ASSISTANCE PROVIDED BY U. S. VOLUNTARY AGENCIES:

Kenya

CARE—20,000 cartons of milk substitute to feed 5,000 school children for 60 days, valued at	\$50,000
Cash donation for purchase of local food as described under MCC below	2,000
	<hr/>
	\$52,000
Church World Service—cash through the World Council of Churches, in the amount of	5,000
Mennonite Central Committee—578,000 vitamin tablets and cash for purchase of starving cattle for slaughter with meat being provided to feeding centers, in the amount of	5,000
	<hr/>
Total for Kenya	\$62,000

ASSISTANCE PROVIDED BY OTHER NATIONS AND INTERNATIONAL ORGANIZATIONS:

World Food Program—Received requests from many of the above governments and in turn submitted requests to the U. S. Government for P. L. 480 commodities for distribution to drought victims.

Cameroon

WFP—purchased 2,000 metric tons of sorghum, estimated value	\$112,000
France—5,000 MT maize, est. value	275,000
Canada—2,400 MT maize, est. value	132,000
USSR—unspecified quantity maize	—
Italy—2,000 MT rice, est. value	264,000
	<u>\$783,000</u>

Kenya

Tanzania (Zanzibar REVCO)—1 million shillings	\$142,000
1,000 MT rice, est. value	\$132,000
	<u>\$274,000</u>
Swiss Mennonites—8,800 pounds milk powder	2,600
OXFAM—Made contributions but details not available	
	<u>\$276,600</u>
Total Other Nations	\$1,059,600

Country	Commodities	Title II Grants (Metric Tons)				Value	Est. Freight Costs	Total Dollar Value
		Govt.	Grain Stab. Program	Thru Volags	Thru WFP			
Mali	Sorghum NFDM & Veg. Oil		25,000		105	\$1,454,000	\$2,018,500	\$ 3,472,500
Niger	Sorghum		2,000			112,000	170,000	282,000
Senegal	Sorghum NFDM & Veg. Oil		25,000		450 45	1,447,000	920,000	2,367,000
Upper Volta	Sorghum		25,000			1,400,000	2,010,000	3,410,000
Gambia	Sorghum				1,800	104,000	70,000	174,000
Cameroon	Sorghum	2,000			3,000	307,000	180,000	487,000
Ghana	Corn, NFDM & Veg. Oil				756	83,000	33,000	116,000
Morocco	Flour & Veg. Oil			746		78,042		78,042
Kenya	Veg. Oil				754	294,000	55,000	349,000
Mauritania	Wheat, Flour, Corn & Sorghum				17,420	1,082,000	635,000	1,717,000
Togo	Sorghum, NFDM, Veg. Oil				2,960	429,000	135,000	564,000
		2,000	77,000	746	27,290	\$6,790,042	\$6,226,500	\$13,016,542

NFDM—nonfat dry milk.

CHAD, ETHIOPIA, IVORY COAST, CYPRUS AND WORLDWIDE

Cholera Epidemics

More than 50 countries affected with cholera in 1970-71. Exact number of cases and deaths unknown. In Africa alone, deaths exceeded 6,800.

Value of US Assistance\$605,728

This report provides a general description of the 1970-71 world cholera emergency, describes briefly its spread from Asia to Africa and Europe, gives specific information on four countries in which American Ambassadors declared cholera disasters, and describes AID's support (cash grants—material aid) of the World Health Organization in worldwide cholera control through the establishment of a U.S. Cholera Task Force.

The Disease

Cholera is man's most virulent diarrheal disease. The acutely ill may lose 50 percent of their total body water through diarrhea and vomiting within 24 to 36 hours. Fatalities among untreated patients are sometimes as high as 75 percent. It can kill in as little as four hours. Proper treatment, started soon after onset of the disease, can reduce fatalities to less than 5 percent.

Treatment and Control

Contrary to popular belief, timely treatment of cholera, through replacement of body fluids customarily done intravenously, is very effective. A new method of oral administration, developed in Pakistan by the SEATO Cholera Institute, greatly reduces the need for intravenous administration. This treatment was of great significance in Africa because of the lesser requirement for professional care and the greater ease with which oral fluids could be produced locally.

Methods of controlling cholera are immunization of populations under risk, identification and isolation of those infected, and proper sanitation to prevent the organisms' spread. Trust in currently available vaccine, however, can be too great since the effectiveness of vaccine is variously estimated from 35% to 70%. Its effectiveness is limited to about 6 months. Vaccination does not prevent the vaccinated from acting as carriers

for months. Given the facts that world travel is at an all time high, that cholera bacteria multiply rapidly, that the disease can recur repeatedly, and that vaccination of total populations every six months is not feasible, efforts to combat the disease necessarily take on the characteristics of a fire-fighting operation. Rapid identification of the disease enables vaccination efforts to be focused on people presumed by epidemiologists to be threatened in the relatively near future. It is important to prevent panic, thereby avoiding demands for vaccination of large numbers of people with little danger of exposure to the disease.

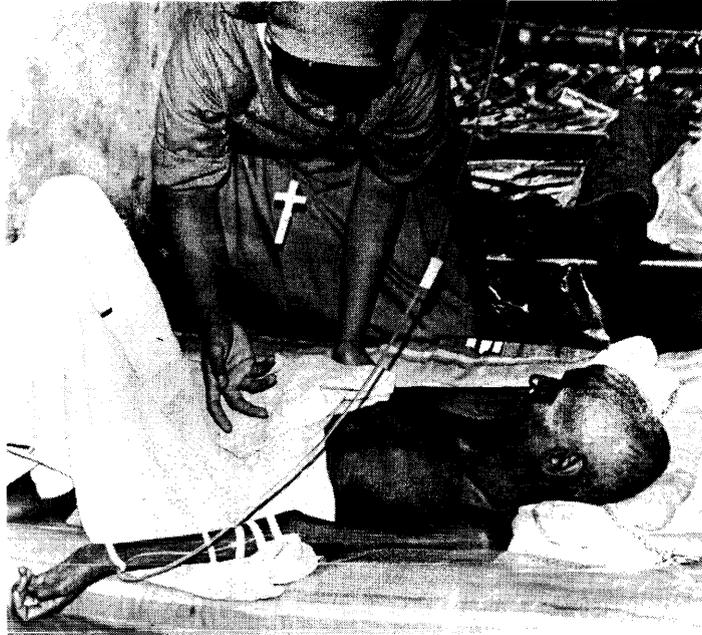
Background Seventh Cholera Pandemic

It was a mistake to think that because of the great advances in medicine and public health in recent years, there was little risk of cholera spreading far beyond the delta of the Ganges and Brahmaputra Rivers in eastern India and East Pakistan where it has been endemic since the beginning of recorded history.

There are no records of cholera epidemics involving other parts of the world prior to 1817. Between 1817 and 1923, cholera broke out of its traditional area in six pandemics, spreading over most of the globe along established trade routes. The sixth pandemic lasted from 1889 to 1923, thereafter retreating to its endemic homeland in Asia. For almost 40 years, until 1961, there were only sporadic new outbreaks, except for the disastrous epidemic in Egypt in 1947.

Prior to 1960, virtually all of the epidemics of cholera were caused by the "classical" cholera organism, the endemic home of which is the delta area of the Ganges River.

The organism mainly responsible for the seventh and current pandemic is the El Tor strain—much hardier and more infectious—first isolated at the El Tor Quarantine Station in Egypt in about 1905. For years, it was considered merely a bacteriological curiosity. The first El Tor Epidemic occurred in the Celebes Island of Indonesia in 1935, with a fatality rate of about 70 percent. In 1961 it broke out of its epidemic foci in the Celebes to spread throughout Southeast Asia and the Far East; then in rapid succession it moved into all of the countries of the Middle and Near East, several countries of Southern Europe and widely separated areas on the African Continent—



roughly two-thirds of the world. In 1970 for the first time in history, cholera spread south of the Sahara, with its heaviest concentration in West Africa. It is predicted that it will advance to the Caribbean Islands and South America in the early future.

Following are 1970-71 cholera statistics. Data were obtained from official reports by governments, the World Health Organization and press reports. In many instances these figures are probably understated. Countries sometimes conceal the existence of a cholera outbreak or its extent, since it can seriously affect their economies. Cholera-free countries often impose embargoes on commodities from cholera affected countries and prohibit their ships from visiting such areas. These restrictions are many times in excess of the International Sanitary Regulations and are beyond reason of necessity. Tourism is also affected.

Region	Cases * Not Available	Deaths
Africa		
Cameroon	343	60
Chad	7,476	2,312
Dahomey	1,685	251
Ethiopia	4,000	500
Ghana	16,377	829
Guinea	2,000	60
Ivory Coast	1,500	120
Kenya	* 92+	92
Liberia	201	45
Libya	28	*
Mali	3,491	1,335
Mauritania	900	41
Niger	1,913	336
Nigeria	3,709	647
Sierra Leone	340	47
Somalia	Hundreds	2
Togo	437	25
Tunisia	25	*
Upper Volta	222	102
Algeria	*	*
Afars and Issas	*	*
Malagasy (imported case only)	1	—
Sudan	*	*
Uganda	*	*
United Arab Republic	*	*
	44,740+	6,804+
Total African Countries Affected: 26		
Europe		
Czechoslovakia	10	1
Russia	720	*
France, United Kingdom (1 each imported case only)	2	—
Yugoslavia	1	—
Bulgaria, Hungary	*	*
	733	1
Total European Countries Affected: 7		

Region	Cases	
	* Not Available	Deaths
East Asia		
Burma	632	*
Indonesia	886	133
Korea	427	20
Malaysia	*	*
Philippines	138	*
Vietnam	1,119	*
	<hr/>	<hr/>
	3,202	153

Total East Asia Countries Affected: 6

Near East/South Asia		
India (1970 only) **	3,995	*
Israel	243	2
Jordan	3	—
Lebanon	39	*
Nepal	320	22
East Bengal (1970 only) **	1,422	537
Iraq	45	*
Saudi Arabia	500	65
Turkey	2,000	40
Cyprus	*	*
Muscat and Oman	*	*
Kuwait	*	*
Qatar	*	*
Trucial Oman	*	*
West Pakistan	*	*
	<hr/>	<hr/>
	8,567	666

Total NESAs countries affected: 16

** Cholera is endemic in East Bengal and India. Following the civil strife in East Bengal in March of 1971, there was only a small increase in cholera cases over normal among the displaced people. However, the situation was different for the Bengal refugees who fled to India. During the summer of 1971 there were 44,130 cases and 5,560 deaths. This situation is covered in the separate case study for India on the refugees.

ACTIONS TAKEN BY GOVERNMENTS AND LOCAL ORGANIZATIONS (IN GENERAL):

In many instances travellers were not allowed to move across borders without proof of anti-cholera immunization. Immunization campaigns were initiated in countries affected or threatened by cholera, and the World Health Organization received requests from most of the countries listed for vaccines, pedo-jets and treatment supplies. Most countries waged clean-up campaigns and warned the population on the importance of sanitation measures.

ASSISTANCE PROVIDED BY THE U. S. GOVERNMENT (IN GENERAL):

A Cholera Task Force was established in the AID Technical Assistance Bureau on September 9, 1970, on a temporary basis. The AID Administrator authorized a two-year extension for the Task Force on August 30, 1971. It became the focal point within the Agency for all matters pertaining to cholera and assisted WHO and other multilateral organizations in implementing actions needed to reduce the immediate threat. It is also assigned the task of stimulating long-range planning for the prevention of future cholera pandemics.

During 1970-71, the task force established a close relationship with WHO Geneva, through personal visits, frequent telephone communications and the exchange of consultants. In cooperation with AID Disaster Relief Coordinator, the Task Force made contributions to WHO in the form of cash, vaccines and related supplies for cholera control activities. They were sent to WHO/GENEVA without being earmarked for a particular country. AID contingency funds used for providing 10 million doses of vaccines and other supplies in addition to cash grants to WHO amounted to\$436,000

Comment—Resources which WHO can make available in cholera emergencies depend to a large extent on voluntary contributions from member states. Demands created by the continued spread of cholera required constant priority reassessment. It was impossible for WHO to satisfy the demands of all petitioners, some of which tended to be unreasonable. USG bilateral emergency assistance is not considered to be a

desirable alternative to this arrangement except under extraordinary circumstances. (During the reporting period, bilateral aid was given on only four occasions, described below.) There are also policy limitations on the use of AID funds available through the worldwide Disaster Relief Account, and the U.S., largely for technical reasons, does not maintain significant stockpiles of supplies. Therefore, U.S. Missions have been instructed to refer requests for assistance to WHO.

ASSISTANCE PROVIDED BY U. S. VOLUNTARY AGENCIES: (IN GENERAL)

Catholic Relief Services, OXFAM and the Catholic Medical Mission Board provided for the Turkey cholera epidemic 500,000 doses of vaccine and 8,000 pounds of antibiotics.

Value of these supplies and airlift \$49,000

ASSISTANCE PROVIDED BY OTHER NATIONS AND INTERNATIONAL ORGANIZATIONS: (IN GENERAL)

World Health Organization

WHO accepted the leadership role in combatting the current spread of cholera. It established a WHO-controlled pool of vaccines, rehydration fluid, antibiotics, equipment, laboratory supplies and funds to which member countries were asked to contribute. WHO makes continuous assessments of the spread of the disease, the amount of vaccine, treatment and other supplies required. For example, a January 1971 WHO assessment indicated 20 million doses of vaccine would be needed but later doubled the estimate due to a rapid increase in disease transmission.

Between August 1970 and April 1971, the World Health Organization received and distributed 47,995,350 doses of vaccine donated by 19 countries. 10 million doses came from the USG. Breakdown by country and value follows:

Canada—255,350 doses	\$ 49,067
China—300,000 doses	1,800

Denmark—50,000 doses	15,000
Federal Republic of Germany—200,000 doses	16,394
France—1.5 million doses	113,719
Malaysia—200,000 doses	4,000
Hungary—200,000 doses	2,667
Pakistan—250,000 doses	5,000
India—1 million doses	15,000
Iran—2 million doses	131,148
Philippines—50,000 doses	750
Sweden—325,000 doses	32,000
Switzerland—2 million doses	92,592
Thailand—300,000 doses	4,500
United Arab Republic—28.4 million doses	568,000
Swiss Serum Institute—925,000 doses	42,823
Japan—tetracycline capsules, TCBS	7,140

\$1,101,600

Cash contributions to WHO by other nations are not available.

CHAD—Cholera:

Cholera first appeared in Chad in mid-May, 1971, with a few scattered cases. It reached epidemic proportions quickly, all but wiping out a number of small villages to the south and to the east of Lake Chad. In the first week of June, the death toll had reached 1,200 and by the end of the month was 2,263. The disease spread to Mandelia, 40 miles south of Fort Lamy and also along the southern border of Chad. The total number of cases reported was 7,476 with 2,312 deaths.

With so many people in the lake villages affected by the disease, a secondary disaster resulted—serious shortages of food and water supplies.

ACTION TAKEN BY THE GOVERNMENT OF CHAD AND LOCAL ORGANIZATIONS:

The Government organization was quick and efficient in initiating control measures. Within a matter almost of hours after

the cholera was identified, treatment centers were constructed throughout the afflicted region, with wards made of straw matting on wooden frames, each housing around 50 patients. The Chad army was fully mobilized for the operation and sent its trucks combing the area to bring victims to the treatment centers. A *cordon sanitaire* was established around the stricken region, restricting all movement in and out.

The Government of Chad made appeals to the international community for vaccine and treatment supplies.

ASSISTANCE PROVIDED BY THE U. S. GOVERNMENT:

The American Ambassador declared a disaster situation warranting USG assistance and authorized the expenditure of AID contingency funds for the local purchase of food and for purchase and air delivery of four ped-o-jets and accessories from the US. Following this, the Ambassador requested that AID/DRC raise the funding level beyond this \$25,000 authorization to pay for airlift cost from London of rehydration fluids donated by OXFAM. Additionally, the U.S. Mission had determined that biscuits excess to U.S. Civil Defense needs and offered free of charge, except for transportation costs, would be well received, and AID/DRC arranged for the delivery of 50 tons of these biscuits to Fort Lamy from the United States.

Breakdown of USG Contingency Fund Expenditures

	FY 1971	FY 1972
4 ped-o-jets, parts and airlift costs	\$ 6,720	
Local purchase of food, supplies by USAID	18,000	
Inland US transport costs, ocean freight charges to Nigeria, overland transport costs Nigeria to Chad for 50 tons Civil Defense biscuits	13,780	\$ 4,308
USAF airlift of 15 tons cholera rehydration fluids		\$ 13,030
	<u>\$38,500</u>	<u>\$ 17,338</u>

Value of Civil Defense donated biscuits	\$55,838
	<u>40,000</u>
Total USG Assistance	\$95,838

ASSISTANCE PROVIDED BY U. S. VOLUNTARY AGENCIES—None Reported

ASSISTANCE PROVIDED BY OTHER NATIONS AND INTERNATIONAL ORGANIZATIONS:

Organization of African Unity—Medical supplies . .	\$ 50,000
WHO—medical supplies valued at \$50,000 but it is believed this has been credited above under Worldwide Cholera.	
France—rehydration fluids and vaccines, value not reported	*
Libya—sent 3 doctors and provided medicines valued at	108,000
People's Republic of China—200,000 doses of vaccine and a cash donation of	<u>400,000</u>
	\$558,000

ETHIOPIA—Cholera 1970

On October 29, 1970, an apparently large-scale outbreak of disease bearing clinical resemblance to cholera was reported. Existence of cholera in Ethiopia was confirmed early in November. Cholera continued to spread with 4,000 cases and 500 deaths eventually being reported.

ACTION TAKEN BY THE GOVERNMENT OF ETHIOPIA AND LOCAL ORGANIZATIONS:

Due to reports of cholera in the Sudan, UAR, Libya and the

Persian Gulf area during the summer months, the Imperial Ethiopian Government became concerned with the possibility of its first cholera epidemic. The Ministry of Public Health requested vaccine and ped-o-jet guns from the U.S. Mission to carry out an immunization program. A committee for Prevention of Cholera which met daily was established; public hygiene programs were begun; city water supplies and food handling were investigated; and an embargo was placed on certain foods and beverages from infected countries.

Despite these measures, cholera spread into Ethiopia. WHO was called upon by the Government to coordinate donor actions, and assistance was requested from the USA, Sweden, and Japan. The Ethiopian RC donated \$20,000 to the Ministry of Public Health and vaccinated 12,600 people in Addis Ababa. The Ethiopian and Swedish RC took responsibility for Illubabur Province. On Nov. 21, the IEG announced that the cholera outbreak was under control.

ASSISTANCE PROVIDED BY THE U. S. GOVERNMENT:

On November 3, 1970, the American Ambassador declared a disaster situation warranting USG assistance and authorized the expenditure of AID contingency funds to assist the Government of Ethiopia. Assistance consisted of purchase by AID/DRC of 10 jet injectors, nozzles and parts, needles, intravenous sets, tubing, syringes and other medical supplies from the U.S. Military and USPHS, plus air lift. Estimated total costs

	\$15,000
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Also 500 bottles of tetracycline, needles and syringes valued at \$31,865 were provided through the AID Cholera Task Force. However, this is presumably included in the total expenditure by the Task Force of \$436,000.

ASSISTANCE PROVIDED BY U. S. VOLUNTARY AGENCIES:

None reported.

ASSISTANCE PROVIDED BY OTHER NATIONS AND INTERNATIONAL ORGANIZATIONS:

World Health Organization

WHO provided 8.9 million doses of vaccine; 5,516 litres of fluid and 2 pounds of TCBS media.

League of Red Cross Societies

The following Red Cross Societies provided cash and supplies in response to a LICROSS appeal:

Canada—cash	\$3,500
Finland—30,000 disposable plastic syringes w/needles and 10,000 capsules tetracycline and medical assistance	1,700
United Kingdom—tetracycline, other supplies valued at	1,110
Norway—cash contribution	1,400
Yugoslavia—medical supplies	1,330
	\$9,040

IVORY COAST—Cholera

On September 4, 1970, the Ministry of Health indicated no cases had occurred in the Ivory Coast, but that precautionary measures were being planned to prevent its introduction. On October 20, 1970, 15 cases of cholera and 3 deaths were unofficially reported in Abidjan; by October 30, 390 cases; by November 3, 1,476 cases. New cases were reported after that, but on a diminishing scale. As of April 1971, 1500 cases and 120 deaths had been reported.

ACTION TAKEN BY THE GOVERNMENT OF IVORY COAST AND LOCAL ORGANIZATIONS:

Strict border control was instituted with neighboring countries,

and the population was warned to take necessary sanitary measures. Discussions were held with the World Health Organization concerning a mass vaccination program along the Guinea border, in areas near ports, airfields and transportation facilities. Requests were made for outside assistance in providing vaccine, jet injectors, rehydration fluids, and other supplies. Water supplies were analyzed daily. Over 600,000 people were immunized in Abidjan. 26 vaccination teams were immunizing people in the entire South East Lagoon area from Sous Prefecture Fresco to the Ghanian border by October 30. The major towns along the coast west of Fresco had previously been vaccinated as well as areas near the Liberian and Guinean borders. Reports of new cases of cholera began diminishing in January 1971.

ASSISTANCE PROVIDED BY THE U. S. GOVERNMENT:

On November 5, the American Ambassador declared a disaster warranting USG assistance and authorized the expenditure of AID contingency funds from the worldwide disaster relief account to provide 20 foot pump injectors, 20 vaccine cylinder pumps, 20 intramuscular nozzles and 20 intradermal nozzles at a total cost of\$9,040

ASSISTANCE PROVIDED BY U. S. VOLUNTARY AGENCIES:

None reported.

ASSISTANCE PROVIDED BY OTHER NATIONS AND INTERNATIONAL ORGANIZATIONS:

None except contributions reported under WHO (General) above.

CYPRUS—Cholera

No actual cholera cases were officially reported in Cyprus, but

the threat of cholera moving into Cyprus was very real. The cholera situation in nearby countries was prominently reported in the Cyprus news media during the latter part of August.

ACTION TAKEN BY THE GOVERNMENT OF CYPRUS AND LOCAL ORGANIZATIONS:

Concerned over the reports that the E1 Tor strain of cholera had broken out in nearby countries, the Government of Cyprus approached the U.S. Embassy on August 22 with the request that the USG contribute cholera vaccine for its inoculation campaign. At the time of the request there were only 8,000 doses on hand in Cyprus and no capacity to manufacture locally.

ASSISTANCE PROVIDED BY THE U. S. GOVERNMENT:

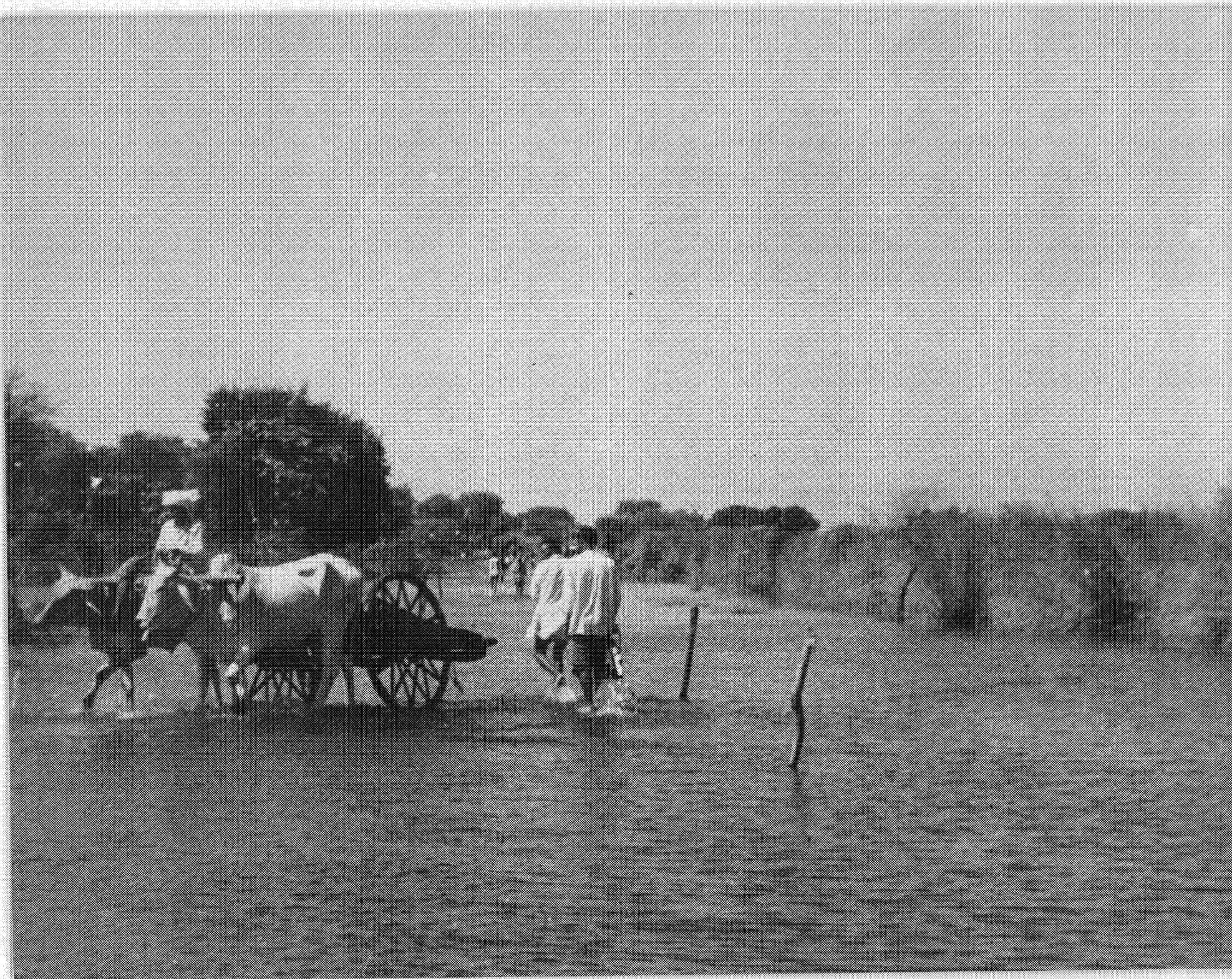
The American Ambassador exercised his disaster relief authority on August 25, and requested a supply of vaccine from the United States. Accordingly AID/DRC arranged with the US Public Health Service to package and air ship 2,500 vials of vaccine, which arrived August 29. Total cost to the AID contingency fund worldwide disaster relief account\$850

ASSISTANCE PROVIDED BY U. S. VOLUNTARY AGENCIES:

None reported.

ASSISTANCE PROVIDED BY OTHER NATIONS:

United Arab Republic—30,000 doses of vaccine with an estimated value of\$800



EAST PAKISTAN FLOODS—July - September 1970

... from unusually severe Monsoon rains strike all but two districts. 10 million people affected—one million homeless. Related effects: houses destroyed 80,286, damaged 244,151, crop losses—100,000 metric tons of rice. Persons killed unknown.

Value of US Assistance\$7,232,760

DETAILS:

With the sudden rise of water level in the principal rivers of East Pakistan from monsoon rains, all but two districts, Khulna and Patuakhali were reported in the grip of severe floods. By the end of July flooding was more serious and widespread than had been the case for years. Some reported them to be the worst since 1954. Hardest hit districts were Pabna, Bogra, Tangail, Rangpur, Faridpur, parts of Mymensingh, Kushtia, Rajshahi, Sylhet, Chittagong hill tracts and Dacca, including the municipal area.

The Government of Pakistan said that 15,000 square miles had been inundated and that approximately 304,000 houses had been destroyed or damaged. Crop damage was not as severe as early reports first indicated, but roads suffered heavy damage. Although the flood struck at a time least damaging to crops, it had a severe impact on the population. Some ten million people were affected—people whose purchasing power was traditionally nil, who depended on external assistance for their food, clothing, housing and other needs. Timely action taken by local officers in shifting and evacuating people to safer zones reduced the loss of human life and livestock. There were no reports on the number of people who were killed in this disaster.

On August 15, the Government of Pakistan announced postponement of national elections (scheduled for October 15) until December because of the severity of the flooding.



ACTION TAKEN BY THE CENTRAL GOVERNMENT OF PAKISTAN, PROVINCIAL GOVERNMENT OF EAST PAKISTAN AND LOCAL ORGANIZATIONS:

On August 3, President Yahya Khan established a special President's Flood Relief Fund and appealed to the people for contributions. The President's Fund was used primarily for local purchase of cloth, clothing, house-building materials and for operating relief camps.

The Government of Pakistan and East Pakistan arranged for free distribution of 200,000 metric tons of wheat from government stocks at a reported cost of 55 million rupees (approximately \$11.6 million).

In addition, the GOP provided 2.78 million rupees (\$585,000) in relief funds for distribution to flood victims and authorized agricultural loans in cash and seed.

The East Pakistan Branch of the Pakistan Red Cross Society had 107 relief squads working throughout the flooded area supplementing the efforts of the authorities and notably providing milk, clothing and medicaments to 150,000 destitute people.

The Government of Pakistan and East Pakistan sought outside assistance in the form of food grains, roofing material, medical supplies, nylon twine, cement, boats and motors.

ASSISTANCE PROVIDED BY THE U. S. GOVERNMENT:

USAID personnel visited the flooded areas to determine the magnitude of the disaster and assess requirements. On August 7, the American Ambassador donated to the President's Fund 100,000 U.S.-owned P.L. 480, Section 104-D, Pakistan rupees (value \$21,000). In response to requests from the Government of Pakistan and the World Food Program, the USG also made the following grants of P.L. 480 Food for Peace commodities.

Title II—Bilateral

41,000 metric tons of wheat; 1,000 of vegetable oil, value plus ocean freight \$5,612,000

Title II—World Food Program

10,800 metric tons of wheat, value plus ocean freight 1,538,000

Total USG Assistance \$7,171,000

ASSISTANCE PROVIDED BY U. S. VOLUNTARY AGENCIES AND PRIVATE SECTOR:

American National Red Cross

Baby food valued at \$33,600; cash \$5,000—total ... \$ 38,600

Church World Service

Cash donation through the World Council of Churches 2,000

Pharmaceutical Manufacturers' Association

In response to a request for medical supplies, the U. S. Consul General and USAID met on September 2 with representatives of the following pharmaceutical firms at which time they reviewed the list of drugs requested by the Government of Pakistan: Cyanamid, Lilly, Wyeth, Parke-Davis, Pfizer, Albert, Carter-Wallace, Merck-Sharp-Dohme, Searle, Smith-Kleine-French, Warner Lambert.

On September 10, it was reported that the Pharmaceutical Association to which the above firms belonged had donated and shipped to the Pakistan Association drugs valued at 21,160

Total Assistance, US Private Sector \$ 61,760

ASSISTANCE PROVIDED BY OTHER NATIONS AND INTERNATIONAL ORGANIZATIONS:

Government of Mauritius—2,000 pounds sterling .. \$ 4,800

It was reported that Russia was planning to donate 100 boat engines and that Canada had offered an interest free loan for the purchase of 420,000 sheets of corrugated iron.

World Council of Churches

Cash donations to West and East Pakistan Christian Councils \$ 10,000

World Food Program

After evaluating a Government of Pakistan request for \$12 million worth of foodgrains and nonfat dry milk, FAO/WFP approved emergency assistance of 10,000 metric tons of wheat and 468 metric tons of dry milk. The USG contributed all of the wheat, the value of which is reported under "Assistance Provided by the USG". The milk powder was to come from the European Common Market. DRC estimated value of the milk to be \$ 330,000

League of Red Cross Societies (LICROSS)

LICROSS made an international appeal to member societies to contribute money and supplies for the flood victims. Twenty-one sister societies responded with contributions valued at more than \$700,000. From cash gifts, the League purchased quantities of powdered milk in Singapore, Hong Kong and the Netherlands for shipment to East Pakistan, and also a variety of urgently needed medicaments.

Red Cross societies who contributed to or reported their assistance through LICROSS were:

Australia —cash	\$	2,210	
Austria —supplies		2,910	
Belgium —supplies		7,060	
Canada Red Cross —cash \$ 8,310			
Government—cash <u>39,160</u>			47,470
People's Republic of China Red Cross —cash			201,980
Denmark —cash			2,680
France —supplies			1,220
India —supplies			200
Japan Red Cross —supplies \$ 2,010			
Government—supplies <u>156,580</u>			158,590
Jordan —cash			280
Korea (Republic) —cash			100
Kuwait —cash			5,790
Lebanon —cash			50
Netherlands —cash and supplies			4,510
New Zealand —cash			1,100
Norway —cash			1,400
Poland —supplies			1,250
Sweden Red Cross —cash \$ 38,550			
Government—cash <u>193,190</u>			231,740
Switzerland Red Cross			
supplies	\$	14,190	
Government—			
supplies <u>4,070</u>			18,260
Turkey —supplies			49,670
United Kingdom —cash			2,390
Total assistance reported through LICROSS	\$	740,860	
Total Assistance from Other Nations and International Organizations			\$1,085,660



EAST PAKISTAN

Cyclone

...The worst of the 20th century. It happened November 12-13, 1970. Along with a tidal surge, the storm ravaged the coastal regions and islands of East Bengal. Estimated dead 300,000. Total persons affected: 3,648,000.

Some other consequences: 235,000 houses destroyed, 100,000 damaged; 470,000 livestock killed; 9,000 fishing boats lost; 400,000 metric tons rice lost. Total estimated dollar damages: \$86.4 million.

Value of U. S. Assistance: \$18,333,899

Value of Other Nations Assistance: 30,383,664

\$48,717,563

DETAILS:

The tragic November cyclone followed closely a severe flood disaster in East Pakistan during the summer and fall of 1970. The storm was first reported at 9:00 a.m. on November 9th. Initially designated a low pressure area located 800 miles southwest of Chittagong, it moved in a northwesterly direction. In four hours it had developed into a cyclone with wind speeds up to 54 miles per hour. It then proceeded in a north-easterly direction, increasing speed as it cut up into the Bay of Bengal. By the early morning of November 12, the cyclone had crossed the Khulna coast, continued to intensify, and by 6:00 p.m. was centered near Chittagong. Wind velocity eventually reached 150 mph. From this time through the early morning hours of November 13, high winds battered the islands and coastal areas.

The eye of the storm passed between Bargara and Khepupara, south of Patuakhali and Maijdi. The offshore islands from the



mouth of the Haringhata to the estuary of the Meghna were in the path of the right half of the cyclone—potentially the most dangerous part.

The whole of Hatia and Bhola Islands and sections of Patuakhali felt the full force of the winds and were inundated by a tidal bore. In addition, all of East Pakistan bounded by the Indian borders on the west and in the coastal belts to the east and the line through Noliam, Nala, Koakali, Gurnadi, Chandpur and Comilla were engulfed by the storm.

Because it coincided with the usual spring tide (a predicted high water mark of 9.9 feet at Hiron point), the tidal surge that accompanied the cyclone was abnormally high, reaching 20 to 25 feet.

All the small islands of the Ganges Delta which were submerged by the tidal surge made their reappearance after the tides had subsided. As the storm moved on, the water rushed out of the area carrying with it houses, boats, human bodies and animal carcasses. It left behind 1,100,000 acres of destroyed cultivated land. Some regions were less affected because of the presence of man-made embankments; those areas without protection lost everything.

An official survey by the Government of Pakistan indicated there had been 16 cyclones, tidal bores and floods in the past decade—conclusive evidence of the recurring nature of these kinds of disasters in the eastern region of the country. The table below lists the most destructive ones that have occurred since 1960.

The November 1970 cyclone tore through an estimated 3,900 square miles of territory in the dead of the night, catching most of the almost three and one-half million inhabitants who were affected by surprise. The system which had been established to warn the population of a coming storm did not work. The reason was that the East Pakistan Government officials, despite the issuance of a "great danger" signal, had described the cyclone in no more frightening terms than they had a lesser storm on October 23 that took 300 lives.

Date	Location	Wind Speed (mph)	Height Tidal Surge (Ft.)*	Affected	Number of Square Miles of Crop Damage	Number of People Killed	Monetary Loss (in millions \$)
Oct. 1960	Chittagong Meghna	120	10-15	4,157	1,130	8,150	9.4
May 1961	Estuary	90	10	3,097	306	11,200	11.9
May 1963	Chittagong	125	10-15	2,700	960	11,500	46.5
May 1965	Patuakhali Khulna Noakhali	100+	12	7,032	320	24,200+	57.7
Oct. 1966	Sandwip	90	14	2,727	737	850	22.4

* Estimated height of surge above normal tide water level.

In the November 18, 1970 edition of the *New York Times*, a resident of Manpura described the suddenness with which the storm came upon the island:

"At midnight we heard a great roar growing louder from the southeast. I looked out. It was pitch black, but in the distance I could see a glow. The glow got nearer and bigger and then I realized it was the crest of a huge wave."

And then destruction swept over the area. In the worst hit sections—Hatia, Bhola and Manpura—from 70 to 75 percent of the residents drowned. Over and above this an undetermined number of seasonal workers died. As shown by a graphic eyewitness account of the *Time Magazine* reporter Ghulum Malik, the devastation was so great that the total number of people dead and the amount of property damage may never be known precisely.

"I could not walk 200 yards without passing heaps of bloated bodies. For miles, animal carcasses littered the landscape. The stench was appalling—the sight of parents hovering over their dead children staggering."

Casualties and property destruction on the small island of Manpura, measuring 25 square miles, reached almost 100 percent. Prior to the disaster Manpura's population was 26,000. Afterwards it was found that three-fourths of the entire population, almost 20,000 people, had perished. Of the 4,500

dwellings existing on the island before November 13, four were left standing after the tide had withdrawn. Only a few livestock survived.

Extremely high losses occurred also on the large island of Bhola and in nearby areas of the Barisal district. Out of a population of 565,000, 134,234 were killed. Hatia Island and the coastal regions of Patuakhali and Noakhali districts were severely affected too.



Backwash of the tidal wave erodes the rich topsoil of Bhola Island in the Delta

Over all, almost 90 percent of the homes were demolished, leaving hundreds of thousands without shelter. About 75 percent of the cattle, sheep and fowl were lost, and an estimated 1700 square miles of crops, mostly rice, were destroyed or sustained heavy damage from the water. In the towns and villages struck by the full force of the wind and water, the ability to replace damaged crops quickly was impeded by the harmful effects of the salt water on the arable land. New seed could not be planted with any guarantee of success until fresh rain water had cleared the remaining salt from the soil.

Besides homes, crops, and livestock, the fishing industry was left in ruins. Thousands of boats and nets were destroyed. No segment of the economy escaped the devastating effects of the cyclone. For days the shocking casualty figures were not known in Dacca—only 104 miles away—because so many boats, the most common means of communication between the islands and the mainland, had been sunk or badly damaged.

Disruption of communication was complete. Telephone and telegraph lines could not withstand the fury of the storm and no longer connected the cyclone region to the East Pakistan capital city, Dacca. The extent of the disaster, therefore, could not be quickly and accurately known by officials. This was evident by the initially low estimate by the Government of Pakistan on the number of people killed. Bridges were swept away by the combined strength of the tidal bore and the high winds. Whatever roads previously existed were washed out; rail lines were torn up. Transportation, along with communications, was thereby halted. The sole means of reaching survivors in the more remote districts was by helicopter.

(A survey of 9 thanas in 3 districts resulted in the following findings on loss of lives and housing damage. They do not represent the entire region affected by the cyclone—only selected areas. It should be noted that the mortality figure is a minimal estimate since only families with surviving members could be counted accurately. Those that lost all members, as well as migrants, are not included.)

District	Thana	Pre-cyclone Population	Cyclone Deaths		Houses Destroyed
			Percent	Number	Percent
Noakhali	Ramgati	210,040	10.2	22,225	62.6
	Sudharam	34,626	17.3	5,990	87.8
	Hatia	218,657	7.7	16,764	89.3
Barisal (Including Bhola)	Tajumuddin	104,457	45.5	47,559	97.9
	Lalmohan	306,930	11.3	34,560	90.3
	Char Fasson	153,725	32.0	49,115	92.5
Patuakhali	Galachipa	318,813	13.8	43,996	86.1
	Kalapara	87,906	9.3	8,190	84.4
	Amtali	40,983	4.6	1,885	94.3
Total		1,476,137	15.6	230,289	87.0

Living Conditions in the Cyclone Area

The cyclone struck an area of islands and peninsulas in East Pakistan that are no more than 20 feet above sea level. These lands are extremely fertile. They were formed by the pulverized rock of the Himalayan glaciers and the silt of the Indian plains that together flow down the Ganges and Brahmaputra rivers. Rice is the chief product, and, although there are several harvests each year, the amount produced is barely sufficient to feed the population. This lack of food is compounded by the use of outmoded methods and tools. The Ganges Delta is one of the poorest areas in the world with a per capita income of only \$63.

No industrialization has yet taken place. There are no modern conveniences—electricity, well-trained medical personnel and sanitation facilities are almost non-existent on these islands. Thatch, rags and bamboo are used by the people in building shelter. The poor construction makes the average dwelling extremely vulnerable to storms of any kind.

Disease, along with the likelihood of cyclones and floods, constantly threatens the lives of the inhabitants. Hundreds of children die annually as a result of typhoid, smallpox, and tuberculosis. Cholera takes thousands of lives each year. The life expectancy in the area is exceedingly low—about 40 years.

All of East Pakistan has a land area of only 55,126 square miles but its population is about 78 million. The potential destruction of the tropical cyclones that tear through this region every year is magnified by these masses of people. The population density of East Pakistan is 922 persons per square mile—the highest in the world. Over-population continues to hamper development plans. Even though agricultural production rises by 2 to 3 percent a year, the population growth exceeds 3 percent.

Effectiveness of Pre-Cyclone Disaster Prevention Projects

Warning System

With the help of the League of Red Cross Societies, the United States, and Australia, East Pakistan had built an extensive communications system connecting the outlying areas with the urban centers. Known as the cyclone warning system, it was designed to alert residents to oncoming storms. One of the great tragedies of the November 1970 cyclone was the breakdown of this warning system. As a result not everyone who might have been able to reach a cyclone shelter even tried to. The traditional warning system, which involved a numbering system of increasing danger levels normally used by mariners, had been abandoned and replaced with a simplified system which incorporated "Distant Hurricane Danger" and "Hurricane Danger Great" warnings. These were considered to be more appropriate for use by the general public, but the people had apparently been confused because of the change. Also, in some areas with no shelters available and no high ground to which to flee, the warning would have been in vain.

In the months following the cyclone, the League of Red Cross Societies has had representatives in East Pakistan working towards reactivation of the warning system. This has been interrupted by the civil strife and the conflict between India and Pakistan that occurred in December of 1971. The League hopes to have an effective warning system established before the April/May cyclone season in 1972.

Coastal Embankments

Over the past ten years the Government of Pakistan, with financial and technical support from the U.S. Agency for International Development, constructed some 2,000 miles of coastal embankments in East Pakistan. The embankments were designed primarily to expand the critically short area of tillable land in one of the most densely populated areas of the earth. In areas that had been protected by them for three years or



AID Deputy Administrator makes an on-the-spot survey of damage and relief efforts in the Delta. In the background an AID-financed community shelter building.

more, there was a substantial increase in agricultural output. But the embankments also served as protection against most cyclonic storms, high seas and the annual river flooding. These earth works rise 15 to 30 feet above the virtually sea-level land. They were not engineered for total protection as this would be impractical in both cost and availability of materials. While some embankments were wiped out or breached as a result of the November cyclone, there was evidence that others had held and had prevented an even greater disaster. Areas that had no such protection were among those that suffered the most storm damage.

Cyclone Shelters

In Barisal, one of the hardest hit districts, many lives were reportedly saved and relief work speeded up because of a cyclone shelter project that had been started after the disastrous cyclone of May 1965. Under a US A.I.D. assisted project, the Pakistan Government constructed 220 steel reinforced brick and concrete buildings to withstand high winds and to be used to shelter nearby residents during storms and to serve as disaster relief centers afterwards.

It was in such a building that a World Bank survey team took shelter at the time of the storm. There they remained safe from the effects of the wind and tidal surge, as did many of the residents in the area. The U.S. Mission reported that in general these shelters stood up very well.

Cyclone-Resistant Housing

Approximately 800 simple compressed-block houses were built in Chittagong under a Government of Pakistan/CARE/USAID project. It was reported that they withstood heavy flood conditions in the summer and fall of 1970 and they also survived the cyclone.

ACTION TAKEN BY THE GOVERNMENT OF PAKISTAN AND LOCAL ORGANIZATIONS

Due to the total disruption of communications and the lack of an effective permanent agency to deal with emergency relief and preparedness, the response of the Pakistan Government to the cyclone disaster in the eastern region was initially slow. After this initial sluggishness, however, the GOP effectively set about to help the cyclone victims.

On November 16, President Yahya Khan made an aerial reconnaissance of the stricken area with the Governor and Relief Commissioner of East Pakistan. He followed by declaring the coast and offshore islands to be a natural disaster area and ordered the Provincial Government of East Pakistan to provide all out assistance to the survivors. He also ordered leaves of all government officers cancelled.

East Pakistan Governor Ashan personally supervised the relief program and set up his headquarters on Manpura Island. He extensively toured Manpura, Sandwip and Bhola islands between November 18 and 20. The Pakistan Army and Telegraph Departments installed emergency radio communications equipment in the affected areas.

On November 17, the Government of East Pakistan announced the release of 13.3 million rupees (about \$2.8 million) for disaster relief. It further indicated that it would draw on another 230 million rupees (\$48.4 million) that had been earmarked for "test relief work" in districts affected by the summer and fall floods. Much of that same territory was affected by the new disaster.

On November 23 the League of Red Cross Societies reported that "over-all relief operations were in full swing," with helicopters and boats covering the cyclone areas. By November 26, 32 helicopters from the U.S., Germany, France, Britain, and Saudi Arabia were involved or committed to the relief effort. In addition the Pakistan Air Force and Army supplied two C-130's from Rawalpindi (to fly four sorties daily air-dropping supplies, which by November 26 totaled 475,000 pounds); four

helicopters, one light Cessna; two or three Beavers and one Widgeon Amphibian. U.S. aircraft operated near Noakhali and covered the middle offshore islands and northern areas; German aircraft were assigned to the port of Chittagong to cover the island of Sandwip; French, Saudi Arabian and Pakistani helicopters operated out of Barisal and covered the western portion of the disaster zone; and British helicopters were based near Patuakhali and covered the southern area.

Pakistan watercraft were repaired and mobilized in increasing numbers to carry supplies. To supplement the local vessels, the USG provided 50 small boats and motors, and Britain brought in 57 boats of 1000 pound capacity and 40 inflatable boats able to carry 500 pounds each.

President Khan again visited East Pakistan on November 24 to observe progress that had been made in aiding disaster victims. On November 26 after a day long survey of sections of Noakhali and Barisal districts, he told reporters that no one would die of starvation or from lack of medical assistance as a result of the storm.

The Government of East Pakistan established an effective long-run relief program through its Office of Relief Commission (ORC). (Its effectiveness, however, was lessened after the events of March 1971.) This office was given the power to mobilize resources and make arrangements to reach victims. This consisted of:

- (1) Four operations headquarters established in Maijdi, Bhola, Hatia and Patuakhali, each under a divisional commander responsible for coordination and planning overall disaster relief efforts.
- (2) 19 zone headquarters—8 in Bhola, 4 in Noakhali, and 7 in Patuakhali, each under direction of a sub-division officer.
- (3) Seven major supply centers located in Chittagong, Maijdi, Hatia, Bhola (2), Patuakhali and Barisal which received relief supplies from Dacca and arranged for transport to coastal and inland distribution centers. Material moved from the supply

centers to the 425 distribution centers by boats, trucks and helicopters. *Four-fifths were moved by assorted water craft.*

By December 6, 1970, the ORC had made available to Noakhali, Barisal, Patuakhali, Chittagong and Khulna districts 39,885 metric tons of wheat, flour, rice and other food and had made cash grants of 10,640,000 rupees (equivalent of about \$2.2 million).

The Government of Pakistan established a board of inquiry to investigate alleged cyclone warning system failures and to make recommendations to perfect the system.

Rehabilitation and Reconstruction

The GOEP's Master Plan for rehabilitation and reconstruction of the cyclone-affected areas had a two-fold objective: (1) to assure a reasonable degree of protection for the population in the storm-prone region, and (2) to rebuild and revitalize the economy on a more modern basis thus improving the general standard of living. The major goals of the reconstruction program were:

- to provide solid structures as community buildings and cyclone shelters
- to assist with rebuilding of damaged houses and to construct new ones able to withstand the wind and water
- to provide a better water supply by digging more wells and building concrete storage reservoirs
- to repair, rebuild and construct embankments that helped save many lives and much property during the cyclone
- to rehabilitate fishermen and the fishing industry by providing boats and gear and restocking inland fisheries
- to construct an effective communications network within the cyclone-prone belt and to provide the capital to facilitate re-

lief operations in the event of a future disaster

—to improve surface transportation infrastructure, including roads, bridges, water transport, jetties and terminal facilities.

This program was proposed to be implemented through a specially constituted reconstruction board with the Governor of East Pakistan serving as chairman, supported by representatives of the Central and Provincial Governments. Although given



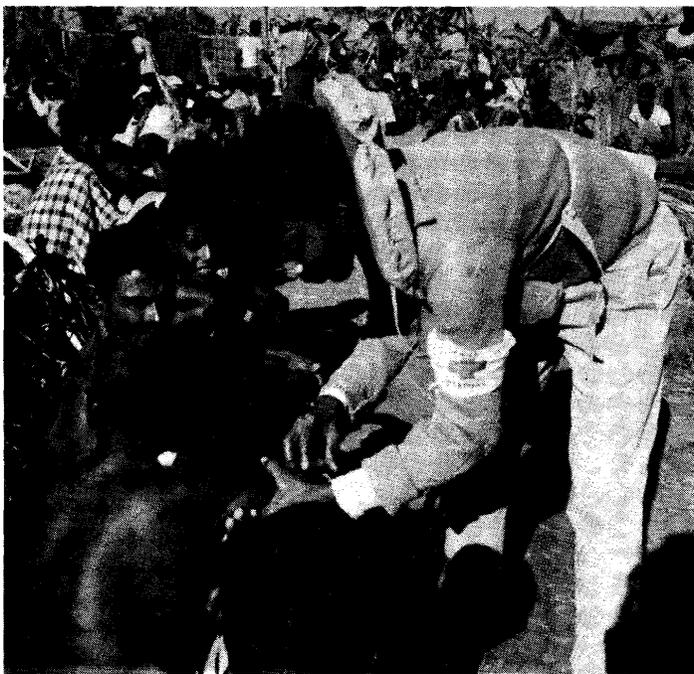
The people of the Delta recognized that "self-help" is the key stone to rebuilding their lives.

necessary administrative and financial authority for the realization of individual project goals, its activities were halted by civil war. After a few months, its plans were reactivated but before work on the projects recommenced, they were again brought to a halt by open conflict between India and Pakistan. The projected cost of the plan was 860 million rupees (\$179 million).

Relief Activities—In-Country Voluntary and Relief Organizations

The ORC was assisted by various Pakistani organizations. One

Pakistan Red Cross relief worker engaged in immunization program.



Empty boxes accumulate as Pakistan Red Cross supplies reach the cyclone victims.

group included the Dacca Chamber of Commerce, the Mahila (Women's) Relief Committee, and the Rotary Club of Dacca. Each used a similar method of operation: they purchased local material from Dacca, supplemented these goods with blankets, clothing and food from other areas, loaded everything onto large launches provided by the GOEP, and transported the articles to villages in need. The Chamber of Commerce delivered roofing, agricultural hand tools, livestock and seeds. The Women's Committee distributed building materials received from CARE, and the Dacca Rotary Club supplied tools, roofing and poles.

Another group was composed of voluntary religious organizations established after the disaster. One of the first to be operative was the Christian Organization for Relief and Reconstruction (CORR) directly supervised by East Pakistan's bishops. Another effective organization was the East Pakistan Christian

U.S. Army helicopter hovers like a giant metallic insect over the glistening expanse of the Delta.



Council (EPCC) formed by Protestant groups. Some of the proposed projects were to be carried out through a joint Christian Relief Organization (CRO). The program planned by CORR had as its objective the complete rehabilitation of over 4,000 families representing approximately 25,000 people. Rehabilitation included construction of shelters in selected thanas that would minimize loss of life and property in future disasters. A comprehensive plan was proposed by CORR for Noakhali which could easily be adapted to Patuakhali and Khulna—two other priority areas. Major elements of the Plan, which would cost about \$500,000 were:

- (1) Housing—cement pillared, partly dismantable, semi-permanent, low cost dwellings.
- (2) Community cyclone shelters.
- (3) Purchase and distribution of power tillers, bullocks, plows, seed, fertilizers and sprayers.
- (4) Cleaning of polluted tanks and ponds, providing surface pumps, small tube wells and deep tube wells for irrigation and an irrigation canal system.
- (5) Secondary and connecting roads.
- (6) Supervisory and field survey teams—personnel and camp expenses.
- (7) Transportation—jeeps and trucks.

The present status of these projects is not known. Some work got underway but was suspended for a while after March 25. Later resumed with difficulty, it was again curtailed when on December 3 conflict with India occurred. It might be presumed the work will continue as circumstances permit.

Another organization deeply involved in the relief and reconstruction efforts was the Pakistan Red Cross (PRC). Immediately following the storm, PRC worked with the Pakistan Army

setting up three operational centers—one at Bhola, one at Noakhali, and one at Hatia. As of November 30, the PRC had over 400 volunteers primarily working at Bhola. Between November 14-24, PRC delivered 70 tons of milk powder; 63,000 saris; 38,800 lungis; 32,800 blankets; 43,000 pieces of adult and 4,000 pieces of children's clothing; 3.5 million water purification tablets, and 5.9 million multivitamins. PRC also worked with the League of Red Cross Societies (LICROSS) distributing 500,000 blankets. A long term rehabilitation program was formulated jointly by the PRC and LICROSS. Description of this plan can be found in the "Assistance Provided by Other Nations and International Organizations" section of this report, under "League of Red Cross Societies."

ASSISTANCE PROVIDED BY THE U.S. GOVERNMENT

American Ambassador Joseph S. Farland quickly recognized the enormity of the disaster. He took personal command of the overall U.S. relief effort and established a special inter-agency Islamabad Task Force at the capital, chaired by Counselor for Political Affairs Stephen E. Palmer, Jr. It was the mission of the Task Force to maintain close liaison with the Government of Pakistan, coordinate with other foreign missions, and keep Washington constantly informed.

In Dacca, nearest the scene of the disaster, Consul General Archer K. Blood and AID Provincial Director Eric Griffel promptly combined forces to extend all possible assistance. Stocks of available Food for Peace commodities and other AID supplies were released for emergency relief through voluntary agencies. Systematic reporting of the situation and relief needs were cabled to AID/DRC. Among the most urgent early requirements were helicopters, blankets, tents and boats.

Ambassador Farland donated \$52,000 worth of US-owned Pakistan rupees to the Ministry of Foreign Affairs for the disaster victims. He made three visits to Dacca and the cyclone areas in November and December to observe relief operations and participated personally in initial U.S. Army helicopter supply flights.

In Washington, State and AID officials went into action as soon as the magnitude of the disaster became known. On Saturday, November 14, AID's Disaster Relief Coordinator, supported by officers of AID and State Department's Near East/South Asia Bureau, quickly informed American voluntary agencies and took steps to provide official U.S. assistance. A message of sympathy and offer of help was sent by President Nixon to President Yahya Khan on November 15.

The White House announced on November 17 the establishment of a special Inter-Departmental Working Group on East Pakistan Relief, chaired by AID Deputy Administrator Maurice J. Williams and including representatives of the White House, State, AID, USIA, Defense, Agriculture, and the Peace Corps. Its first task was to effect the President's directive to provide an initial \$10 million of emergency relief and reconstruction assistance. Mr. Williams visited the stricken province November 30 to December 5 to review emergency operations and discuss plans for longer range rehabilitation and reconstruction projects.

A U.S. military doctor and one from the U.S. Public Health Service, assigned to SEATO Cholera Laboratory in Dacca, assisted the Government of Pakistan in a medical survey of the affected areas. They reported no need existed to supplement Pakistan medical resources.

Among the most important contributions by the USG was the provision of 10 helicopters—eight from the U.S. Army and two from USAID/Nepal. Eighty-one U.S. military personnel engaged in East Pakistan helicopter and emergency communications operations. By mid-December, the time the emergency phase was considered over, the U.S. Government had funded about \$2 million for tents, boats, blankets, helicopters and other relief, not including value of P. L. 480 food. U.S. helicopters flew over 1250 sorties and delivered more than 1.1 million pounds of supplies to survivors. There were a total of 23 AID-financed U.S. military and commercial charter flights from the United States from November 14 to December 13. On November 30, the American Ambassador reported that 46 percent of foreign relief landed at the Dacca airport was American aid. The U.S.

Ambassador commented that after talking to a number of people who had been in the disaster area, few, if any, deaths resulted from delays in moving emergency supplies.

The USG approved grants of 175,000 metric tons of wheat and 50,000 of rice under Title I and Title II of the PL 480 Food for Peace program, but could complete delivery on only 94,226 tons due to subsequent civil strife. In addition, AID/Disaster Relief Coordinator arranged to obtain one million pounds of ready-to-eat biscuits from Civil Defense. The biscuits were well accepted by the people since no preparation or cooking was required.

Planned Rehabilitation Projects

In June 1971, the U.S. Government and the Government of Pakistan entered into a cooperative agreement for repair and construction of additional coastal embankments, cyclone shelters, housing and other rehabilitation projects. The agreement provided that the USG was prepared to contribute \$4.7 million to help finance the program. Plans had been developed for these projects and some were about to get underway when on December 3 conflict developed between India and Pakistan. Further work had to be suspended.

Following are two chronological action and cost summaries of USG assistance.

Date	U.S. Chronological Action Summary
11/14	US Mission/Pakistan authorized US Voluntary Agencies in the country to utilize Food for Peace commodities and USAID resources.
11/15	Message of sympathy and offer of help from President Nixon to President Yahya Khan.
11/17	Ambassador Farland donated 250,000 US-owned Pakistan rupees (\$52,000).
11/17	1st commercial paneload of USG-donated blankets and

- tents dispatched from the U.S.
- 11/17 Grant of 50,000 metric tons of USG PL 480 Title II wheat authorized.
- 11/18 First four large U.S. Army UH-1H helicopters dispatched from the U.S. via USAF C-141's.
- 11/20 Two small Bell 47G reconnaissance helicopters arrived from Nepal USAID Mission. The four UH-1H helicopters became operational in East Pakistan on this date.
- 11/21 Four more U.S. Army UH-1H helicopters sent from the U.S. via USAF C-141's.
- 11/20 to 11/24 Nine commercial flights chartered by the USG and carrying USG and voluntary agencies priority disaster supplies left the U.S. for East Pakistan during this period of time.
- 11/30 Boeing Company demonstration flight of a 747 jet carried free of charge 25 tons of priority items including Civil Defense biscuits. The jet made stops enroute and arrived in East Pakistan 12/4/70.
- 12/13 to 12/18 Six U.S. military C-141's left for East Pakistan on 12/13 to pick up and return the eight helicopters to the U.S. They brought with them thousands of pounds of Civil Defense biscuits, seeds and other supplies. During the period 12/15 to 12/18 the helicopters were withdrawn.

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- 1/ 1 to 11/30 During this period an additional 175,000 metric tons of Food for Peace commodities were authorized and ocean freight shipments were scheduled. (Only a portion of this food could be delivered due to port congestion and disruption of inland transport resulting from civil strife.)
- 6/16 AID agreement with the Government of Pakistan to pay \$1 million for chartering coastal vessels to deliver food and other supplies in the cyclone area.
- 6/29 AID agreement with the Government of Pakistan to pay \$4.7 million to assist with cyclone reconstruction and rehabilitation projects. (Civil Strife and Pakistan/India war prevented implementation of these projects.)

U.S. Cost/Value Summary			
Costs	Contingency Funds	Value of US-Owned Rupees	Value of Food
8 helicopters, their delivery to EP, operation cost, per diem/ expenses of crews. There were 12 C-141 flights involved in airlifting these helicopters to and from East Pakistan	\$ 772,000		
2 helicopters from USAID/Nepal	57,388		
Cost of 10 chartered commercial airlifts .	570,696		
10,080 blankets and 1,000 tents	111,023		
60,000 plastic quart bottles; 30,000 can openers	12,978		
50 boats and 50 motors and parts	62,700		
Materials for construction of 8 fiberglass fishing boats	2,200		
2.25 million water purification tablets .	5,000		
2 emergency chlorinator kits	2,334		
23,000 pounds assorted vegetable seeds .	34,848		
Inland U.S. freight charges	7,627		

Costs (Cont'd)	Contingency Funds	Value of US-Owned Rupees	Value of Food
Air and ocean freight charges for voluntary agencies' supplies ..	16,000		
US Mission dollar costs for relief	3,746		
Value of US Civil Defense donation of one million pounds of biscuits			400,000
P. L. 480 Title II Food Grants			
50,000 metric tons of wheat under bilateral agreement with the Government of Pakistan, plus ocean freight.			6,369,100
25,000 tons of wheat and oil through the World Food Program, plus ocean freight.			5,030,000
P. L. 480 Title I Emergency Relief			
Original commitment was for 100,000 metric tons of wheat and 50,000 of rice, which including ocean freight was valued at \$18.7 million. However conditions in			

Costs (Cont'd)	Contingency Funds	Value of US-Owned Rupees	Value of Food
East Pakistan following civil strife prevented delivery of most of this grain, making necessary diversion of it to West Pakistan. An estimated 19,226 metric tons of wheat arrived in East Pakistan, valued at			1,348,000
US-Owned Rupees Used for Relief Operations:			
Donation of 250,000 to Government of Pakistan	\$	\$ 52,000	\$
Released to CARE—481,500		100,000	
Released to UNICEF 1,203,750		250,000	
For USAID expenses, medical assistance, travel costs and to assist HELP program—444,135 .		94,500	
Cost of chartering coastal vessels	1,000,000		
Although the USG obligated \$4.7 million for reconstruction and rehabilita-			

Costs (Cont'd)	Contingency Funds	Value of US-Owned Rupees	Value of Food
tion projects, it is not completed assistance summarized here since circumstances prevented implementation.			
TOTALS	\$2,658,540	\$ 496,500	\$13,147,100
		(\$16,302,140)	

ASSISTANCE OFFERED AND PROVIDED BY U.S. PRIVATE SECTOR

General

Offers to help poured in from private citizens appalled by the magnitude of the disaster. Again, as was the case following the Peru earthquake, the majority wanted to collect supplies and sought USG help in arranging and paying for airlifts. The temptation for individual citizens and groups to collect unsolicited items such as food, clothing and medicines is understandable. It is difficult, however, for private relief agencies and the government to handle such donations of goods. They tend to clog transportation and distribution pipelines at a time when all available resources are needed for efficient, fast deliveries of high priority items in direct response to a country's specified requirements.

Mr. Tabarok Hussain, Deputy Commissioner of Relief and Rehabilitation for East Pakistan (at that time) was in the U.S. for disaster relief training. He pointed out that the cultural patterns of the people in the cyclone area made it very difficult for people from the U.S. to meet their clothing and food needs. Along with AID/Disaster Relief Coordinator, he stressed

that cash donations would be far more effective. AID/DRC advised those making inquiries to send their cash contributions for the cyclone victims to CARE, American National Red Cross, Catholic Relief Services, Church World Service, or the newly created Pakistan Cyclone Relief Fund. The experience gained during the Peru earthquake relief program made it easier to discourage the private collection of supplies and to provide early advice to people wishing to help. Unlike the Peru situation, no large pile-up of supplies occurred at U.S. airports.

There were also a large number of calls from people in the U.S. offering a variety of skills to East Pakistan disaster victims. These included doctors, nurses, pilots, engineers, mechanics and food distribution and disaster operations experts. A record of names and addresses was made by AID/DRC of all such offers should a future need develop and be requested by the Government of Pakistan. The USG received no requests from either the central or provincial governments for U.S. personnel services other than for helicopter and communications crews and two doctors already on the scene surveying medical requirements.

Formation of a Citizens' Relief Committee and Fund

In response to mounting concern among Americans, President Nixon announced on November 26 the formation of a citizens' Pakistan Relief Committee.

Mr. Robert D. Murphy, Chairman of the Board of Corning Glass International, agreed to serve as Chairman of the Committee, with Mrs. Richard Nixon serving as Honorary Chairman. The Committee consisted of some 25 distinguished citizens, many of whom were already involved in the cyclone relief work. To assist the Committee and U.S. voluntary organizations seeking to provide emergency help, the U.S. Office of Voluntary Action established a Pakistan Relief Center manned by volunteers in the Washington area. At the same time a Pakistan Cyclone Relief Fund, co-chaired by Mr. Joseph Barr, President of American Security and Trust, and Mr. Walter Surry, a Washington attorney, was established to accept tax deductible donations from the public. It was planned to channel all money donated to the relief fund to U.S. voluntary agencies

which had or were establishing relief and rehabilitation programs for the cyclone victims.

As of December 15, 1971, \$442,214 had been collected, of which \$150,000 was distributed to U.S. voluntary agencies prior to December 3, 1971, and \$47,189 went to defray administrative and fund raising expenses. The balance is being held for apportionment to voluntary agencies pending their ability to resume their planned projects.

Agencies which received apportionments of the disbursed \$150,000 were: CARE, Catholic Relief Services, Lutheran World Relief, Seventh-Day Adventist Welfare Service, Church World Service, Salvation Army, Community Development Foundation, Medical Assistance Programs, and World University Services. Since the \$150,000 is included in this report in the total aid attributed to these agencies, only the balance remaining for apportionment and administrative expenses is included here

.....	\$292,214
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Voluntary Agencies

The following assistance data by voluntary agencies generally relates to the pre-civil strife period. While some cyclone-related assistance was given by several of the agencies after March 25, it was difficult to separate cyclone and civil strife donations. In general, contributions by voluntary agencies after March 25 are included in the Civil Strife Disaster Report, in this way reducing the chance of duplication.

American National Red Cross

Immediately following the cyclone, ANRC contributed \$30,000 in cash for emergency relief through the League of Red Cross Societies (LICROSS) and the East Pakistan Red Cross, along with blankets, children's underwear, men's shirts and sweaters. ANRC also raised funds and provided field personnel to assist LICROSS in building cyclone shelters and reactivating the cyclone warning system, and in other disaster preparedness projects. (See description on these under "Assistance Provided by Other Nations and International Organizations." Total value of ANRC assistance as of 12/3/71

.....	\$131,800
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CARE

Care had an effective program in the disaster area prior to the November cyclone. The regular CARE staff, augmented by two additional personnel sent immediately by CARE/New York to Pakistan, worked closely with Bengali officials in the relief effort. Subsequently, CARE staff was increased to 15.

Several boats with CARE-provided food departed Dacca November 25 to the down river areas of vital need. From there supplies were loaded on smaller boats in order to reach remote areas where no road links remained. CARE brought in kerosene stoves and cooking pots for emergency kitchens and distributed rice and other food for 60,000 meals in the first week of the emergency.

CARE funds, and USG-owned Pakistan rupees donated through CARE, were used in promoting and implementing reconstruction/rehabilitation programs. CARE donated construction materials and/or rupees for temporary housing, reconstruction and agricultural recovery projects initiated by the Dacca Chamber of Commerce, Rotary Club and Mahila Relief Committee.

CARE also agreed to undertake a project in the Bhola area for construction of cinder block and metal roof houses, similar to those built under CARE guidance in the Chittagong area prior to the cyclone, which stood up so well under the onslaught of wind and water during the storm. The project was to be financed by the U.S. Government in cooperation with the Government of Pakistan. Work had barely begun after having been held up by the civil strife, when it was suspended again due to the outbreak of hostilities between India and Pakistan on December 3, 1971. As of March 4, 1971, CARE donations in cash and kind from its own resources amounted to \$.600,000.

Catholic Relief Services

Catholic Relief Services began its program in East Pakistan in November 1970 by donating money, water purification tablets, blankets, vitamin tablets, typhoid vaccine and antibiotics for cyclone relief. This included contributions made through CRS

by the *Catholic Medical Mission Board*. CRS also channeled funds and services for cyclone-proof housing, community shelters, irrigation, drainage, road construction and agricultural development projects in Noakhali, Patuakhali and Khulna districts through Caritas International and the Christian Organization for Relief and Reconstruction (CORR). This agency was set up by the four Catholic Bishops of East Pakistan after the cyclone. Work on the projects was done by able-bodied survivors, providing employment and a source of income while rebuilding their homes and villages. (See more detailed description under "Action Taken by Government of Pakistan and Local Organizations.") Total CRS cash and in kind donations related specifically to cyclone relief\$211,730

Christian Children's Fund

Cash donations were made to the Home of Bethany in Kecargani and the Kellogg Mookerjee High School Project in Dacca July 1970 through November 1971, totaling\$36,247

Church World Service

CWS began a program in East Pakistan in November 1970 by providing typhoid vaccine, medical supplies, water purification pills, blankets, and clothing for cyclone relief. It also donated money for rehabilitation projects. Total value of CWS aid \$220,000

Following the cyclone, CWS sent an engineer to East Pakistan to work on plans for a \$2 million rehabilitation project. However, the outbreak of civil strife in March resulted in the recall of the engineer and suspension of the project. Since March 25, 1971, CWS has been sending its cash donations, personnel and material aid through the World Council of Churches and the East and West Pakistan Christian Councils.

Community Development Foundation/Save the Children Federation, Inc.

Following the cyclone and tidal wave, CDF initiated five self-help community reconstruction projects involving 2,200 work-

ers who were given cash awards in return for service. From January to April 1971, CDF trained Bengali officials in self-help techniques. As of March 4, 1971, CDF/SCF cash contributions amounted to\$28,140

Direct Relief Foundation

As of March 4, 1971, DRF had donated medications and medical supplies with a wholesale value of\$24,574

International Christian Fellowship

ICF provided blankets and food for the cyclone victims, and assisted in rebuilding homes and the digging of about 200 wells. Its staff in Dacca distributed cash in remote areas on the Ganges, north of Dacca, enabling villagers to purchase food. One of its nurses was assigned to the Association of Baptists for Worldwide Evangelism Hospital in Chittagong. Total cash donations\$18,000

Lutheran World Relief

LWR airlifted medicines, including cholera and typhoid vaccines for 20,000 people and shipped 8,000 blankets from the U.S. Value of LWR emergency relief was\$55,351

Medical Assistance Programs, Inc.

MAP made a cash donation of \$4,285 and shipped medicines to the Memorial Christian Hospital, Malmghat, Chittagong. Total value\$90,285

Mennonite Central Committee

MCC sent 10,000 blankets, canned chicken, a motor boat and money. Total value of emergency relief and planned rehabilitation assistance is\$70,000

MCC initiated its program in November 1970, suspended it following events of March 25, resumed in October 1971, and again temporarily suspended it in late November 1971.

Salvation Army

The Salvation Army provided emergency rehabilitation assistance consisting of feeding and mobile clinic programs, but suspended operations following the civil strife. The SA needs reentry clearance for its personnel to resume its work. Total contributions by the Salvation Army as of March 1971 were valued at\$40,000

Seventh-Day Adventist Welfare Service

SAWS provided cash, clothing and medicines immediately following the cyclone which as of March 1971 were valued at\$86,750

Southern Baptist Convention, Foreign Mission Board

Cash contribution for cyclone relief, as of March 4, 1971\$12,000

United Church Board for World Ministries

Cash contribution\$90,000

VITA (Volunteers for International Technical Assistance, Inc.)

Following the cyclone, VITA provided professional advice on the better utilization of bullocks and plows, and worked with CARE on improved roofing and foundation blocks for self-help program.

World Relief Commission

WRC works through mission agencies that have been engaged in relief work in East Bengal for many years. As of March 4, 1971, WRC had made cash grants to such agencies totaling\$20,000

World University Service

Cash contribution\$2,080

World Vision Relief Organization

Made contributions related to cyclone relief valued at . \$2,000

YMCA

Cash donations for cyclone relief\$588

TOTAL ASSISTANCE FROM THE U.S. PRIVATE SECTOR
..... \$2,031,759

ASSISTANCE PROVIDED BY OTHER NATIONS AND INTERNATIONAL ORGANIZATIONS

Seventy-five nations and nine international relief organizations donated cash, supplies and services valued at over \$30 million. Of this amount approximately \$10 million was reported through the League of Red Cross Societies; the balance by the American Embassy, the United Nations, and other international organizations.

INTERNATIONAL ORGANIZATIONS AND GROUPS

League of Red Cross Societies (LICROSS)

LICROSS issued appeals to all sister societies not only for emergency relief but for cash donations to finance cyclone shelter reconstruction, reactivation of warning systems and other rehabilitation projects. Of the \$10 million in aid pledged by Red Cross Societies, it was estimated that \$3 million was earmarked for these projects. Of special note, 517,000 critically needed blankets were among the contributions by the Red Cross Societies.

For reporting purposes the \$10 million has been attributed to the countries of origin rather than carried as a total under LICROSS. Private donations made directly to LICROSS for cyclone relief amounted to \$21,000

LICROSS cyclone recovery projects are discussed on page 53

of the Civil Strife report since they did not get underway before March 25.

Caritas, International

Caritas, International planned with CORR a rehabilitation and reconstruction program for Noakhali, Patuakhali and Khulna. See description of this program on page 27. This long term project started after the cyclone and continued on a reduced scale through the civil strife period. \$1.5 million was raised from a number of Catholic voluntary agencies, including Catholic Relief Services of the U.S. and European Caritas groups for this purpose.

Since \$254,000 of this was contributed by CRS, this amount is credited under U.S. voluntary agencies. Balance\$1,246,000

United Nations

The UN participated in relief activities following the cyclone but did not coordinate the international humanitarian relief program as it did later for the civil strife disaster.

Secretary General's Disaster Fund	\$ 20,000
UN Development Program—grant for vegetable seed, poultry, livestock and animal vaccines ...	500,000
FAO-WFP—cereals, vegetable oil and dry fish, other than USG contributions	4,000,000
FAO Staff Association	24,100
UNESCO—for educational buildings	50,000
"Staff Association"—cash	700

UNICEF—contributed \$77,000 in cash for kitchen equipment, rice, blankets; \$200,000 for replenishment of medical supplies used during disaster, for rural water supply equipment; \$50,000 also set aside for other emergency relief. (This does not include 1,203,750 Pakistan rupees (equivalent \$250,000) obtained by UNICEF from the USG for rehabilitation/recovery programs)

	\$ 327,000
	<u>\$4,921,800</u>

World Council of Churches

WCC made an immediate transfer of \$25,000 and provided material aid valued at \$129,000 to the East Pakistan Christian Council, total \$154,000. It also launched an emergency appeal to its membership for further contributions and support for a rehabilitation program.

International Council of Voluntary Agencies (ICVA)

ICVA organized an ad hoc coordination meeting on December 7, 1970, to enable participating voluntary agencies and inter-governmental organizations to discuss common concerns in relation to planned relief/reconstruction measures.

European Common Market—200 tons baby food, 1,000 tons of enriched cereal \$2,265,000

Vatican—\$100,000 to the Government of Pakistan for relief programs and \$100,000 to the Catholic Church in East Pakistan 200,000

Geneva Conference — Seventh-Day Adventists, cash, clothing, medicine 10,000

Save the Children Federation—cash . 96,690

International Union of Child Welfare—cash 97,300

SUB-TOTAL INTERNATIONAL ORGANIZATIONS \$ 9,011,790

OTHER NATIONS

Abu Dhabi (a Sheikdom)—200,000 rupees, equivalent \$ 41,840

Afghanistan—cash, cloth, tents, blankets, oil, milk, raisins and flood dari, total value 122,000

Albania—clothing and footwear 10,000

Algeria Red Cross—cash, blankets, canned food, condensed milk, clothing, sugar \$ 12,520
Algeria Government—500,000 dinars, equivalent 100,000 112,520

Argentina—clothing, food, medicaments, value about 2,200

Australia Red Cross—3 cash grants, medicaments \$54,600
Australia Government — 5,000 tons wheat plus freight 594,000 648,600

Austria — blankets, clothing, TABC vaccine, and \$10,000 to UN 39,860

Belgium Red Cross and Government —blankets, powdered milk, food, medicaments, clothing, services of Red Cross personnel 155,430

Brazil—150 kilos vaccine, value not reported *

Bulgaria—blankets, clothing, food, utensils 25,000

Burma Red Cross—
vitamin tablets \$ 1,260
Burma Government—500 tons rice, valued by DRC about 65,000 66,260

Cambodia—cash 360

Canada Red Cross—8 cash grants, clothing \$ 262,000
Canadian Government—food, 5,000 cases milk, 160,000 sheets corrugated iron, 1,075 tents, 35,986 blankets, clothing, medicines, water purification tablets, tetracycline, 1,000 tons nonfat dry milk, and \$58,850 in cash grants, total value 2,086,000 2,348,000

Ceylon—shirts, 825 kilos full cream milk, value not reported *

China (People's Republic of)—cash equivalent of \$400,000, plus food, medicaments, blankets, for total value of	1,250,000
Cyprus—cash	1,320
Czechoslovakia Red Cross and Government—blankets, clothing, medicaments, tents, milk	61,860
Denmark Red Cross— 3 cash grants	\$33,400
Denmark Government— cash grant	33,400
Ecuador—cash	1,000
Ethiopia—blankets	10,000
Finland Government— cash, medicaments, blankets, clothing, rubber boots, vitamins and antibiotics	\$86,260
Church of Finland— medicaments	14,460
France — medicaments, antibiotics, disinfectants, TAB vaccine, multivitamins, clothing, blankets, condensed and dry milk, cholera vaccine, antityphoid vaccine, cloth and cash grants	220,000
Germany (Dem. Rep.)—medicaments, streptomycin sulphate, vitamin B tablets, tents, clothing, water purification tablets, blankets, cloth and other relief supplies	68,840
Germany (Fed. Rep.)—clothing, 24,700 blankets, 10,597 tents, 12 plastic boats with motors and spare parts, 4 water purification units with 7 technicians, 31,500 water containers plus 4 large ones, 7,000 metal stoves with	

solid fuel, 42,000 cooking and eating utensils, medicaments, edible oil, rice, sugar, tea, cash donations of 500,000 in marks and 250,000 in rupees equivalent about \$197,400, plus airlift costs, total value 1,563,120*

Also use of 6 helicopters, 2 hospitals (field), Mercedes truck, V-W minibuses (7), and ordered 500 tons rice, 3 pumping plants, value not reported.

Great Britain Red Cross, Christian Aid, OXFAM, War on Want, Save the Children—cash grants, water purification tablets, TAB and cholera vaccine, 2 trucks, galvanized iron sheets, 120,000 undershirts, 25,000 cooking pots, 20 inflatable boats with 30 outboard motors and 4 lifeboat men, powdered milk, drugs, bleaching powder, tents, clothing, food, plastic water bottles, 24 water purification sets and generators, 26,700 blankets, 50,000 lungis, 46,240 saris, multivitamins and 10 tons more of blankets ..	\$ 558,500
Great Britain Government—\$1,272,000 in cash and supplies valued at \$1,200,000 for a total of .	2,472,000
Great Britain—public donations reported of 1 million pounds but information not available on how this will be used	2,400,000
Greece Government and Red Cross—blankets	\$ 8,064
Church of Greece—medicaments and supplies	648,330
Hungary—supplies	8,830
Iceland Red Cross—powdered milk,	

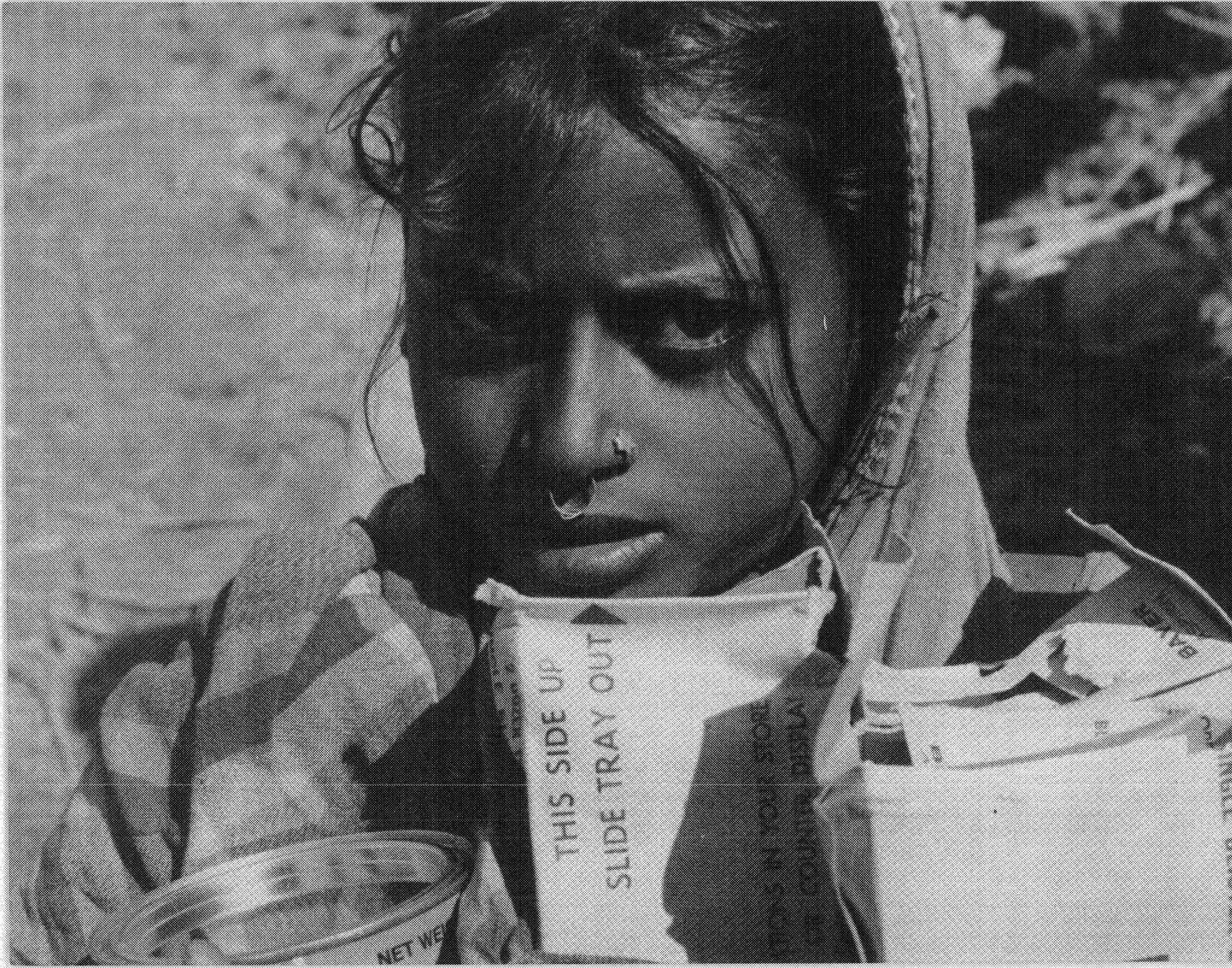
blankets, cash	\$10,950	
Iceland Government—powdered milk blankets, cash	11,300	22,250
India Red Cross—dhoties, saris, TABC vaccine, blankets, cloth ..	\$ 2,350	
India Government—10 million rupees, equivalent about	<u>1,316,000</u>	1,318,350
Indonesia Government—3 million in rupees and \$25,000, total		128,000
Ireland—blankets, clothing, powdered milk, cash		31,330
Iran—13,000 blankets, clothing, medicine, rice, baby food, sugar, tea, biscuits, valued by DRC at about		150,000
Italy Red Cross and Government—rubber boots, shoes, new clothing for men, women and children, medications, powdered milk, food, blankets		300,650
Jamaica—cash		240
Japan Red Cross—towels, baby and children's clothing, shirts, underwear, blankets, powdered milk, water bottles, men and women's clothing, cotton cloth, medicines, biscuits, candies, instant foods, crackers, sheets, soap, socks, 10 trancesivers, 20 boats with outboard engines, 30,000 aluminum plates, cash, vegetable soup cooking oil, 228,060 instant meals, total value	\$ 496,570	
Japan Government—medicines, multivitamins, powdered milk, clothing, 100,000 aluminum plates, 2,000 tents, 20 boats with motors, 93,000 blankets, 200,000 yds cotton shirting, 4,000 tins cooking oil, 400,000 yds cotton, 10 jeeps, 3,000 tons of rice, total value	<u>1,646,480</u>	2,143,050

Jordan—20,000 dinars, equivalent about		55,200
Kenya—cash		26,400
Korea (Rep.) Red Cross—cash \$ 400		
Korea (Rep.) Government—cash	<u>10,000</u>	10,400
Korea (North) — 100,000 rupees, equivalent		21,000
Kuwait Red Cross—cash .. \$ 13,920		
Kuwait Government—100,000 dinars (includes cost of airlift of 10 tons medicines and expenses of two doctors)	<u>285,700</u>	299,620
Lebanon—cash		150
Lesotho—cash		60
Liechtenstein—cash		1,160
Luxembourg Red Cross and Government—3 cash grants and supplies ..		57,160
Malaysia Red Cross—medicaments	\$ 3,290	
Malaysia Government — cash in pounds sterling of \$13,658, 150,000 doses of vaccine (est. about 3 cents per dose), total	18,180	21,470
Malta—35 cases of medicines		*
Monaco—4 cash grants		6,990
Morocco—19 tons food, 11 tons medicaments and cholera vaccine ..		122,000
Nepal—blankets, vaccine		9,000
Netherlands—1 million guilders from Red Cross and 2 million guilders from Netherlands Government as a drawing account to the Government of Pakistan. Equivalent in dollars		833,300
The following supplies were sent		

by the Netherlands RC and Government and it is assumed they were obtained from above funds: baby food, vitamin tablets, 116,400 blankets, 150 tons oil, 250 tons powdered milk, 151 tons condensed milk, candies.

New Zealand Red Cross—two cash grants, 26 disaster relief huts	\$17,230	
New Zealand Government—\$10,000 cash and 100 tons rice	23,000	40,230
Niger—cash		180
Norway Red Cross—cash, vitamin tablets, powdered milk, TAB vaccine, 29,150 blankets, antibiotics, services one delegate	\$197,660	
Norway Government—cash	35,050	232,710
Peru—cash		1,000
Philippines—cash grant, services one delegate		800*
Poland—blankets and medicaments		41,550
Portugal—\$1,000 cash; medicaments, clothing, no value given		1,000*
Rhodesia—cash		10,260
Romania—1,000 blankets, 500 kilos medicaments		27,880
Saudi Arabia—200,000 pounds cash, equivalent		480,000*
Also sent 5 tons medicaments and vaccine, provided two helicopters and sent medical personnel, no value given.		
Singapore—cash		140
South Africa—three cash grants		96,580
Spain Red Cross and Government—3,000 blankets, tents		23,430

Sweden Red Cross—services 2 delegates, cash grants, clothing, over 131,000 blankets, antibiotics, 3 water generators with technicians, TABC vaccine, syringes, needles, trousers	\$472,210	
Sweden Government—cash	96,800	569,010
Switzerland Red Cross and Government—65,000 blankets, clothing, medicaments and other relief supplies		302,320
Syria—cash		5,240
Tanzania—40,000 rupees, equivalent		8,420
Thailand—cash		380
Togo—cash		360
Trinidad/Tobago—cash		3,720
Tunisia—2,000 blankets		3,810
Turkey—cash, 5,000 blankets, clothing, vitamins, powdered milk		53,000
Uganda—cash in shillings, equivalent		28,000
Upper Volta—cash		360
USSR—900 tons sunflower oil, 33,000 yds cloth, medicines, vitamins, sent by ship. Supplies arrived Nov. 14 and were supposed to be for previous flood disaster but were used for the cyclone victims. Total value \$737,000		
Other relief supplies were reportedly sent later by the USSR value at	111,400	848,400
Yugoslavia—blankets, cloth, medicaments		23,860
SUBTOTAL RED CROSS SOCIETIES AND GOVERNMENTS		\$21,371,874
TOTAL CONTRIBUTIONS FROM OTHER NATIONS & INTERNATIONAL ORGANIZATIONS		\$30,383,664



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EAST PAKISTAN

... erupting on March 25, 1971, takes an estimated 200,000 lives. Ten million flee for India—as many more are displaced within East Pakistan. International community provides food, medicine, shelter to prevent starvation and disease.

Civil Strife

Period Covered

3/25 to 12/3/71

Value of U. S. Assistance	\$34.1 million
Value of Other Nations Assistance	25.2 million
	<u>\$59.3 million</u>

BACKGROUND AND DETAILS:

Pakistan was carved out of India to provide a homeland for Indian Moslems when India won its independence from Britain in 1947. This was prompted by the historical conflict between the Hindu majority in India and the Moslem minority. It was anticipated that peace would come when each religious majority had its own country. Clashes occurred during the cross-migration in which millions of Hindus fled from the new country of Pakistan to India and Indian Moslems sought new homes in Pakistan.

But the country of Pakistan was a dichotomous state divided by almost a thousand miles of Indian territory. They were two separate people—in the West Punjabis and in the East Bengalis. Differing in both custom and language, they held only their Moslem religion in common. Of an estimated population of 78 million in East Pakistan, 70 million were Moslems, and the balance mainly Hindus.



East Pakistan had its own provincial government, but was subject to central government authority in West Pakistan. In 1969 there was a country-wide revolt against the head of the Pakistan Government, Ayub Khan. As a result Yahya Khan, General of the Pakistan Army ascended to the presidency. Free elections were promised by the new military government.

A politically active group called the Awami League began pressing for more self-government in the East. The promised free elections were held in December 1971. The Awami League won 167 of the 169 seats at stake in East Pakistan, which would have given it an absolute majority in the national assembly. The President of the Awami League, Sheikh Mujibur Rahman, demanded that in the new constitution which was to emerge from the convening of the national assembly, East Pakistan be given virtual autonomy, with only its defense and foreign affairs matters being the concern of the central government.

President Yahya Khan, concerned that granting autonomy to East Pakistan would lead to the fragmentation of Pakistan, delayed convening of the national assembly. Finally he broke off negotiations with Mujibur and the elected officials in East Pakistan were never allowed to be seated.

There followed a series of civil disturbances and strikes in East Pakistan, which paralyzed transportation, communications, business and economic operations. President Yahya Khan, faced with two choices, to grant virtual independence to the East or attempt to crush the growing Bengali nationalism, chose the latter. The Awami League was banned.

Civil strife began in East Pakistan with the arrival of the Pakistan Army sent from West Pakistan to suppress the rebellion. Sheikh Mujib was arrested and taken to West Pakistan. By the end of April 1971, the Pakistan Army succeeded in temporarily crushing the independence movement, but in the process several thousand Bengalis, many of them intellectuals, administrators and students were reportedly slain. The Pakistan Army remained in the East to enforce martial law and was faced with the intense hatred of the majority of the people, and a growth

of guerrilla-type resistance mostly from students and young people who became known as the Mukti Bahini. Retaliation killings of members of the Pakistan Army and civilians who cooperated with the Central Government, especially Biharis, occurred. Reprisals by the Pakistan Army followed, which in turn generated more violence from the Mukti Bahini. Numerous villages were burned by the Pakistan Army; communications, railroad lines, bridges and roads were destroyed by the guerrilla forces.

Soon after March 25 and for more than six months thereafter, thousands of Bengalis daily left East Pakistan for India. (The relief program for the refugees in India has been covered in a separate report.) Millions of others were displaced within East Pakistan, which were additional to the victims of the 1970 cyclone who were still in need. This report of international aid covers only the disaster situation within East Bengal from March 25 to December 3, 1971.

A new situation developed late in 1971 involving not only accelerated internal conflict but open conflict between India and the West Pakistan Government.

Indian troops entered East Pakistan in support of the Mukti Bahini guerrillas on December 3, 1971, and moved on the city of Dacca. On December 16, after 14 days of war, West Pakistan forces capitulated to the Indian Army. The Awami League and Mukti Bahini declared East Pakistan a separate country to be known as Bangladesh. As of December 31, 1971, India and Bhutan had recognized the new government. President Yahya Khan, blamed for the loss of the East, was succeeded in West Pakistan by Zulfikar Ali Bhutto.

President Bhutto ordered Sheikh Mujibur Rahman who had been confined for nearly 10 months, released from prison, and after a brief period of house arrest, he was given his freedom, at which time he returned to East Bengal to head the new government.

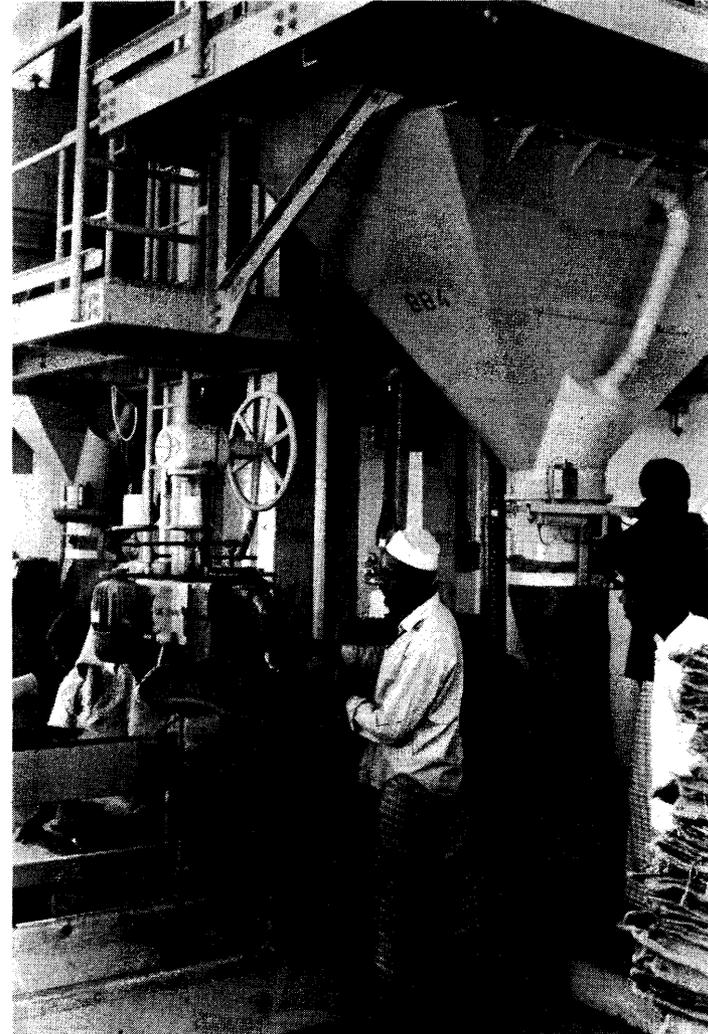
Post civil strife relief requirements were, at the time of closing this report, being assessed.

RELIEF ACTION TAKEN BY THE GOVERNMENT OF PAKISTAN, PROVINCIAL GOVERNMENT OF EAST PAKISTAN AND LOCAL ORGANIZATIONS

On May 22, 1971, the Government of Pakistan requested the United Nations to coordinate international relief in East Pakistan. In a June 28, 1971 speech, President Yahya Khan reviewed steps his government had planned to end the refugee flow into India and to encourage Pakistanis to return from India. Plans included amnesty; establishment of reception centers; guarantees for restitution of property; assurances of protection for returning Hindus, who make up the vast majority of the refugees; agreement to UN presence in East Pakistan; and appointment of senior civilian officials for refugee and relief programs. These assurances, however, had little effect either in stimulating the return of the refugees or in ending guerrilla actions in East Pakistan.

On June 23 the Chief Secretary of the Government of East Pakistan announced the establishment of a Relief Committee as a counterpart to the United Nations East Pakistan Relief Organization (UNEPRO).

West and East Pakistan Government officials cooperated with the UN and the USAID Mission in Dacca in surveying the Eastern province to determine relief needs. The effects of the civil strife, especially the continuing sabotage of bridges, roads, railroads and water transport by the Mukti Bahini and other dissident groups made the delivery of supplies to all the people in need most difficult and in some areas impossible. In an attempt to reach the majority of the victims, the Government of Pakistan signed an agreement with the U.S. Government to arrange for the U.S. funded leasing of foreign coastal vessels and minibulkers. These vessels were utilized under UN auspices and in cooperation with the East Pakistan Food Department which assisted in scheduling and loading operations. The Government of Pakistan sent some of its own food grains from West to East Pakistan and entered into agreement with the U.S. Government for both grant and sale of PL 480 Food for Peace wheat, rice and oil for East Pakistan.



Modern and efficient grain bagging operation at the Government silo in Naranganj near Dacca.

Food delivered to Chittagong and Chalna ports was unloaded by local labor, stored in government warehouses, released and distributed by water or truck transport under direction of East Pakistan and UN officials.

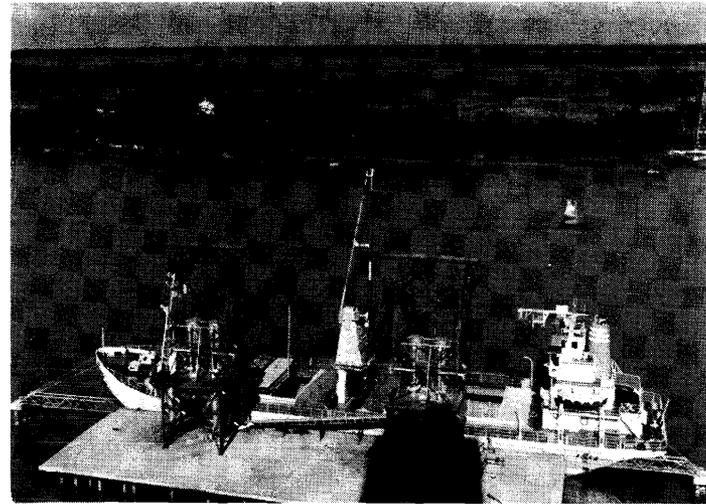
The East Pakistan Red Cross Society joined with the League of Red Cross Societies in its efforts to establish a food distribution program in the cyclone areas and thanas under control of the guerrilla forces.

UNITED NATIONS RELIEF OPERATION IN EAST PAKISTAN (UNEPRO)

By letter dated April 22, 1971, addressed to President Yahya Khan, U Thant, Secretary General of the United Nations, offered all possible assistance to the Government of Pakistan in providing urgently needed relief to the population of East Pakistan. On May 3, 1971, President Yahya Khan accepted the Secretary General's offer. The Secretary General then sent a special envoy, Ismat Kittani, to Pakistan to work out, in cooperation with the Pakistan Government, a framework for an international relief effort.

On June 16, 1971, the Secretary General appealed to all governments, intergovernmental and non-governmental organizations and private institutions and donors to assist in alleviating the suffering of the people of East Pakistan by making contributions to the UN in cash and kind. On July 15 he reiterated his appeal, calling for an initial contribution of \$28.2 million in assistance through the UN system. Later estimates, based on surveys, clarified the dimensions of the problem and indicated an even greater need for outside help. These estimates predicted that the people of East Pakistan would be faced with a food gap of up to 200,000 metric tons a month starting in September 1971 and continuing through the spring of 1972.

During the month of June, the UN selected a small relief planning staff. Mr. Behgat E1-Tawil was appointed as the Secretary General's representative in charge of relief coordination in Dacca. He was assisted in surveying relief requirements for a



US-financed chartered mili-bulker grain ship discharges cargo at Naranganj for transfer to a grain silo in the Dacca area.

period of several weeks by Mr. Glen Haydon, a private U.S. Citizen.

Mr. Stephen R. Tripp was appointed as a special UN New York headquarters assistant for the relief program. Special teams from the World Health Organization (WHO) and World Food Program (WFP) proceeded to survey health and food requirements while at the same time, UNICEF formulated a special feeding program for mothers and children in cooperation with Pakistan authorities, WFP, WHO, and CARE.

It is important to note that this was the first time the UN had undertaken a major operational role for an international humanitarian relief effort. This involved breaking new ground in recruiting a large international staff—possessing a variety of skills and experience. The plan evolved was to recruit this staff in three phases. Phase I covered people to survey assistance needs and plan the relief program. Phase II covered logistical and transport specialists to guide and assist the Government of

East Pakistan in moving supplies inland via water and truck transport to areas distant from Chalna, Chittagong and Dacca. Phase III would place UN personnel in the field to monitor distribution of supplies and insure that all in need received help without discrimination.

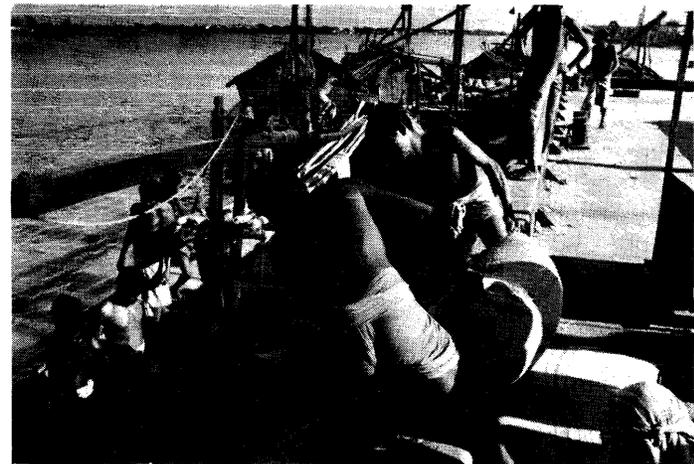
On August 11, the UN completed its organization and staffing plan and implementation of Phase I, which called for 38 personnel in Dacca. By that date some of the 38 people slated for Dacca assignment had already arrived and taken up their duties.

On August 23, 1971, Mr. Paul-Marc Henry, formerly Assistant Administrator of the United Nations Development Program, was named Assistant Secretary General for UN Humanitarian Relief Operations to East Pakistan headquartered in New York. Mr. Henry made several survey trips to East Pakistan in the ensuing months to identify requirements and to give direction to the emerging UN relief program. His responsibility included mobilizing and expediting international assistance, directing headquarters operations, and coordinating participation of UN agencies and Secretariat units. He advocated assistance to East Pakistan on a crash basis and his dynamic approach gave impetus to the development of a workable relief effort. His approach is credited with increasing the effectiveness of the effort as personnel and supplies became available and coordination problems solved.

Recruitment for Phase II of the personnel program was begun in September and by mid-October the UN had a total of 85 employees in East Pakistan, including those of the UNICEF staff. Action was begun on Phase III which, if pursued to a conclusion, would have increased the total UNEPRO staff to 185 by the end of 1971. UNEPRO, however, experienced difficulty in obtaining approval from the Government of East Pakistan to place field staff in outlying areas and regions subject to strong guerrilla influence. During November, Mr. Henry succeeded in obtaining a general agreement from East Pakistan officials to carry out a direct feeding role and to place its personnel anywhere in the country. At that time UNEPRO proceeded to set up four regional automotive centers and 17 relief and automotive sub-centers.

Among the major problems faced by the UN, beyond that of obtaining sufficient quantity of food, medicine and equipment, were the severe shortage of coastal and river vessels; continued destruction of rail and road facilities; port congestion; shortage of trucks and vehicles to deliver supplies inland; and shortage of tools, parts and personnel to maintain trucks and other vehicles.

By mid-November, eight coastal vessels and nine minibulkers, financed by the USG under agreement with the Government of Pakistan, were delivering foodgrains and relief supplies under UNEPRO auspices. Eight others had been scheduled. The minibulkers proved to be a more efficient mode of transportation across the Bay of Bengal and "up-river" than the



Available country boats were also used to deliver needed food to isolated areas up river. These are being loaded near Dacca.

coasters. At that time 100 UNEPRO trucks (donated by the USG and other governments) were moving shipments inland, another 162 trucks had arrived and were in the process of being made operational, and 138 others were on the high seas.

A November 19 UN press release indicated that its non-discriminatory distribution was moving ahead and that it expected it to achieve its maximum level early in 1972, provided conditions of free access and a tolerable degree of security could be achieved. A late November Situation Report indicated a number of Phase III personnel were on their way to Dacca; food and supplies were being donated in large quantities and the East Pakistan aman (rice) crop soon to be harvested promised to be a good one. In fact all reliable sources reported that because of the anticipated harvest and worldwide response, famine had been averted for the time being.

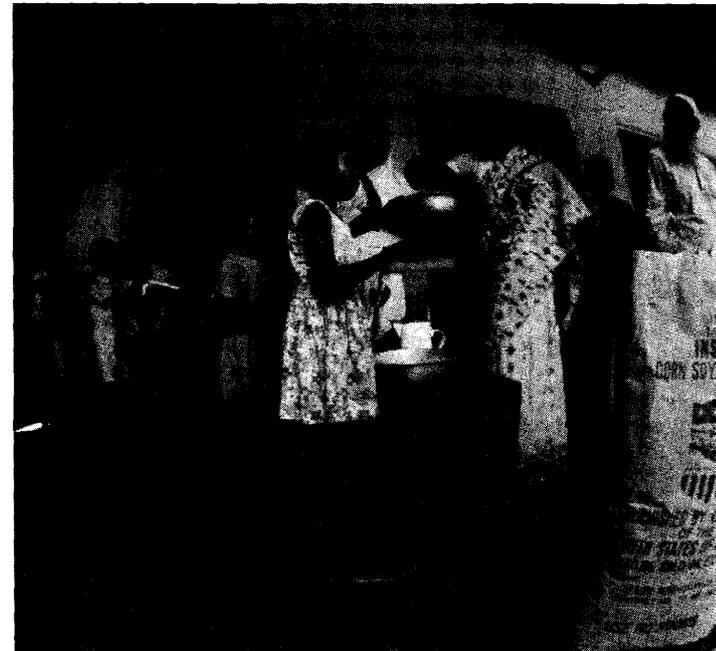
On November 23, however, the UN advised that its relief activities were being hampered by military-type actions, including violent attacks on UNEPRO ships (three minibulkers were mined by Mukti Bahini forces) and trucks (several were commandeered by the Pakistan Army). It was at this juncture that UNEPRO issued instructions to divert to Singapore supplies food, trucks and other equipment on the high seas destined for Chittagong. On December 3, 1971, war broke out between India and Pakistan and the UN relief program was suspended. At the end of the 14 day war, East Bengal declared itself independent. Subsequently the UN initiated a new relief effort to be known as United Nations Relief Operation Dacca (UNROD). Food, cash and equipment previously pledged by the international community in connection with the civil strife on which delivery had been suspended provided the base for the new UN program.

The U.S. Government entered into an agreement with UNICEF to provide 70,000 metric tons of high protein food to feed Pakistani children in East Pakistan and in India. One-half of this amount, 35,000 tons, was scheduled for shipment to East Pakistan. Prior to the outbreak of war with India, 14,480 tons had been delivered. The balance will be scheduled for shipment as conditions permit. The remaining shipments will be sweetened with sugar for increased food value and improved taste, for which AID will reimburse U.S. Department of Agriculture \$650,000. The sugar additive will provide quick energy, help to increase children's resistance to prevalent digestive maladies and help them to recover from such disorders. These

high protein food blends consist of either corn/soya/milk or wheat/soy combinations.

Under UNICEF's distribution program each child receives a daily portion of 3-½ ounces, which contains almost all essential nutrients for one day. In addition to the daily portion, each is allowed up to three portions to take home for brothers and sisters unable to come to distribution centers. These food blends can be boiled, baked, or fried. They can also be used as beverages by adding water, or be added to soups, gruels, bread and other foods. CARE helps UNICEF with this program by providing personnel and program services. UNICEF reimbursed CARE for personnel costs and salaries.

"Children in Dacca receiving AID-donated CSM through UNICEF program."



ASSISTANCE PROVIDED BY THE UNITED STATES GOVERNMENT

On March 26 the State Department indicated it was watching developments in East Pakistan closely and with concern. Statements followed expressing U.S. concern for the loss of life, damage and hardship suffered by the people of Pakistan and the hope that peace would soon be restored. The State Department also expressed hope that the Government of Pakistan would avail itself of aid from the international community and offered to assist in any international humanitarian effort of this kind.

When the UN offer to carry out an international relief program was accepted by the Government of Pakistan, the USG gave full support to the United Nations Operations. Because of the anticipated need for massive importation of food, a U.S. Department of Agriculture specialist was sent immediately to survey East Pakistan's two major ports to recommend ways of relieving port congestion and expediting movement of grain and other supplies.

Two agreements were signed with the GOP on June 16 and 28, each involving cash grants by the Agency for International Development of \$1 million. This money was used for chartering foreign manned coastal and river vessels to transport food and supplies to needy areas. One agreement applied specifically to cyclone affected areas, whereas the other was for all of East Pakistan. Another AID cash grant for leasing coasters and minibulkers was made on August 9 in the amount of \$2 million. It was amended on September 2 to include two tugs at an additional cost of \$325,000. Of the 25 vessels contracted for, 17 were in service as of late November. Use of these vessels was suspended at that time due to increase in hostile actions and damage suffered as a result by three of the minibulkers.

During 1971, the USG delivered to East Pakistan 532,275 metric tons of regular food aid valued at \$48.5 million, which is not included in the table of US relief assistance below. The availability of this food, together with that delivered for flood,

cyclone and civil strife emergencies prevented the widely predicted famine in East Pakistan.

In April, the USG resumed food shipments committed for cyclone relief. New food surveys followed to determine increased needs for victims of the civil strife, and additional USG food commitments were made to UNICEF, World Food Program, UNEPRO and the Government of East Pakistan.

Deliveries had been only partially completed under agreement with UNICEF and WFP when the India/Pakistan war began. Full implementation however was anticipated without new agreements when conditions permitted call forward of the commodities. For that reason the total value of this food is included in the summary of USG assistance below.

One of the food commitments by the USG was for 100,000 tons of wheat and 75,000 metric tons of rice to be distributed under joint agreement between the Government of East Pakistan and UNEPRO. None of this grain had been scheduled for shipment prior to the outbreak of war on December 3. Although these commodities are now being made available to UNROD under a new agreement, their value will be credited in a subsequent report on the new situation in East Bengal.

An announced USG commitment of 500,000 metric tons of grain and 25,000 of oil planned for sale to the Government of Pakistan under Title I (with proceeds to be turned over to the GOP for relief projects in East Pakistan) was suspended. The value of this food, (\$44 million) therefore has been deleted from the summary of USG aid.

USAID representatives assisted UNEPRO in surveying food needs by making assessment visits to cyclone affected areas and other pockets of food shortage. U.S. AID Mission personnel worked in Dacca focusing on: coordination of the U.S. field activities in support of the UN operations; agriculture; boats and engineering; negotiation of relief and food agreements; food and transport needs; and procurement. U.S. Ambassador Joseph Farland closely observed developments and made recommendations to Washington on the kind and magnitude of further USG assistance needed.

On August 9 Secretary of State Rogers, accompanied by Mr. Maurice J. Williams, Deputy Administrator of the Agency for International Development, met in New York with Secretary General U Thant, senior UN and specialized agency officials for extended discussion of the Pakistan situation. On that occasion, Secretary Rogers presented a check for \$1 million to the Secretary General to assist in administrative costs of the UN relief operation.

On August 14, Secretary Rogers announced that Mr. Williams had been designated to coordinate all U.S. relief assistance to East Pakistan. He reemphasized that USG assistance was being provided through and in support of the UN.

Mr. Williams made two trips to East and West Pakistan for discussions with the Pakistan Government, U.S. Embassy, USAID, and UNEPRO officials on relief problems and bottlenecks. His conclusion, which coincided with that of the UN, other international and church related relief organizations and news reports, was that famine (for the present) had been averted, except in special pockets of need. Mr. Williams attributed this to recent large imports of grain from the U.S., the departure of more than 9 million Bengali refugees for India, and the anticipated good "aman" harvest.

Mr. Russell S. McClure, AID Disaster Relief Coordinator, was also in East Pakistan from October 19 through October 27 to review logistical problems and to help UNEPRO in that critical area. He visited Dacca, Narayanganj, Chittagong, Jessore and Khulna particularly to observe port congestion and problems of delivering food up-country caused by continued disruption of communications and rail and truck transport.

On August 22, 1971, President Nixon named six American citizens to an advisory panel on South Asian relief to help direct the US Government East Pakistan refugee effort in East Pakistan and India. Named to the panel were: James Perkins, former president of Cornell University; George Elsey, president of the American Red Cross; Joseph E. Johnson, former president of the Carnegie Endowment for International Peace; Glen Haydon of St. Joseph's Mercy Hospital, Mason City, Iowa;

Maxwell Robb, attorney and former president of the U.S. Committee for Refugees; and Mrs. Jeanne R. Ferst, Atlanta, Georgia, a civic leader.

The panel held its first meeting in Washington, D.C. on September 3, 1971 and met several times thereafter. They were kept informed of the situation in both East Pakistan and India, of the assistance provided and planned by the USG, of UN actions and of the responses from the international community. The panel made numerous suggestions and recommendations to increase the effectiveness of the relief programs.

In addition to the South Asian Bureaus of State and AID and AID's Disaster Relief Office, several other USG agencies participated in authorizing, procuring and shipping food, medicines, trucks, jeeps and vegetable seeds to East Pakistan. Assisting offices included:

AID Office of Private Overseas Programs—Voluntary Agencies Division;

AID Food for Peace Office (Frank R. Ellis, Deputy Coordinator of FFP visited EP to help survey food needs);

AID Resources Transportation Division;

AID Administrative Services;

The Departments of Agriculture, Defense, Health, Education and Welfare.

AID reimbursed other departments of the government for costs of their assistance and provided cash grants to the UN and Government of Pakistan; and financed costs of supplies, air and surface freight. FY 71 costs were charged to the AID Contingency Fund. FY 72 costs however were charged to a special \$200 million Congressional appropriation for South Asian Humanitarian Relief for displaced people in East Pakistan and refugees who fled to India.

Following is an adjusted breakdown of the USG cash and kind assistance for civil strife (March 1971 to December 1971) reflecting deletions made for suspended food commitments prompted by events of December 3. For this reason, no overall comparison can be made with previously announced figures on total USG assistance.

Note: Even though some food supplies for the 1970 flood and cyclone were delivered after March 25, 1971 (date Civil Strife commenced), their value is included in the preceding flood and cyclone case studies.

Also, while \$4,325,000 in cash grants were made for leasing coastal vessels and tugs, only \$3,325,000 is included in this report. The remaining \$1 million is accounted for in the cyclone disaster financial summary, since it was to be used only in the cyclone areas.

	Cash Contributions		Value of Food Including Ocean Freight
	Fiscal 1971	Fiscal 1972	
	\$ Value		
US-Owned rupees			
16,653,000 for local administrative costs of the UN relief operation		3,500,000	
25 million rupees allocated to support emergency relief to provide employment and income		5,000,000	
2,820,180 rupees to CRS for rehab. project		344,000	
1,050,000 rupees to UNICEF for child feeding program expenses		221,000	

	Cash Contributions		Value of Food Including Ocean Freight
	Fiscal 1971	Fiscal 1972	
	\$ Value		
AID Contingency Fund (Dollars)			
Chartering coastal vessels all of EP	1,000,000		
Allocation of AID Funds for Special Refugee Relief Assistance (East Pakistan Refugees) Allotment (Dollars)			
Chartering coastal vessels, minibulkers and two tugs for use throughout East Pakistan		2,325,000	
Cash grants to UN for administrative/ personnel costs		1,868,000	
Air transport cost WHO medical supplies to Dacca at request UN		90,000	
10 jeeps, 1 3T truck, 1 station wagon for UN operations		42,000	
200 trucks purchase from US Military in Europe, plus one year's spare parts, tools for UN, including painting			

	Cash Contributions		Value of Food Including Ocean Freight
	Fiscal 1971	Fiscal 1972	
	\$ Value		
and UN markings, and air/surface transport		1,950,000	
Refugee Relief Assistance (East Pakistan Refugees) Allotment—continued			
Purchase and airlift 16,000 pounds seeds		92,000	
PASA with USDA for payment of \$1.3 million to add sugar and flavoring to PL-480 food provided to UNICEF for feeding Pakistan children in India and within East Pakistan. One-half cost for Pakistan.		650,000	
PL-480 Food for Peace Commodities			
44,537 MT wheat and oil and nonfat dry milk through the World Food Program			5,988,000
35,000 MT corn/soya/milk mix and wheat/soy blend to UNICEF for child feeding program of which 15,000 MT were			

	Cash Contributions		Value of Food Including Ocean Freight
	Fiscal 1971	Fiscal 1972	
	\$ Value		
delivered prior to 12/3/71.			10,180,000
Other Food			
Value of 400,000 pounds Civil Defense biscuits contributed through CARE			160,000
	\$1,000,000	\$16,082,000	\$16,328,000
Total amount USG assistance		\$33,410,000	

ASSISTANCE PROVIDED BY U.S. VOLUNTARY AGENCIES

Most of the U.S. Voluntary agencies cyclone relief programs were suspended on March 25. Some organizations resumed and added to their projects as changed conditions permitted. The following is a record of actions and contributions by them which were not included in the previous case study on the cyclone:

American National Red Cross

(See the cyclone case study.) ANRC provided personnel following the civil strife disaster to work with the League of Red Cross Societies developing rehabilitation, reconstruction and feeding programs. See description under LICROSS.

CARE

CARE provided funds and utilized its staff of 15 in a housing program and to assist UNICEF with its child feeding project. Additional funds and value of CARE contributions after March 25 totalled\$327,000

Catholic Relief Services

(See cyclone study) CRS continued working with CORR and Caritas on reconstruction projects, helping care for the needy, and to encourage self-help, paid rupees to local people working on projects. Value of additional CRS assistance totalled \$42,270

Christian Reformed World Relief Committee

Cash donations in support of CWS and Mennonite Central Committee programs\$12,000

Church World Service

(See cyclone case study) Since March 25, 1971, CWS has been sending its donations to the World Council of Churches and East and West Pakistan Christian Councils. Value of contributions March 25 to December 31, 1971\$37,000

Community Development Foundation/Save the Children Federation

(See cyclone case study) Cash raised by CDF since March 1971 \$66,860

Direct Relief Foundation

(See cyclone case study) Since March 1971 DRF provided medicines valued at\$20,427

Medical Assistance Programs, Inc.

See cyclone case study. In addition to cyclone reported contributions, MAP provided medicines valued at\$68,187

Lutheran World Relief Mennonite Central Committee Salvation Army

(See cyclone case study)

Seventh-Day Adventist Welfare Service

(See cyclone case study) SAWS reported cash donations of \$33,100 and clothing and medicine valued at \$173,042 for its relief program in East Pakistan. \$86,750 was credited in the cyclone report. Balance\$119,392

Southern Baptist Convention, Foreign Mission Board

Contributions not previously reported under cyclone relief\$14,272

World Relief Commission

WRC made cash grants for local purchases of clothing, boats, livestock and housing projects not previously reported under the cyclone relief valued at\$15,000

TOTAL VALUE U.S. ASSISTANCE FROM VOLUNTARY AGENCIES\$722,228

ASSISTANCE PROVIDED BY OTHER NATIONS AND INTERNATIONAL ORGANIZATIONS

INTERNATIONAL ORGANIZATIONS

United Nations—See page 46

League of Red Cross Societies (LICROSS)

As soon as conditions permitted, the League resumed its long-term rehabilitation program for cyclone victims and undertook new projects. Funds pledged by sister societies to support these projects, estimated at \$3.5 million, have been in-

cluded in the previous Cyclone Disaster Report and are not duplicated here. LICROSS has three primary relief and rehabilitation project activities in East Bengal. These are:

1. Administer the Holy Family Hospital, Dacca

Six administrative and technical personnel were assigned to this hospital in support of local staff.

2. Activate Cyclone Warning System

The present cyclone warning system in East Pakistan was reviewed by a team of LICROSS experts. LICROSS goal is to develop and finance an 8 to 12 hour advance warning system for coastal region populations. The initial step is the reactivation of the cyclone radar station at Cox's Bazaar.

3. Participate in Direct Feeding

Red Cross teams distributed food, clothing and blankets in cyclone affected areas including Barisal, Patuakhali, Noakhali and Chittagong District and the Sandwip and Hatia islands. The Red Cross reported several instances of being able to reach civil strife victims in isolated areas under control of Mukti Bahini forces where distribution difficulties had previously been encountered. The direct feeding program was undertaken in cooperation with the East Pakistan Red Cross Society, the United Nations Relief Organization and U.S. AID Mission.

League delegates P. C. Stanassis and Claes Hagstrom met with the Pakistan Red Cross Society and Pakistan officials in Islamabad and Dacca in June and July concerning the implementation of LICROSS projects. They visited the port of Chittagong, Bohla Island and other areas seriously affected by the civil disturbances.

LICROSS also began work locating, constructing and stocking Red Cross warehouses in cyclone affected areas and continued its plans for building storm proof community centers. Considerable work had been accomplished stocking warehouses prior to December 3. LICROSS sponsored several relief and medical

teams to work in East Bengal with the local Red Cross relief workers and volunteers. Team members were recruited from several national societies, including the U.S.

Caritas, International

Rehabilitation/reconstruction projects continued following the civil strife but at a reduced level. These projects included cyclone proof houses and community shelters, irrigation and drainage work, road construction and agricultural development in Char Jabbar, Noakhali District and Char Chapli, Patuakhali District. These are long term projects described in the case study on the cyclone, and their percentage of completion, prior to December 3, is not known. Work on the projects was done by able bodied survivors, providing them with employment and a source of income while rebuilding their homes and villages. Catholic Relief Services of the U.S. participated with CORR and Caritas on these projects. Funds used have been credited under the cyclone disaster and are not duplicated here.

A daily motor launch service from Mohipur in Patuakhali District set up under the CORR relief program provided medical and food services to people living on the island of Khepupara.

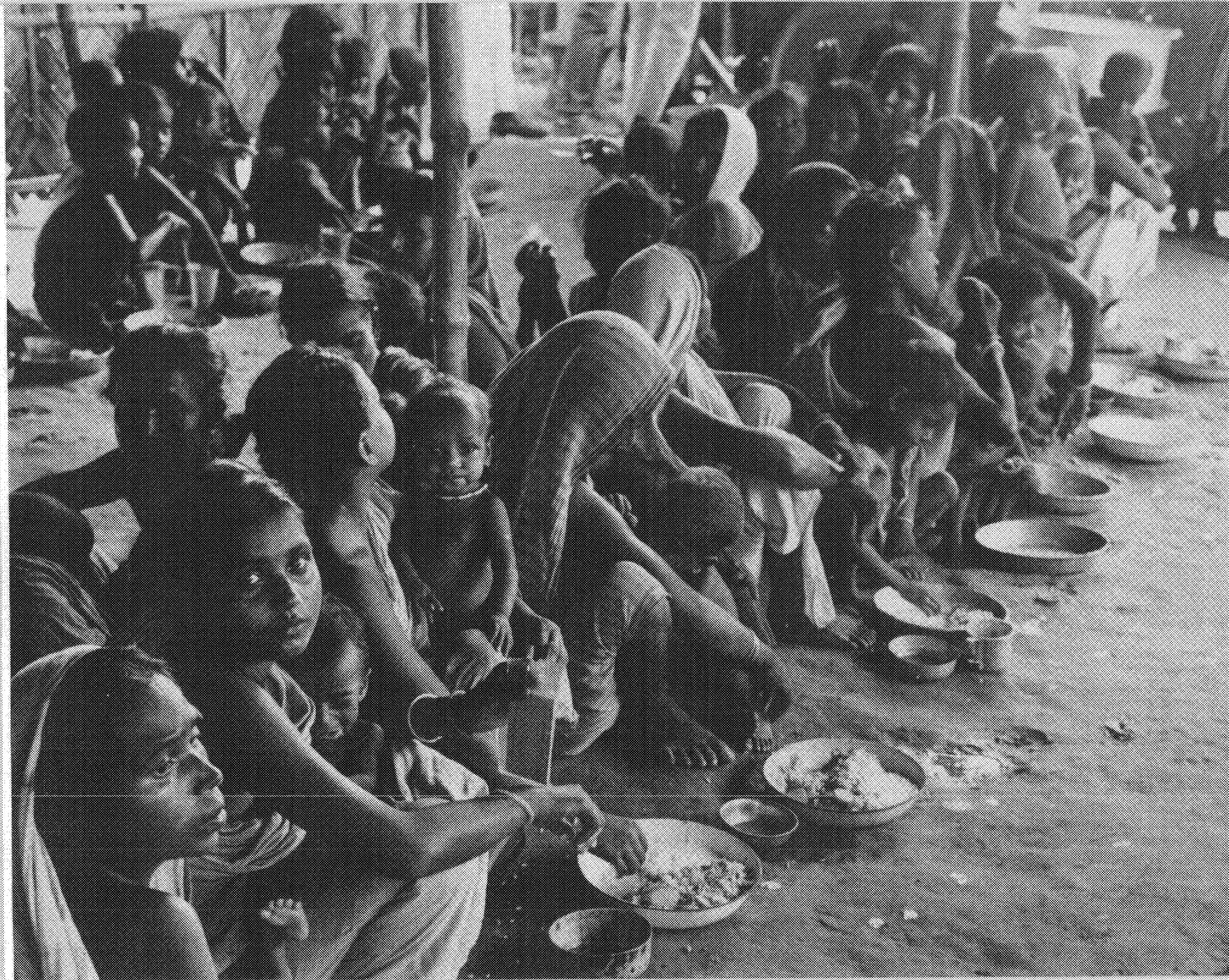
World Council of Churches

WCC sponsored cyclone relief activities through the Christian Council in East Bengal continued, but its reconstruction plans were suspended.

OTHER NATIONS

The cyclone case study reports over 75 nations as well as international organizations contributing cash and supplies to cyclone victims. Much of this aid overlapped assistance for civil strife victims. The following are contributions provided for cyclone and civil strife victims after March 25, 1971.

Australia—cash to UN of \$287,687 plus \$863,061 for the purchase of rice and edible oil.	
Total contribution	\$ 1,150,748
Belgium—a cash donation to UN	419,200
Canada—73,737 metric tons of wheat under the World Food Program valued at \$7 million plus \$495,050 in cash to the UN, total	\$ 7,495,050
Chile—cash to UN	\$ 3,000
Denmark—cash to UN	\$ 273,729
France—cash to UN	\$ 452,899
Italy—58,000 doses of cholera vaccine and cash for value of	\$ 213,000
Iran—sent 3 million doses of cholera vaccine, value estimated by DRC	\$ 75,000
Germany (Federal Republic)	
\$3,000,000 value for 27,000 metric tons of wheat plus 5 million Marks (about \$1.5 million) total ..	\$ 4,500,000
Vatican—cash to UN	\$ 5,000
Japan—for purchase of rice—180 million yen to UN, equivalent	\$ 500,000
Netherlands—Cash to UN of \$670,000 plus supplies valued at \$1,560,000 and contribution to Red Cross of \$157,000, total	\$ 2,387,000
New Zealand—supplies to UN valued at	\$ 13,500
Norway—cash to UN	\$ 548,000
Sweden—cash to UN of \$1.5 million plus Save the Children Fund contribution of \$600,000, total ..	\$ 2,100,000
Spain—antibiotics valued at	\$ 60,000
Turkey—Planeload of medical and relief supplies, no value given	*
United Kingdom—cash and supplies totaling \$4.8 million plus another \$240,000 from Children's Aid total	\$ 5,040,000
Total assistance provided by other governments since March 1971	\$25,236,126



INDIA

Refugees 1971

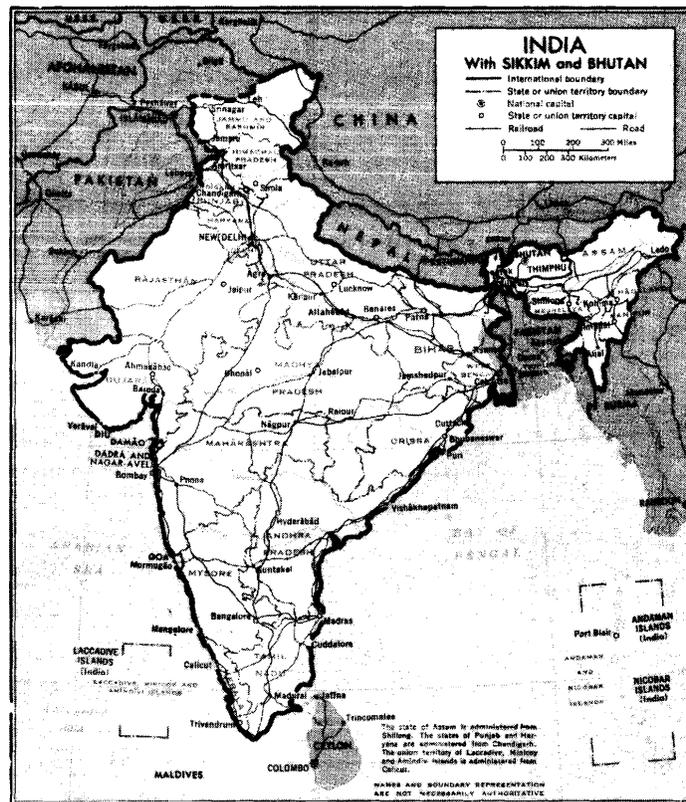
... from civil strife in East Pakistan, numbering nearly 10 million, cross the border into India creating enormous food, shelter and medical problems for that country. Massive international aid is essential.

Value of India Assistance	\$335.0 million
Value of US Assistance	102.3 million
Value of Assistance by 57 Other nations and by International Organizations	191.2 million
	\$628.5 million

DETAILS:

Refugees from East Pakistan began seeking safety in India in the last days of March, 1971. Floods of frightened people, mostly without possessions, started moving across the border, usually on foot. They numbered more than a million by the end of April, over 4 million by the end of May, 6 million by the end of June and 8 million by the end of August. By the end of November, the Government of India's count exceeded 9 million men, women and children—7 million in 1,000 camps. The rest found shelter in India's cities and countryside. All required assistance from India and the international community.

This report terminates on December 17, the cease-fire date of India-Pakistan hostilities, which commenced December 3. After December 17, the problem was to help refugees return to their homeland and provide food and shelter until they could be rehabilitated. These efforts will be described in future reports.



ACTIONS TAKEN BY THE GOVERNMENT OF INDIA AND LOCAL ORGANIZATIONS:

India's response to a human emergency of such staggering proportions aroused the admiration of the world. Steps taken included establishing within the Government of India a Refugee Coordinating Committee, with the Minister of Rehabilitation as chairman. Relevant government agencies were represented on this committee, as was the United Nations High Commissioner for Refugees and UN agencies engaged in assistance to the relief operation. The Committee, with offices in New Delhi and in Calcutta nearer the refugee areas, directed the massive relief work of federal and state government workers, and of Indian voluntary agencies, including the Indian Red Cross. The Committee coordinated appeals for and receipt of international assistance, directed distribution of food and sup-



One of many refugee camps in India.

plies, requisitioned properties for camps and centers, established refugee registration procedures, issued ration cards, and otherwise fully directed a very large relief program. The GOI preferred that actual work among refugees be performed by Indian nationals and restricted the number of outside volunteer workers. While not all problems were solved immediately, the Government's actions were considered effective, especially in view of the magnitude of the disaster.

An estimate of the total cost of India's refugee assistance through December 16, 1971 was placed at \$335 million. Variables and residual costs, unknown at the date of this summary, could revise these figures.

UNITED NATIONS HIGH COMMISSIONER FOR REFUGEES:

On April 26, with 686,000 refugees already within her borders, India asked Secretary General U Thant to organize a relief assistance program. After an on-the-ground UN assessment, the Secretary General on May 19 made an appeal for international contributions and designated the UN High Commissioner for Refugees, Prince Sadruddin Aga Khan, to serve as "focal point", i.e. coordinator for UN support.

ASSISTANCE PROVIDED BY THE U.S. GOVERNMENT:

The Department of State's Office of Refugee and Migration Affairs (ORM) began contingency planning on March 29—four days after outbreak of civil strife in Pakistan—when it became apparent a refugee problem would develop. In early April, the Department and AID authorized four U.S. voluntary agencies—CARE, Catholic Relief Services, Church World Service and Lutheran World Relief—which had on going programs in India, to begin issuing food which had been granted to them under Public Law 480 to the refugees.

Meanwhile, the Department determined that further U.S. assistance, if requested, would be channeled through the United

Nations. Concurrently, with the UN Secretary General's appeal for international contributions, the USG granted \$500,000 in cash to the UNHCR to enable him to organize a program. The money came from the \$2.5 million which President Nixon had authorized on April 30 for initial US assistance for the refugees.

On May 20, in order to establish the basis for a major U.S. effort, the U.S. Government organized in Washington an Intergovernmental Committee on Pakistani Refugee Relief, made up of representatives of the Department of State, Defense and Agriculture, the Agency for International Development, the Peace Corps, the U.S. Information Agency and the White House Office of Management and Budget. Frank L. Kellogg, Special Assistant to the Secretary of State for Refugee and Migration Affairs, was designated chairman and Louis A. Wiesner, secretary. The committee's assignment was to coordinate U.S. Government assistance, to encourage and guide voluntary agency programs and to maintain continuing liaison with the UNHCR headquarters at Geneva and New Delhi. The committee was active throughout the period of this report.

In New Delhi, the American Embassy organized a Mission task force on refugee relief headed by L. Paul Oechsli, Deputy Director of the AID Mission. At Calcutta, entry port for refugee-assistance supplies and center of the total relief effort, an AID employee, Mr. David Nelson, was added to the staff of the Consul General as refugee officer.

AID Resources Transportation Division provided valuable assistance to ORM in arranging charter airlifts from the US and other parts of the world to India. Because this was a refugee matter, rather than displaced people within their own country, the AID Disaster Relief Coordinator's role was of an advisory and support nature. DRC in cooperation with the AID NESABureau arranged for cash grants of AID funds to the UNHCR and ORM to support the relief efforts.

One of the early US commitments made through the UNHCR was to supply at least half the food required by the refugees. It was arranged for the Government of India and authorized

voluntary agencies to draw from existing stocks in the country against an American commitment to replace the food with PL 480 shipments from the U.S.

Five special programs of the USG were:

Anti-cholera campaign—Cholera broke out in the refugee areas, threatening refugees and local residents alike. To sup-



A boy receives a medical checkup by a Red Cross nurse at the Salt Lake Refugee Camp near Calcutta.



Many forms of shelter and variety of materials were used in the refugee shelters.

port a World Health Organization (WHO) immunization campaign, the Interagency Committee provided an emergency airlift to Calcutta of 1 million doses of USG-donated vaccine and 215,000 doses from American voluntary agencies, plus syringes, jet injectors and rehydration fluids. U.S. chartered aircraft flew additional vaccine and supplies procured by WHO in Europe and elsewhere. The epidemic killed more than 5,000 people and hospitalized 40,000 before it was stemmed by mass vaccination and other measures undertaken by Indian medical teams organized on a crash basis through the countryside.

Shelter Materials—With the monsoon rains threatening, shelter materials were vital. Purchases exhausted available canvas in India. The Interagency Committee, after examining the cost of air shipment of canvas, switched to less bulky heavy-duty polyethylene which the refugees hung over the bamboo frames to make watertight huts. It was also used on more substantial houses built by the Indian government. This was probably the first large-scale use of such material in an emergency housing program.

Airlift—Early in the situation, the Government of India asked for an airlift of refugees to ease overcrowding in remote Tripura, across Pakistan's eastern border. On June 8, Colonel Charles E. Turnipseed of the U.S. Air Force, flew the first of four C-130 cargo planes from Pope Air Force Base in North Carolina to Agartala Indian Air Force Base in Tripura. Until the monsoon closed the Indian base a month later, the planes shuttled 23,615 refugees from Tripura to camps in Assam and returned with 2,254 tons of food and supplies for use in Tripura—half of the food needed by the remaining refugees.

Operation Lifeline—This UNICEF/League of Red Cross Societies program, handled in the field by the Indian Red Cross and voluntary agencies, supplied high-protein food for children and nursing mothers to combat malnutrition. It also supplied medical centers in the refugee camps for the severely malnourished. The Agency for International Development, which committed 35,365 tons of food for this program, had developed special blends prepared in the U.S. and shipped dry bags to Calcutta. The blends consisted of a corn, soya meal and milk mix, sweetened and flavored with vanilla to make the unfamiliar food palatable to the refugees, and a wheat-soya mix similarly sweetened and flavored.

Blankets—With cold weather approaching, the UNHCR made a worldwide appeal for blankets for the refugees. The USG responded by providing 1.25 million blankets, which were shipped by rail to Charleston, S.C. A chartered ship, the S.S. Export Adventurer, made an express run to Calcutta with 657,000 of these blankets—packed in waterproofed wooden containers which could be converted, on arrival, into simple shelters for the refugees.

The remaining blankets were shipped from Charleston by chartered aircraft. Provision on short notice of such a large number of blankets was an unprecedented logistics operation reflecting credit on the Department of State Supply and Transportation Division. The Interagency Committee also arranged airlifts to Calcutta of blankets purchased by UNHCR from international contributions by a half-dozen Western European countries and Canada.

Funds provided by the U.S. Government were utilized as follows:

Description	Amount	Use
Grants to UNHCR	\$23,290,000	Procurement of medical supplies, shelter material, blankets, clothing, vehicles, other goods and services, and administrative expenses
Grants to UNICEF	600,000	Procurement of trucks and food for child feeding program.
Grants to voluntary agencies	4,565,000	Procurement of shelter materials, medicines and other supplies, shipping costs
USAF airlift	775,548	Reimbursement to USAF for expenses of airlifting refugees and food during June-July 1971
Charter cargo flight	609,225	Airlift of relief supplies from U.S. and Europe to Calcutta
Direct purchase and transportation	5,659,227	Medical and other supplies, including 1.2 million blankets shipped by sea and air
Administrative Expenses (ORM)	175,000	
Contingencies	75,000	
Total	\$35,750,000	

Sources of the above funds:

Office of Refugee and Migration Affairs \$ 500,000

Foreign Assistance Funds transferred to ORM by Presidential determination 15,000,000

AID funds of which \$5 million came from FY 1971 contingency funds and the balance from special appropriation by Congress for South Asia relief in FY 1972 \$20,250,000
\$35,750,000

P.L. 480 Food Commodities

USG food commitments consisted of 35,365 metric tons of high protein food, 96,700 metric tons of rice, 50,852 metric tons of vegetable oil and 5,000 metric tons of bulgur, for a total of 187,911 tons. Over 70 percent of these commodities had been delivered to India prior to date of this report and the balance was enroute at sea, enroute to ports or under procurement. This food had a market value of \$55,125,000. It was provided to the Government of India to replenish stocks it had used for the refugees, to U.S. voluntary agencies to replenish their stocks and to UNICEF for its child feeding program.

Shipment of food and delivery from Calcutta to refugee camps, during and after the India-Pakistan hostilities continued without significant interruption.

Total Value of USG Assistance\$90,875,000

ASSISTANCE PROVIDED BY U.S. VOLUNTARY AGENCIES:

Americans for Children's Relief—Cash donation and baby foods, value \$ 12,000

American Friends Service Committee—cash and equipment of children's hospital and bamboo to construct platforms for refugee families and for school programs in camps 11,500

American National Red Cross—cash donations, infants clothing, needles and thread 181,955

Americans for Children's Relief, Inc. cash 1,500
Baptist World Alliance—cash 38,000
Baptist Foreign Missionary Board 25,000
CARE—Initial program concentrated on the purchase and distribution of tarpaulins for shelter in the refugee camps. Emphasis later shifted to local purchasing of soap, other sanitation commodities and blankets. CARE also distributed USG food commodities to refugee camps primarily for use in child feeding. Total contributions from CARE's own resources in cash and supplies were valued at 814,720
Christian Church—cash 18,250
Christian Children's Fund—cash 56,605
Community Development Foundation—cash 50,000
Catholic Relief Services—CRS provided blankets, clothing, shelter materials, soap, household utensils, insecticides and other necessities on a regular basis to over 1 million refugees in camps in West Bengal, Assam, Tripura and Meghalaya. CRS assisted in emergency feeding programs in refugee camps, providing daily food rations from USG FFP supplies and distributing 140,000 loaves of vitamin enriched bread daily. Also supplied cholera vaccines, inoculation jet guns and other medicines. Total value of cash and supplies from CRS \$ 3,810,000
Christian Reformed World Relief Committee—cash and clothing valued at 107,000
Church World Service—Beginning in March 1971, CWS through its counterpart agency in India, Christian Agency for Social Action (CASA), became deeply involved in work with the East Bengali refugees in four camps. In these camps where CASA had staff, CWS employed 200 refugee teachers on an hourly basis to operate 'classroom' educational programs, providing paper, pencils,

and other supplies. CWS distributed clothing, food, blankets, tar felt and plastic for roofing in in camps where CASA operated under general agreement of UNHCR. CWS also initiated a program in nutritional research and applied nutrition using 40 4th-year medical students. Total value of cash and supplies from CWS 646,900
Direct Relief Foundation—medical supplies \$ 83,355
East Pakistan Emergency Refugee Fund—cash 225,000
Indians for Collective Actions—cash and blankets 15,500
International Christian Fellowship—cash 18,000
International Rescue Committee—Provided subsistence stipends to refugee doctors, teachers and professionals who, in turn, accepted work assignments in the refugee camps in the following programs:
... Education (basic). As of November 1971, IRC had established 51 schools in refugee camps, employing 714 teachers and 10 administrators. The average school served approximately 500 children.
... Folklore research project employing 30 people.
... Study of camp life dynamics employing 25 persons.
... Research Faculty in Exile program engaging 45 academicians and 4 secretarial/clerical assistants in a study of the overall refugee flow and resettlement problems.
... Grants for purchase of paints and canvasses to refugee artists.
In addition, IRC had, by mid-November, placed 305 medical personnel in 48 refugee camp medical facilities which treated an estimated 250,000 patients per month. The IRC programs were carried out in cooperation with the Refugee Teacher's Association, the Calcutta University Assistance Committee and the Government of India.
Total value of cash and supplies provided by IRC . 365,000
Lutheran World Relief—Provided infants' clothing,

blankets, soap and cash. LWR worked in cooperation with the Cooch Behar Refugee Service supported by the Department of World Service of the Lutheran World Federation and with CASA. Total value of cash and supplies by LWR \$ 838,526

Medical Assistance Programs, Inc. Shipped antibiotics, soap, cleansing bandages, medical supplies and 21 million vitamin tablets to various organizations assisting refugees in the Calcutta area. Value of cash and supplies 1,216,225

Mennonite Central Committee—Distributed 5,146 tarpaulins and polyethylene sheeting to provide shelter to 75,000 refugees; 13,000 straw mats; clothing for 55,000 people; 500 cartons of soap and 55 tons of pounded rice and molasses. MCC also contributed vitamins, medical supplies and health kits, purchased and distributed 2,000 bottles of saline solution for cholera treatment and helped to equip the Salvation Army field hospital at Barasat. Total value of cash and supplies 840,000

Meals for Millions Foundation, Inc. Provided high protein food supplement valued at 9,680

Medical Mission Sisters—Medical supplies and cash donations totaling 108,310

OXFAM-American, Inc.—Collected \$155,000 in cash, provided medical supplies, clothing and food supplements and blankets. OXFAM-America contributed funds and provisions toward the international Oxfam effort which is carried out by approximately 300 Indian and refugee volunteers serving over 600,000 persons in 6 camp areas at New Barrackpore, Barasat, Bangaon, Balurghat, Galpaiguri and Agartala. The program provided sanitation services, medical care, health and nutrition education, family planning information, supplementary feeding, educational and recreational activities, shelter materials and handicraft training. Total value of cash and supplies by Oxfam-America ... \$ 919,000

The Salvation Army—SA serviced refugee camp population of 75,000 and distributed baby food, bread, milk and clothing on a regular basis. Operated a field hospital at Barasat, dispensaries in 4 refugee camps within 6-mile radius of the field hospital. Provided six vehicles, 3 to be used as ambulances. Total value cash and supplies 86,400

Seventh-Day Adventist Welfare Service 20,000

United Church Board of World Ministries 100,000

U.S. Committee for UNICEF—Cash to UNICEF for child centered needs including basic health, education and recreational services in camps 565,000

World Neighbors—cash to assist in training 2,000 students from 5 universities to work with refugees in State of Maharashtra \$ 15,000

World Relief Commission—Worked through the Evangelical Fellowship of India which assumed responsibility for several refugee camps in the Shillong area and near New Delhi. WRC contributed funds toward this work and also sent blankets through the Mennonite Central Committee. Total value 86,500

World Vision Relief Organization, Inc. Assisted in building a model school used for refugee children, provided saline solution, tarpaulins, medical supplies, and other material. Operated the Edith Mulvaney Home in Calcutta for 55 refugee children. Total value assistance 123,000

Young Men's Christian Association of the U.S.—Supported the refugee program of the World Alliance of YMCA's, Geneva, Switzerland—made cash contribution of 25,000

Young Women's Christian Assoc.—cash 2,075

Total value assistance by volags: 11,435,001

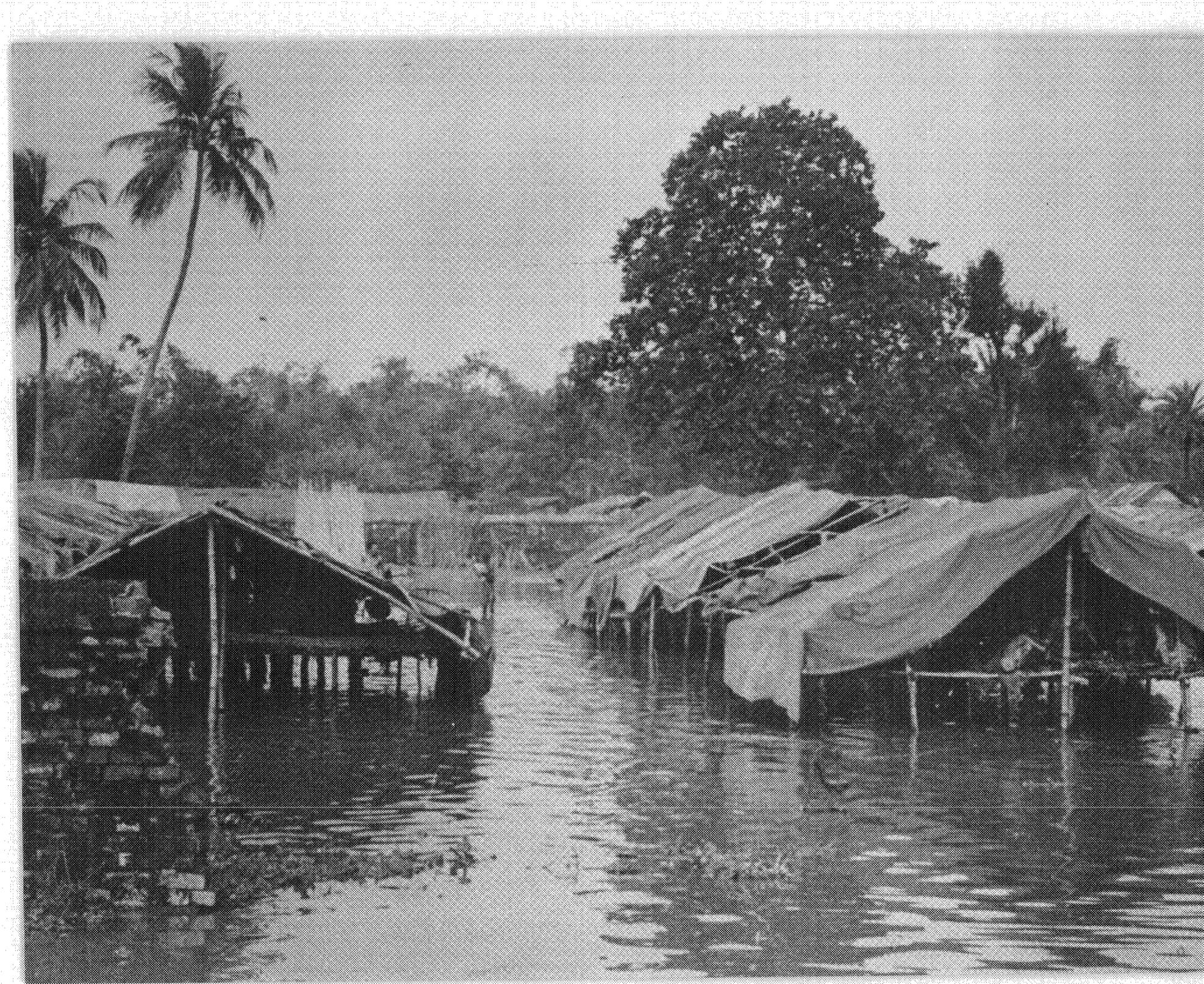
ASSISTANCE PROVIDED BY OTHER NATIONS AND
INTERNATIONAL ORGANIZATIONS:

Argentina	
4,000 tons of wheat valued at	\$ 240,000
Australia	
Government	6,160,000
Voluntary Agencies	2,240,000
Austria	99,800
Barbados	5,000
Belgium	
Government	2,400,000
Voluntary Agencies	18,000
Botswana	7,000
Canada and Provinces	22,705,000
Voluntary Agencies	2,390,000
Ceylon	
Clothing valued at	336,100
Chile	3,000
Cyprus	12,000
Dahomey	125
Denmark	
9,575,000 kr. cash to UNHCR and 5,075,000 kr. reserved for refugees in India or repatriation (1/2 calculated for each)	2,814,156
Voluntary Agencies	800,000
European Economic Community	
43,000 tons of Italian rice	\$ 8,600,000
Fiji	5,000
Finland	
\$475,000 in cash and \$80,800 through the Finnish Red Cross and other channels	555,800
France	
Government, 10,000,000 fr.	2,898,550
Voluntary Agencies	600,000

Gambia	235
Germany, Democratic Republic	2,034,286
Germany, Federal Republic	
Government	21,344,000
Voluntary Agencies	9,216,000
Ghana	25,000
Greece	
Through Greek Red Cross, tents, canned meat, bandages	170,000
Guinea	
2 million doses of smallpox vaccine	40,000
Guyana	
Rice valued at	5,200
Iceland	2,850
Iran	
1 million units of cholera vaccine	60,000
Other	123,600
Ireland	
Government	215,983
Voluntary Agencies	1,200
Jamaica (through WHO)	12,700
Japan	
Government	6,390,000
Voluntary Agencies	10,000
Korea	
Medicines valued at	5,000
Liberia	20,000
Libya	200,000
Lichtenstein	4,900
Luxembourg	453
Malaysia	13,100
Mauritius	
500 tons sugar	50,000
Monaco	300

Nepal	2,500
The Netherlands	
Government	2,678,885
Voluntary Agencies	6,214,600
New Zealand	
Government	256,360
Voluntary Agencies	537,080
Norway	
Government	1,990,700
Voluntary Agencies	2,000,000
Philippines	
1,000 tons of sugar, plus \$493 in cash	100,493
San Marino	1,602
Senegal	7,200
Singapore	13,147
Spain	
Medicines	42,900
Swaziland	1,200
Sweden	
Government	6,000,000
Voluntary Agencies	374,000
Switzerland	
Government	2,730,400
Voluntary Agencies	1,000,000
Tanzania	8,400
Thailand	12,300
Tonga	250
Trinidad and Tobago	9,985
Uganda	14,000
USSR	
Portion of 100,000,000 doses smallpox vaccine	1,000,000
100,000 tons of rice	20,000,000

Other commodities	1,100,000
United Arab Republic	
1 million units of cholera vaccine	60,000
United Kingdom	
Government	37,050,000
Voluntary Agencies	3,400,000
Viet-Nam	
200,000 doses of cholera vaccine valuated at	20,000
Yugoslavia	
Tents, etc.	20,000
Caritas Internationalis	35,000
LICROSS	5,727,165
Lutheran World Federation	
Member churches	718,000
UNHCR	500,000
UNICEF	
Drugs, food supplements, other supplies and domestic air freight plus 41 jeeps	600,000
World Council of Churches	775,200
World Food Program	
Existing stocks of oil and NFDM turned over to GOI	1,100,000
To UNHCR	2,000,000
Pope Paul VI	25,000
World Health Organization	155,000
Other donors	126,586
TOTALS:	
Contributions by Governments	\$150,679,460
Contributions of international organizations, voluntary agencies and others	40,562,831
TOTAL ASSISTANCE	\$191,242,291



INDIA

Floods

. . . during summer and fall of 1970 inundated areas of eight states and Calcutta. 627 people killed, several thousand injured, and over 10 million affected. Other consequences: 63,746 homes destroyed, another 202,358 damaged; crop losses occurred on 2.6 million acres; and 22,000 head of live-stock killed. Estimated dollar damage for State of Uttar Pradesh—\$3.4 million; the State of Gujarat—\$97,779,000 (\$56 million to infrastructure; \$19 million to housing; \$22 million in crops, and \$416,000 to livestock). Damage estimates for other states not available.

Value of U.S. Assistance \$1,235,245

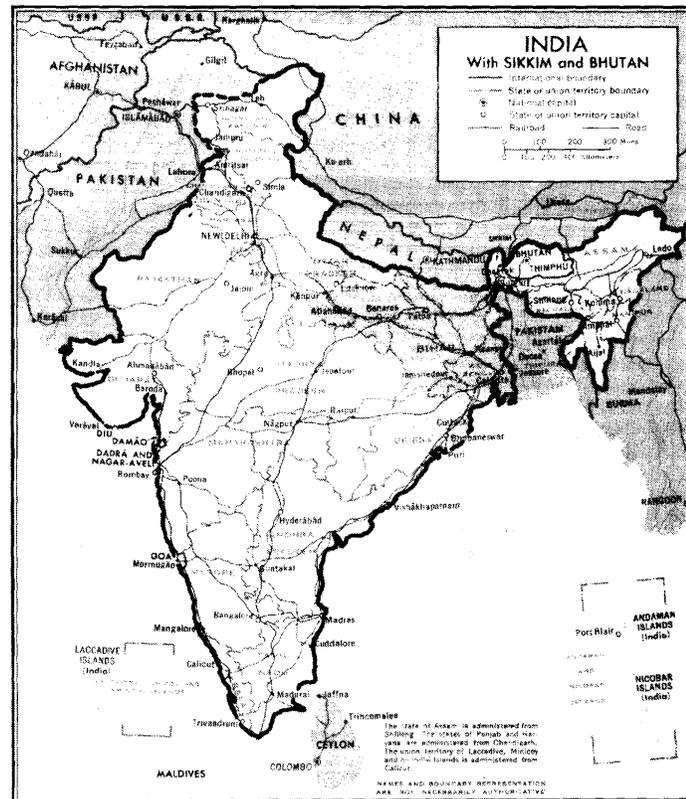
DETAILS

July Floods

On July 20, following several days of heavy rain, landslides occurred in northwestern Uttar Pradesh, partly filling a huge catchment area. Rising waters cut embankments, and released water destroyed the village of Alaknanda. Other villages along the river were also washed away including Belakuchi, which lies close to the border of Tibet. Taxis, trucks, and passenger buses were swept away by the rushing water, roads and bridges were destroyed, and 112 people were killed by this flood.

Fall Floods

Monsoon rains which regularly cause flooding in India were unusually violent and extensive in the fall of 1970, especially during the month of September. Except for Gujarat floods, only limited information was received on the effects of flood-



ing in other Indian States. In West Bengal there were 42 deaths and six million people affected; in Uttar Pradesh, 153 deaths occurred, 30,000 dwellings were destroyed or damaged, and a large crop acreage was laid waste; in Andhra Pradesh 20,000 victims were reported, and 10,000 acres of cultivated land inundated.

During the period September 6-20, the abnormally heavy rains caused flooding in a large area of Gujarat. Districts suffering the most damage and losses were Surat, Broach, Baroda, Kaira, and Ahmedabad. To a serious but lesser extent, the following other places were also affected: Jamnagar, Rajkot, Bhavnagar, Mehsana, Jhagadia, Dediapada, Gothada, Zankhvav, Vyara, Nadiad and Petlad. The total number of villages affected by the disaster was 5,783. The swollen Narmada River breached, and many of the villages located on its banks were completely washed away. Over 35,000 houses and 26,000 huts were destroyed, while another 172,000 suffered extensive damage. An estimated 350,000 people were left homeless, and approximately 3.5 million were affected. Of the 432 people officially reported killed in Gujarat (many more were believed to have died in various villages that were not counted), 350 were from Broach, the most seriously affected district. Rail and communications remained severed for more than a month. Travel anywhere required walking through knee-deep water.

ACTION TAKEN BY THE GOVERNMENT OF INDIA AND LOCAL ORGANIZATIONS:

Only limited information was available on relief activities. State Governments were aided in their assistance measures by such voluntary agencies as CARE, Catholic Relief Services, and Lutheran World Relief. Also, the Indian Red Cross participated in the relief operations.

For the July flood in Uttar Pradesh, the State Government provided 620,000 rupees to flood victims (equivalent of \$81,580) in Pithoragarh, Pauri, and Chamoli Districts, in addition to foodstuffs. The Indian Red Cross brought in blankets, sheets and wearing apparel.

According to a Catholic Relief Services report, in Gujarat following the September floods, the State Government carried out swift rescue operations that saved many lives and much property. The Government worked out a food-for-work project with CRS and the U.S. AID Mission which benefitted 261,875 people in Ahmedabad area. All able-bodied persons were required to work on reconstruction of houses, huts and roads. The aged and destitute were given free meals at feeding camps organized by the State Government and local officials. Food grains were released from Government go-downs for this project and later replaced by CRS from its in-country stocks of USG PL 480 food commodities. Victims in the Broach District, the area of Jhagadia and eleven other villages also benefitted from work projects. In addition to food and local currency contributions for these projects by CRS, the State of Gujarat made available 1,579,158 rupees (equivalent \$208,000) to be utilized for purchase of land for new villages, schools, wells, and for administrative expenses.

ASSISTANCE PROVIDED BY THE U.S. GOVERNMENT:

The U.S. Government offered to provide U.S.-owned rupees for relief and rehabilitation projects, and authorized Catholic Relief Services, CARE and Lutheran World Relief to release Food for Peace commodities from their stocks for distribution to flood victims and for food-for-work projects. Breakdown of this aid follows:

Uttar Pradesh	
60,000 Indian rupees to CARE to purchase blankets, equivalent	\$ 8,000
PL 480 food by CARE—500 lbs CSM, 462 lbs vegetable oil, and 53,250 lbs bulgur	2,225
Orissa	
PL 480 food by CARE—740,625 lbs CSM, 370,312 lbs bulgur wheat, and 92,578 lbs vegetable oil	78,650
West Bengal	
PL 480 food by CRS—1,350,000 lbs nonfat dry milk.	337,500

Kerala	
PL 480 food by CARE—30,000 lbs bulgur wheat ...	2,100
Bihar	
PL 480 food by CASA—315,000 lbs bulgur wheat; by LWR 163,420 lbs bulgur wheat	19,130
Calcutta Area	
PL 480 food by LWR—1,569,890 lbs wheat, 540,923 lbs bulgur, and 14,447 lbs oil	83,180
Madras	
PL 480 food by CARE—216,996 lbs bulgur wheat, 20,678 lbs CSM and 13,479 lbs oil; by LWR— 81,250 lbs bulgur wheat and 6,561 lbs vegetable oil	15,980
Gujarat	
500,000 rupees cash donation to Gujarat State Gov- ernment for flood relief	66,000
PL 480 food by CRS—5,000 tons grain and 500 tons vegetable oil	583,000
TOTAL USG ASSISTANCE	\$1,195,765

ASSISTANCE PROVIDED BY U.S. VOLUNTARY AGENCIES

Catholic Relief Services, CARE, and Lutheran World Relief participated in flood relief and rehabilitation projects by releasing previously mentioned USG Food for Peace commodities. While some of this was used for free distribution, most was used in food-for-work projects in which the flood victims contributed labor to rebuild homes, schools, wells, and roads.

CARE also distributed blankets in Uttar Pradesh which had been purchased with USG-donated Indian rupees.

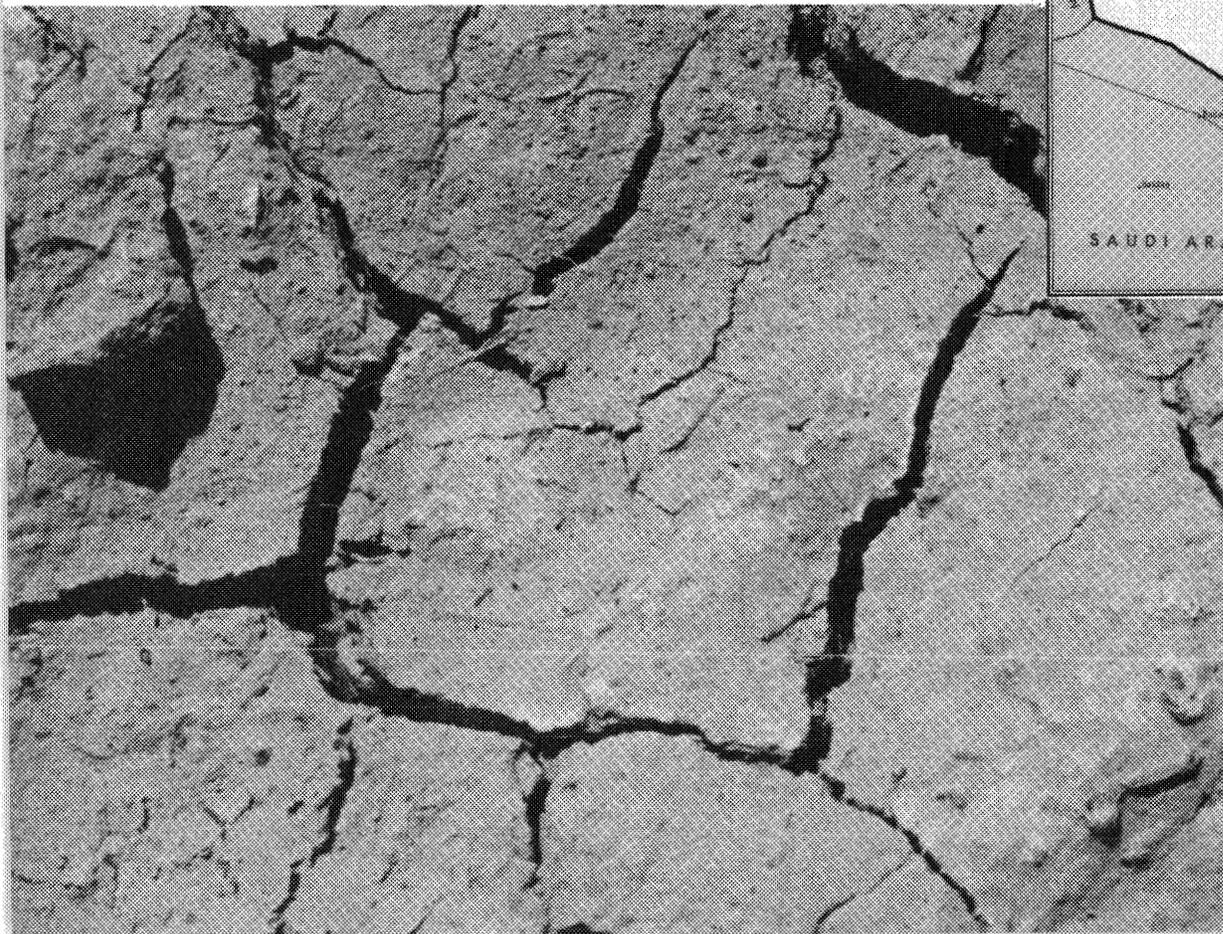
CRS operated feeding kitchens and assisted in administering food-for-work projects.

American National Red Cross provided multivitamins valued at \$39,480.

ASSISTANCE PROVIDED BY OTHER NATIONS AND INTERNATIONAL ORGANIZATIONS:

Japan—cash donation of \$280.

It was also reported that OXFAM and Caritas, International had made donations to the Gujarat flood relief program, but kind and value of assistance were not available.



IRAQ

Drought

Near complete failure of winter cereal crops results from continued Iraq drought. 500,000 in need of food assistance. An estimated 14,000 sheep, goats and camels perish.

Value of U.S. Assistance\$2,408,000

DETAILS

During the planting and harvest years 1969-1971, scarce rainfall (lowest recorded in 50 years) caused the near complete failure of winter cereal crops and the loss of vegetative growth in all desert and natural range areas, especially in the Provinces of Ninauri, Kirkuk and Arbil.

In the northern part of the country, the area most affected by the drought, over one million hectares of wheat and 232,500 of barley had been planted. Normally, these plantings would have produced 650,000 tons of wheat and 188,000 tons of barley. However, seeds did not germinate (in 90% of the planted area), and the harvest was no more than 6% of normal.

It was estimated that 7% of the nomadic livestock perished (total estimated population of 3,000 sheep and goats and 200,000 camels). In an effort to minimize their losses, nomads sold their lambs for the equivalent in Iraqi dinars of \$3.36 as compared with the usual \$15.68.

As a consequence of the drought, the Bedouin tribes migrated to the high mountain areas in search of fodder, eventually penetrating beyond the Syrian and Jordanian borders. The migration to less affected areas caused overgrazing of the already poor pasture land.

The drought affected the progress of development programs such as, resettlement of the nomadic population on agrarian reform land, drilling of deep wells for drinking water, construction of dams and reservoirs, the installation of fenced enclosures, and the establishment of veterinary clinics and feed reserves.

ACTION TAKEN BY THE GOVERNMENT OF IRAQ:

The Government of Iraq requested that the World Food Program approve a food-for-work project for the drought affected families who had suffered significant loss of income.

Also, the GOI imported 400,000 metric tons of wheat from Australia to stabilize local prices, which had peaked at \$168 per ton. Later 72,000 metric tons of barley and another 250,000 tons of wheat were imported for the same purpose. Value over \$50 million.

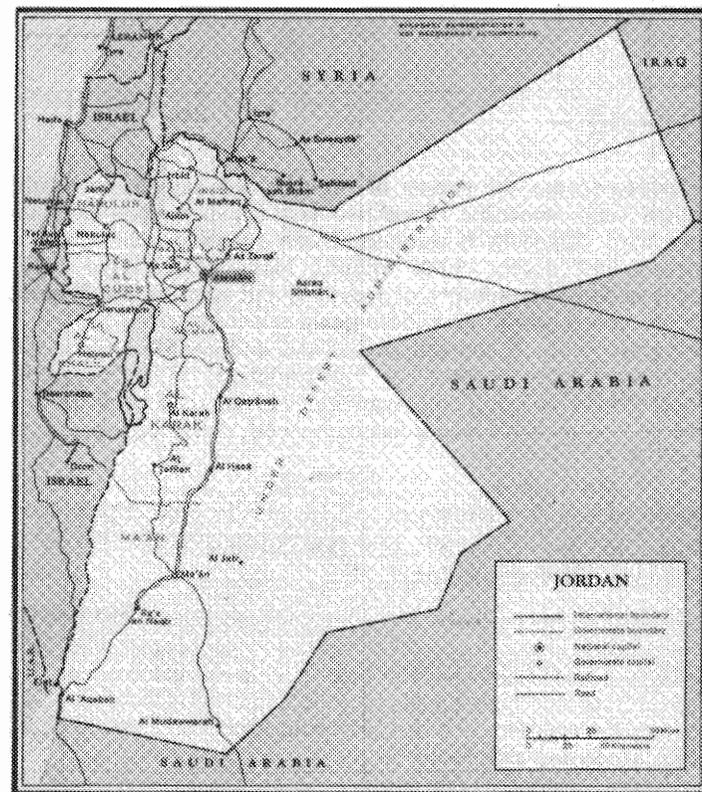
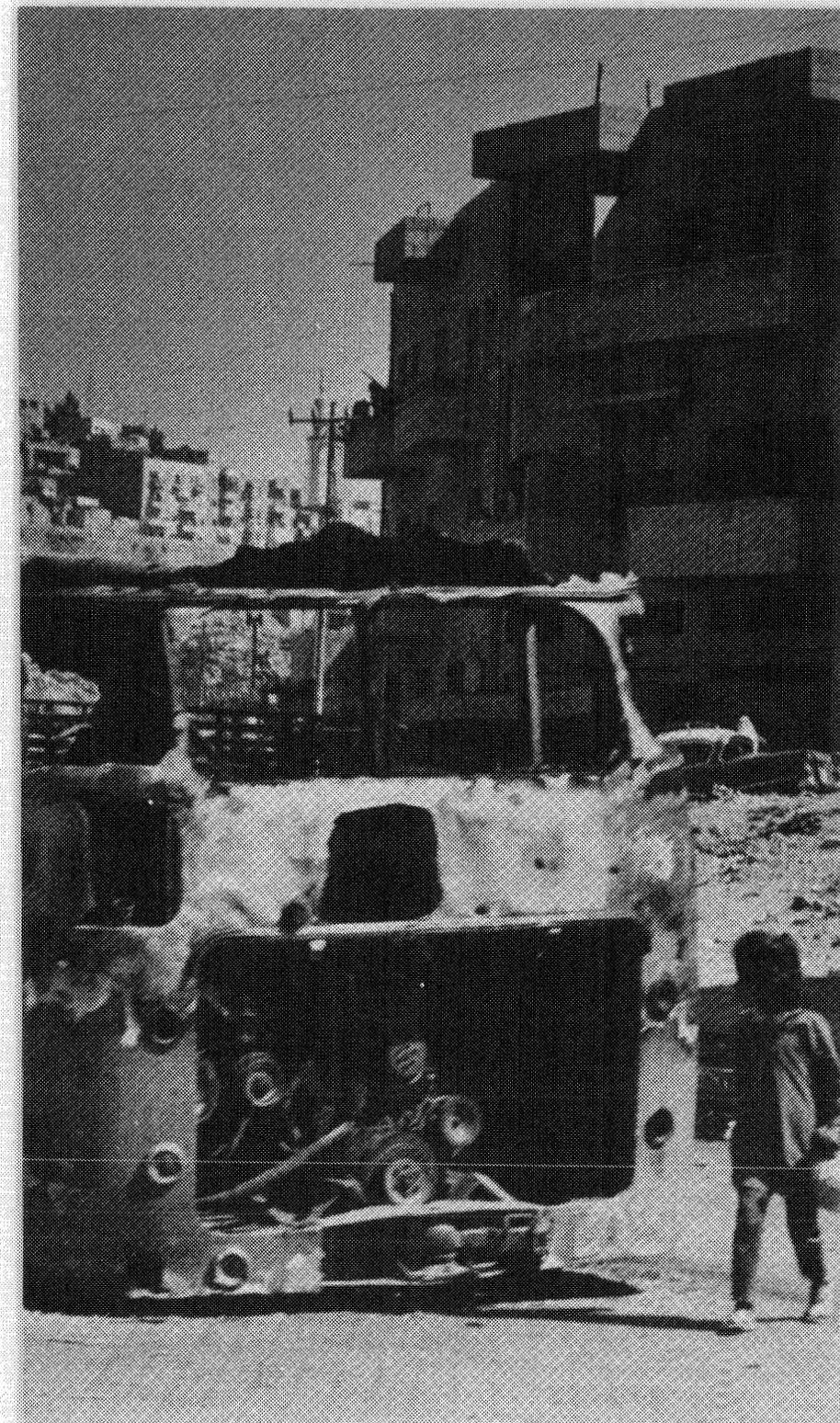
ASSISTANCE PROVIDED BY THE U.S. GOVERNMENT:

The World Food Program requested and received from the U.S. Government 15,000 metric tons of wheat and 1,000 tons of vegetable oil for their food-for-work project, planned to assist 250,000 drought victims.

Value of this wheat and oil	\$1,698,000
Ocean freight charges (estimate)	710,000
	<u>\$2,408,000</u>

ASSISTANCE BY U.S. VOLUNTARY AGENCIES: None

World Food Program—In addition to 15,000 metric tons of wheat and 1,000 tons of oil supplied by the USG, the WFP provided 750 metric tons of dry milk valued at about \$412,500



JORDAN

Civil Strife

... spread from the streets of Amman, the capital, to nearby cities and towns. The bloodshed lasted two weeks—September 17 to 30, 1970. It was unofficially reported 3,500 civilians were killed, nearly 11,000 injured. Many deaths were attributed to the impossibility of reaching and treating the injured. In all, an estimated one million persons were affected. Some other consequences: Armor and artillery fire left the city without communications or transportation. There was little food. Water for drinking, washing, bathing and cooking was scarce. Normal life was paralyzed. Total dollar damages: \$42 million.

Value of U.S. Assistance	\$11,816,007
Value of Assistance by 21 other Nations and International Organizations	7,352,446
	<hr/>
	\$19,168,453

DETAILS AND BACKGROUND:

Palestine refugees are Arabs who fled from that part of Palestine which became Israel in 1948. Some went to Syria and Lebanon, others crowded into the Gaza Strip. But most went to the Kingdom of Jordan, where some settled on the "West Bank" (formerly Palestine), and others across the Jordan River on the "East Bank" (Transjordan).

In 1967, as a result of renewed Arab-Israeli hostilities, the Jordan River became the scene of another massive exodus. Arabs fleeing the Israeli-occupied West Bank and the Gaza Strip went to Jordan east of the river. Some were already registered with the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA), dating from the 1948 exodus. Others, non-refugee residents of the West Bank and the

Gaza Strip, fled for the first time. There were thus 517,000 UNRWA registered refugees in East Jordan plus 250,000 other displaced people from the West Bank and the Gaza Strip. Of these, the combined total of 767,000, two-thirds were located in the Amman area.

The severe civil strife that occurred in Jordan from September 17-30, 1970, was the culmination of many months of internal disturbance marked by conflict between the Government of Jordan and its armed forces on the one hand, and the Palestine Fedayeen (commandos) and their supporters on the other.

Prior to September 17, Amman, with a population of about half a million, had for a number of days been under partial curfew. The nights were silent, broken only by occasional gunfire between hostile forces. Small daytime clashes occurred in the streets. Fierce fighting erupted at 5:00 A.M. on September 17, and for almost two weeks civil war prevailed in Jordan. Although there was heavy fighting in other parts of the country, Amman clearly bore the brunt of the conflict.

Two weeks of gunfire left scars throughout Amman and the surrounding area.



Armor and artillery fire were widespread, coupled with heavy concentrations of small arms fire. Throughout Amman, civilians were pinned down in homes, mosques or other public buildings. When the shooting stopped on September 27, they emerged to find themselves in a city without communication or transport and very little food. When obtainable, food was selling at three times normal price. Most distressing, there was no water for washing, sanitation, cooking or even for drinking. Normal life was paralyzed throughout the country.

Suffering was severe, and the number of casualties ran high, particularly in the Wahdat refugee camp in Amman. Wahdat Camp, originally built outside the city limits by UNRWA, had been gradually engulfed by Amman, and although UNRWA continued to provide certain services, the original "camp" had become a congested urban neighborhood.

In Amman, many thousands of homes were damaged or destroyed. The toll of industrial, commercial and government premises and public utilities was heavy as the conflict raged throughout sections of the city. Losses were also severe in and around major outlying population centers such as Irbid and Zarqa in northern Jordan. Areas south of Amman escaped damaged from the fighting.

ASSISTANCE PROVIDED BY THE GOVERNMENT OF JORDAN, LOCAL ORGANIZATIONS AND REFUGEE SELF-HELP:

The Government of Jordan authorized expenditures on a number of relief, clean-up and rehabilitation projects under emergency fund allocations. After the initial shock had dissipated, the government quickly moved to restore normal life. There was an especially heavy burden in the early weeks upon municipal officials to restore transportation, electricity, water and other public services. Central government ministries and departments worked closely with municipal authorities and, considering the magnitude of the disaster, the coordination was judged satisfactory though not highly systematized. Aside from some ad hoc committees, no new relief organizations were

formed.

Shelter, food, clothing and medical help were provided to the needy by the government, the International Committee of the Red Cross, Palestinian and Jordanian Red Crescent Societies, UNRWA, local, U.S. and international voluntary agencies and by third country donors.

By early 1971, the Jordanian Government had compensated refugees of the three hardest hit camp areas (Wahdat, Jebel Hussein and Zerka). By this time repairs were well underway on buildings, equipment, supplies and vehicles damaged in Wahdat. Reconstruction of schools had started and those that could be opened were placed on double shift in order to get the children out of the tents in which many of them had started the 1970-71 school year.

The self-help element, based on a strong Arab tradition of family allegiance, was evident. Assisted by the Jordan Government and several voluntary agencies, refugees largely rebuilt their own concrete-block shelters. In Wahdat, the Lutheran World Federation set up machines for the manufacture of concrete blocks which were donated to needy families.

Dollar value of all assistance provided by the Government of Jordan, local organizations and private citizens is not available. However, in agreement with the U.S. Government, a Joint Fund for rehabilitation projects was established. The USG gave \$1,820,000 to the Fund and the GOJ added an equivalent amount.

ASSISTANCE PROVIDED BY THE U.S. GOVERNMENT:

For the first ten days of the conflict, the heavy fighting and firing completely prohibited movement in the city and prevented any attention to relief considerations. American Embassy staff were unable to leave the premises during this period.

On September 25, the American Ambassador, L. Dean Brown, officially declared that a disaster situation existed, and on the following day President Nixon pledged \$5 million to help meet emergency and rehabilitation needs in Jordan. Under the

Ambassador's direction, during the following months all members of the U.S. Mission participated unstintingly in the administration of this assistance, coordinating with the Government of Jordan and other donors.

The Ambassador exercised his disaster relief authority and received AID/W approval for expenditures not to exceed \$50,000 from the pledged \$5 million, to help local and international relief activities underway at the time. This "discretionary authority" was later increased to \$150,000.

In late September 1970, the American Embassy in Beirut, Lebanon, accepted the responsibility to act as the temporary coordinator of the disaster relief efforts for Jordan until the security situation improved permitting the transfer of coordination to Amman.

United States efforts were channeled through the **International Committee of the Red Cross (ICRC)**, which solicited assistance from all sources, and coordinated all relief activities in Jordan. Under the ICRC, relief became a vast international undertaking. To avoid duplication in these efforts, daily coordination meetings were held at the ICRC headquarters, attended by an American Embassy official.

While it was impossible for relief activities to commence until the fighting ended, advance preparations were made by the

Line of USAF C-130's at Kitzingen AFB, Germany, on alert to airlift Red Cross personnel and a mobile hospital to Amman.



USG for the earliest possible delivery of two US military hospitals, food and other supplies. A special group consisting of State/AID/USIA representatives was created in Washington to focus exclusively on the relief needs of the civilian victims of the conflict. This task force was placed under the direction of Mr. C. William Kontos and worked on a 24-hour a day, 7 day week basis. The AID Disaster Relief Coordinator, who coordinated USG and US voluntary agencies' relief shipments from the United States, and a member of his staff were assigned to the task force.

At the request of Ambassador Brown, the US Mission in Beirut arranged for a commercially chartered planeload of fresh and canned food to be flown on September 27 from Beirut to Amman. It was the first shipment of USG-donated supplies. The next day four C-130s carried food and other supplies to Amman from the USG Air Base at Incirlik, Turkey.

Ambassador Brown recommended and State/AID approved the deployment to Jordan by the Department of Defense of two US Army and Air Force mobile hospital units. One was a mobile 36-bed hospital capable of providing in-hospital and out-patient care; the other a 60-bed field surgical hospital, staffed primarily by surgeons and surgical teams. It required 18 US military aircraft to fly the hospitals to Amman from Europe. They were delivered on September 28 and 29 and were immediately put into operation. The two hospitals were manned by more than 200 US military doctors, male nurses and support personnel. Patients brought to the facilities quickly filled all the beds. The capabilities of the American doctors and the range of their facilities resulted in their taking on many very difficult surgical cases.

A great deal of ingenuity was required of the American medical facility. Members of the motor pool, for example, made artificial limbs from scrap wood and other materials they could salvage locally. All of the US military personnel wore civilian clothes and were identified by Red Cross armbands as part of the ICRC effort. The American flag was flown in front of the US hospital complex.

U.S. military teams served in Jordan for approximately one month, terminating their efforts on October 31, 1970. Cost of this operation, known as "Fig Hill", was \$1,568,205, exclusive of equipment valued at \$308,282 that was transferred to the Government of Jordan when the teams departed Jordan on October 30. Thus the total cost of Fig Hill was \$1,876,487—the largest single expenditure for emergency relief by the USG. This American hospital facility continued in use under ICRC auspices until ICRC terminated its program on December 10. Final disposition of the Fig Hill equipment was made as follows:

(1) all hospital equipment and supplies transferred to Jordanian hospitals under jurisdiction of the Ministry of Health.

(2) all vehicles (some 17 trucks and 20 cargo trailers) transferred to the Ministry of Public Works.

USAF doctor completes tent-pole peg leg and cast on young civil strife victim.



(3) all tents transferred to the Jordanian High Ministerial Committee for Refugee Relief and to the Jordanian Youth and Sports Organization. Upon departure of the US military team, patients at the American hospital were transferred to the care of an international staff of the remaining foreign medical teams directed by the ICRC. Virtually all ongoing specialized care was consolidated at this once American facility, which then became the central medical relief facility.

The following is quoted from a US Mission report: "The Fig Hill array of medical specialists and sophisticated equipment enabled it to treat the most complicated orthopedic and paraplegic hospital cases from the disaster, and it was a great success both in terms of medicine and human relations."

On November 26, 1970, the USG and the Government of Jordan entered into a Joint Rehabilitation Fund Project Agreement to assist the GOJ to rehabilitate and repair essential public services and to restore public confidence. This project consisted of four short-term sub-projects: (1) repair and equipment for public schools; (2) repair and equipment for other public buildings; (3) replacement of vehicles and specialized equipment for public services; and (4) repair and equipment for Ministry of Health hospitals and buildings.

The Project Agreement and its amendments required that monies contributed to the Joint Fund by the USG be matched by the Government of Jordan in an equivalent amount of Jordanian dinars. The USG contributed \$1,820,000 to the Fund, which was matched by the GOJ. As of April 15, 1971, the release record of the Joint Fund showed that \$3,127,236 had been made available to the various GOJ Operating Agencies, and a USAID audit found that all funds had either been expended or obligated within the activity targets prescribed in the agreement.

The need to conserve scarce AID contingency funds led to a USG proposal that, with GOJ concurrence, PL 480 Title II Food for Peace commodities valued at approximately \$750,000 be provided by the USG to Jordan to be sold at the then current Jordan market prices. Proceeds from such sales would be added to the Joint Rehabilitation Fund. This proposed use of Title II

food sales generation was viewed to be a one-time deviation from standard USG policy. The program determination was signed June 17, 1971 for 11,300 metric tons of wheat or 6,700 metric tons of wheat flour. The export market value was about \$735,000, and in addition, the USG agreed to pay ocean freight charges on shipment of 50% of the food, not to exceed \$280,000, for a total \$1,015,000.

Following is a breakdown of costs of USG assistance described above:

AID/W Incurred

Fig Hill	\$1,568,205	
Incirlik Airlift	122,000	
Cash donation to ICRC	100,000	
CRS Air Charter	30,335	
Air Charter for CARE cheese	13,220	
LWR/CARE air charter for blankets.	27,641	
Surface freight cost for CARE space-		
stick food	7,920	
Reimbursement to CARE for Medi-		
cal Team	13,015	
Reimbursement to CRS for travel/		
per diem of one nurse	1,369	
Kodak x-ray films and chemicals ..	3,354	
Equipment for Muashir Hospital ..	19,723	
MAC costs of airlifting some Fig		
Hill equipment	4,905	
ICRC commodities lifted by Fig Hill		
aircraft	2,112	
LWR reimbursement for inland		
freight for donated blankets	2,058	
Transportation of West Bank volag		
food	5,000	
TDY personnel:		
5 medical volunteers	8,000	
Ankara Controller	260	
Dr. Price HEW/USPHS	1,003	
DPSC/DSA—medical supplies and		
equipment plus air costs \$132	3,936	
Misc. costs	294	\$1,934,350

Field Incurred

Fig Hill Equipment \$ 308,282

Ambassador's Authority

CRS chartered flights Beirut-Amman 4,600

Beirut Purchases:

 Foodstuffs 23,245
 Charter to Amman 9,200

Amman Purchases:

 Food for the North 25,014
 UNRWA sugar 11,301
 Transportation of flour Beirut-
 Amman 1,693
 Transportation of Food to North
 Repair church roof 2,871
 Beirut blankets 145
 Trade schools equipment and
 tools 11,841
 Pump for hospital 300
 Transportation—Beirut Airport .. 101

Grants:

 Sport and Youth Organ. 5,000
 Ministry of Health 48,000
 Dept. of Culture and Arts 5,000 \$ 149,403

AID contingency fund contributions
to Joint Rehabilitation Fund 1,820,000

Total from Contingency Fund 4,212,035

P.L. 480 Title II Food for Peace:

11,300 metric tons wheat grant to
GOJ for sale with proceeds to go to
above Joint Rehabilitation Fund.
CCC cost of this food plus one-half
cost ocean freight \$1,015,000

Flour, vegetable oil, bulgur, and
milk from CRS warehouse trans-
ferred to UNRWA and 60 tons
cornmeal, value 72,442

53.8 tons vegetable oil and 5.7 tons rolled oats sent by CRS from West Bank, value 15,710

284 tons of vegetable oil, non-fat dry milk, flour, and bulgur seized by the Fedayeen from CARE warehouses, plus 144 tons of flour sent by CARE—Israel to East Jordan from the West Bank of Jordan in UNRWA, value 103,290

P.L. 480 Food Sub-Total 1,206,442

Additional USG help was approved by AID through supporting assistance funds. A Program Assistance Grant Agreement was signed with the Government of Jordan to rehabilitate municipal and other public services and to reimburse the GOJ for reparation damages sustained by private citizens. Total amount of this grant was \$ 5,000,000

TOTAL USG ASSISTANCE \$1,418,477

"The United States has a long and well established reputation as a major supporter of Jordan's economic development and welfare. Our timely contributions to its recovery from the severe September 1970 civil strife were recognized by the GOJ and by private Jordanians alike as fresh and significant evidence of American concern to alleviate suffering and to help disaster victims get back on their feet."

From U.S. Mission Report

ASSISTANCE PROVIDED BY U.S. VOLUNTARY AGENCIES:

American National Red Cross

ANRC contributed personnel experienced in emergency relief—some dealing directly with relief problems in Amman and others working out of Geneva with ICRC. ANRC also made a cash donation to ICRC in the amount of \$ 50,000

American Near East Refugee Aid

8 Arab-American doctors

Catholic Relief Services

CRS deployed P.L. 480 Food for Peace commodities as reported under USG section above from its warehouses in Amman and from the West Bank to UNRWA. In addition, from its own resources CRS donated:

From stocks on hand in Jordan

Medicines	146,268
Baby clothing	1,704
1,242 bales clothing	224,000
10,000 blankets	13,000
Milk for babies purchased in Amman .	500
Cost of repairing damaged units in Zarka Camp for 50 families	6,664
From CRS stocks in West Bank 20 tons used clothing, bedding, blankets, 5.5 tons soap, 840 tons cleaning supplies, baby clothing and vitamins, value about	67,500

From United States

6,000 blankets	30,000
15 tents	1,050
4,904 lbs tinned meat	1,979
44,625 lbs medicines, drugs, medical supplies, 10 mobile x-ray units	176,178 \$668,843

In addition to the above, CRS sent a nurse to Jordan to work in the hospitals for approximately three months, and a representative from Rome to assist in CRS emergency operations for a period of approximately 3½ weeks.

Church World Service

Contribution through MCC	\$ 5,000
Cash through WCC	5,000
10,000 blankets sent directly to Amman	30,000
10,000 yds. cloth and 46,000 pounds	

used clothing, est. value	48,000	
Cash for social case work grants thru WCC	4,500	92,500

Lutheran World Relief

10,000 blankets	\$ 30,000	
(LWR donated blankets through Lutheran World Federation)		
Cash grant	50,000	
65 tons clothing, est.	148,000	\$228,000

Mennonite Central Committee

Airlifted 11 tons of food purchased in Beirut to Amman. The food was distributed in the Irbid region. Total cost was \$5,429 but half was contributed by the Southern Baptist Mission

14,130 blankets, 20 tons of clothing, est. value	\$ 2,715	
Emergency family service	72,390	
Cash to UNRWA for purchase of 800 kitchen utensil sets	900	
Medical supplies for the Palestine hospital	4,000	
Allocation to rehabilitate small business enterprises and institutions totaling \$10,000 of which half paid by Church World Service	1,000	
	5,000	\$ 86,005

Southern Baptist Mission

Contribution through MCC		2,714
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CARE

Several hundred tons of USG P.L. 480 food commodities located in CARE warehouses were appropriated by the Fed-ayeen commandos, as were three CARE vehicles, some office machines and 608 cartons of tea. Value of the tea and vehicles was estimated at

	\$ 14,350
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On October 1, the CARE Director purchased 15 tons of meat, cheese and fruit juice in Beirut which were airlifted to Amman by Red Cross planes. Value of this food was

	8,568
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CARE also purchased 6 tents	1,250
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On November 1, CARE brought to Jordan a special medical team consisting of an Orthopedic Surgeon, a Plastic Surgeon, an X-ray technician, two operating nurses and three physiotherapists. Most of the team stayed until early January 1971. AID reimbursed CARE for the Team's expenses.

In addition, CARE sent one of its field representatives from Turkey to Amman to assist in emergency reconstruction. Cost to CARE for travel and related expenses was about

	\$ 500
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From the United States CARE airlifted and sent by ocean freight three separate shipments of space sticks (high protein and vitamin supplemented food). AID paid transportation on one of the ocean shipments. Value of these shipments was:

63,000 pounds	\$ 96,400
54,000 pounds	82,600
43,000 pounds	65,800
	<u>\$269,468</u>

TOTAL ASSISTANCE US VOLAGS	\$1,397,530
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ASSISTANCE PROVIDED BY OTHER NATIONS AND INTERNATIONAL ORGANIZATIONS

International Committee of the Red Cross

The International Committee of the Red Cross (ICRC) became the coordinator of all relief activities in Jordan. Most of the aid

provided by governments, Red Cross societies, church and international organizations was channeled through ICRC.

On September 19, a nine-member ICRC medical team left Switzerland for Amman to work at the Mu'sher Hospital. Because military operations in Amman gave rise to great confusion, the ICRC delegates were unable to move about in fighting areas.

In Geneva, ICRC set up, within the Operations Division directed by Mr. R. Courvoisier, a relief coordinating group led by Mr. Kai Warras, Secretary-General of the Finnish Red Cross Society and Vice-Chairman of the League of Red Cross Societies. The group's first emergency measure was the immediate dispatch on September 23 to Amman of a four-member relief coordinating mission.

The objective of the team was to determine from each party to the conflict the scope for ICRC action and to step up the relief work already started. Its preliminary findings and esti-

Red Cross relief convoy.



mates on relief needs for the injured and for the civilian victims of the conflict were made known to National Red Cross, Red Crescent and Red Lion and Sun Societies, and in liaison with the League of Red Cross Societies (LICROSS), ICRC launched an appeal for help to these societies on behalf of the victims of the conflict.

ICRC administered the Jordan relief operation utilizing the combined resources furnished by the National Societies, LICROSS, voluntary agencies and the national medical teams of 19 nations. These medical teams treated more than 2500 in-patients and more than 7,850 out-patients. Some 1800 tons of relief supplies were distributed under ICRC auspices. For a time ICRC was sponsoring four round trip flights daily from Beirut to Amman. Expenses of the ICRC relief operation in Jordan from about mid-September to the end of October came to \$530,000. Several governments helped pay the costs, with the US contribution to ICRC amounting to \$100,000.

Almost all medical teams provided by foreign governments departed Jordan during the latter part of October and in November. Wounded civilians who required further medical care were concentrated in the ICRC hospital, normally known as the King Hussein Hospital. The facility was operated by the Jordanian health authorities, augmented by 21 ICRC surgical, medical and nursing personnel.

Mr. Robert Pierpont, an American Red Cross representative assigned to ICRC who was Deputy Chief of the Jordan Relief Operation, visited Amman November 26 to 28 to confer with team members and local health authorities regarding current and immediate future medical and relief needs. A survey indicated that Jordanian medical authorities would be able to provide for continuing care of approximately 50 remaining hospitalized patients. The ICRC medical contingency was released on December 10.

A final convoy of relief supplies under ICRC auspices arrived in Amman from Beirut on December 6. The items included food, clothing, medical supplies and 280 tents. The Jordanian and Palestinian Red Crescent Societies took responsibility for

the distribution. Value of assistance provided through ICRC is credited under contributing countries.

United Nations Relief and Works Agency for Palestine Refugees (UNRWA)

Like all other civilian functions in Amman, and in most other populated areas of the country, UNRWA's activities were brought to a virtual standstill by the fighting which erupted on September 17. Officials and staff in Jordan were unable to communicate with each other or with anyone else for 10 days. On September 27 the Commissioner-General, the Director of UNRWA Health Services, the Acting Director of UNRWA Affairs in Jordan and the UNRWA Chief of Supply and Transport for Jordan were able to meet with the Prime Minister and the Minister of Health to arrange for reactivation of UNRWA's services. Two large UNRWA camps in Amman where some 70,000 refugees lived suffered heavily.

UNRWA's mandate extended only to registered refugees. The Agency brought in water tankers, resumed health and sanitation services that had been suspended, and distributed food rations.

UNRWA also cooperated with the ICRC and others in bringing emergency assistance from sources outside of Jordan and to help these groups coordinate their activities with each other. Meetings in Beirut of representatives of interested relief agencies were called by UNRWA on September 25 and 28.

UNRWA had most of the food and medical supplies immediately required for the registered refugees but indicated this food would have to be replaced to carry on its regular refugee program. UNRWA estimated cost of purchasing tents and replacement of shelter in the camps in Amman, not including other camps or housing needs, would be about \$2 million. The Commissioner-General urgently appealed to governments, organizations and individuals for funds to enable it to restore its services and to meet the emergency needs of the Palestine refugees east of the Jordan River. UNRWA's facilities suffered over a half million dollar's damage during the civil strife.

Cash contributions were made to UNRWA to meet additional expenses of the emergency and to rebuild by Denmark, United Kingdom, OXFAM and other relief organizations. Credit for these contributions has been given under name of donor governments and agencies below. The U.S. Government's annual allotment to UNRWA for its refugee program is \$24 million. No additional USG funds were made available to UNRWA as a result of the Jordan civil strife.

World Council of Churches

Cash and material aid were provided by member churches in Europe and USA valued at over \$600,000. Aid provided by Church World Service through WCC totaled \$62,500. This has been subtracted from the \$600,000 leaving a balance of \$537,500

Lutheran World Federation (LWF)

Immediately after the ceasefire, LWF provided a mobile clinic, and purchased and airlifted \$10,000 worth of bread and canned meat from Lebanon. These supplies were channeled to the needy through ICRC. Two days later large quantities of food and supplies were flown in from LWF donor groups in Scandinavia. Blankets were airlifted from Germany and the US, and 1,000 family cooking kits, tents and medical supplies were also donated through LWF. Value of these commodities was approximately \$250,000 but credit for the blankets from US has been given above to Lutheran World Relief for \$30,000, reducing this amount to \$220,000

LWF also helped to reestablish villages in the East Jordan Valley and Kraimeh and contributed 13 manually operated cement block-making machines for the refugee self-help home construction project. Value of this and other LWF assistance not reported above follows:

Rebuilding or repair of refugee shelters	\$100,000
Village development	15,000
Medical Services	10,000
Material Aid	10,000

University Scholarships	10,000
Other emergency aid	10,000
Total value LWF assistance	\$375,000

**Near East Council of Churches
Committee for Refugee Work**

NECC Centers in Amman, Zarka and Irbid took an active part in meeting some of the urgent needs of people who called at the centers. NECC made a quick survey in some of the Amman quarters for the purpose of issuing relief supplies received by the Arab Relief Committee from various sources. It investigated over 500 cases and helped with cash grants and material supplies such as food, clothing and blankets. Cost to NECC for this emergency aid was \$53,838.

In addition, it expended in Jordanian dinars an equivalent of \$20,720 and allocated another \$34,000 for other families and projects.
Total value NECC aid\$108,558

UNICEF

Contributed 14 tons of food through ICRC valued at ..\$10,000

International Committee of the Red Cross (ICRC)

The following listing of contributions by other nations and Red Cross Societies is believed to be incomplete. It reflects only such information available to AID/DRC at the time of this report. The data were obtained from a variety of sources, mainly from cables from the US Mission in Jordan. It will be noted that many contributions do not have dollar values reported, except where information was sufficient for DRC to give an estimate.

Belgium Red Cross—cash	\$ 540
Belgium Govt. 50 tons canned meat, medicines, including 10,000 bottles blood plasma and other supplies, valued at	100,000

Canadian Red Cross—cash	25,000
Canada Gov't—cash to UNRWA	150,000
Denmark, Gov't—Mobile hospital and medical team	300,000
Cash to UNRWA	13,348
European Common Market 15,000 MT flour and 250 MT nonfat dry milk. No value given. Estimated by DRC at \$88/ton for flour and \$550/ton for milk. Total	1,457,000
France—Set up hospital. Not enough details to establish a very good estimate of value but assume it would cost more than mobile hospital mentioned above for Denmark for which a value was reported. DRC estimates it would be at least	400,000
Germany—10 tons canned meat	5,500
50 bed hospital with 12 medical personnel. No value. DRC estimates at least	400,000
Indonesia—Gov't through RC	5,000
Israel—20 trucks of food	*
Italian Government—food, clothing, medical supplies and 280 tents. Est. value tents	28,000
20 tons canned meat, est.	11,000
Set up hospital. No details, value est. by DRC at least	400,000
Japan Red Cross—cash to ICRC	2,000
Kuwait—150 tons of food trucked to Jordan	*
Malaysia—cash donation	10,000
Netherlands Government—cash (28,-570), cheese, other dairy products, medical personnel. Total value 700,000 guilders, equivalent	200,000

Norway—Norwegian Council of Churches through ICRC \$8,000. Blankets and 200 tents. Value estimated by DRC	44,000
New Zealand Red Cross—cash	4,000
Sweden—Save the Children Federation—cash to UNRWA for reconstruction	20,000
Turkey—50-bed Turkish Army medical unit. Est. DRC	300,000
United Kingdom—Field Hospital and Field Ambulance Team consisting of 66 personnel plus a field surgeon team of 9. No value reported. DRC estimates on basis of personnel and equipment required at least	\$ 500,000
500 tons canned corned beef, value est. about 25¢ lb.	275,000
80,000 lbs sterling to UNRWA	192,000
Cash to UNRWA by OXFAM	24,000
500,000 lbs for reconstruction	1,200,000
	<u>2,191,000</u>

Switzerland Gov't sent milk, other supplies for which details on which to estimate value is lacking. Also gave cash to ICRC to be used in part to pay for airlifts of supplies by ICRC from Beirut to Amman, in the amount of ..

	255,000
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Saudi Arabia—four C-130's with medical and other relief supplies, doctors and male nurses

	*
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Spain—airlift relief supplies

	*
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USSR—sent relief planes with food, clothing, medical supplies and medical staff.

No details available on which to estimate value

Total value contributions through ICRC \$6,321,388

Other countries providing medical teams not mentioned above were: Abu Dhabi, Algeria, Sudan, Sweden, UAR, Kuwait. AID/DRC did not have names of all countries providing medical assistance.

Total value reported assistance by Other Nations and International Organizations \$7,352,446

* Value not reported or incomplete.

Several private Lebanese organizations mobilized their members to participate in the relief effort. The largest and best organized of these groups was the Islamic Welfare Organization attached to the Shi'a Higher Council of Imam Musa Sadr. The Social Welfare League for South Lebanon embarked on an ambitious fund raising program to finance construction of clinics, nurseries, elementary schools, and other facilities much in need in the villages of South Lebanon. The Jabal 'Amil Women's organization, an informal association of socially prominent Lebanese ladies, undertook distribution of relief supplies in certain villages.

ASSISTANCE PROVIDED BY THE U.S. GOVERNMENT:

The American Ambassador exercised his disaster relief authority on June 5, 1970 and reiterated his findings on August 21, 1970 that a disaster prevailed in South Lebanon that required outside assistance. This was attributable to the fact that the overall level of USG assistance for this emergency had not been determined prior to the end of the fiscal year. The Ambassador wished to make certain that the U.S. contribution would be an appropriate response to priority needs of the disaster victims identified by the Government of Lebanon. USG contributions consisted of the following:

Two Chevrolet vans modified and equipped to serve as mobile clinics/ambulances, following the Lebanon Council's specifications, to bring emergency medical care to people living in villages of South Lebanon. Total cost	\$10,425
Payment of ocean freight, clearing and handling charges, packaging and labor for 20 tons of non-fat dry milk turned over to Lebanese Red Cross	1,715
Donation to Social Welfare League	46
Total cost to AID contingency fund	\$12,187
P.L. 480 FFP non-fat dry milk. Above 20 tons plus 118 tons provided from Catholic Relief Services stocks, estimated value	7,400
Total USG contributions	\$19,587

ASSISTANCE PROVIDED BY U.S. VOLUNTARY AGENCIES:

Catholic Relief Services and Catholic Near East Welfare Association

Contributed 50 tons of used clothing, 3 tons of medical supplies and \$36,000 for purchase of basic furniture and supplies for families whose possessions were destroyed. Total

\$152,000

American National Red Cross

ANRC donated 250,000 vitamin tablets. Total

7,650

American University of Beirut

Surplus hospital equipment

16,000

North East Emergency Donations (NEED)

NEED provided a fully equipped mobile clinic, estimated value

12,500

Total contributions by U.S. voluntary agencies

\$188,150

ASSISTANCE PROVIDED BY OTHER NATIONS AND INTERNATIONAL ORGANIZATIONS:

In response to the League of Red Cross Societies appeal on behalf of the Lebanon Red Cross, the following national societies made contributions:

Australia—supplies	\$ 110
Belgium—supplies	2,820
Bulgaria—supplies	2,510
Germany (Dem. Rep.)—supplies	28,210
Kuwait—unspecified	—
Yugoslavia—supplies	840
Denmark—cash	6,690
Total	\$41,180

NEPAL

Floods

... and landslides leave 350 people dead and 20,000 homeless in Southern Nepal.

Value of U.S. Assistance	\$ 8,549
Value of Assistance by Other Nations	\$116,020
	<u>\$124,569</u>

DETAILS:

Heavy rains during the period August 15 to October 15, 1970, caused serious flooding in several parts of Nepal. The major damage area was located in southern Nepal where flooding caused a shift in river beds. Many villagers whose houses were in the path of the flood waters were killed; farm animals were drowned; and there was considerable silt damage to rich agricultural land. Flash floods also struck in southwestern Nepal and landslides devastated a number of village sites. Earlier in the summer a similar flood took a number of lives, destroyed homes and caused major damage to a powerhouse under construction in the Butwal area.

Many roads and bridges were washed out which impeded efforts to bring relief to the affected areas.

ACTION TAKEN BY THE GOVERNMENT OF NEPAL:

The Government of Nepal is not prepared to cope effectively with disasters of national or even regional magnitude. Major reliance is on local organizations, and the effectiveness of assistance varies from locality to locality.

The Government of Nepal established an ad hoc flood relief committee under chairmanship of the Home Panchayat Minister.

During the emergency, the U.S.A.I.D. Mission had the opportunity to call the attention of Nepalese officials to the advantages which a national command post would offer in coping with disaster situations.

In a number of communities, military units, local police and civil officials performed capably in rescue and relief work. The Nepalese Red Cross also actively engaged in the assistance program, and appealed to the League of Red Cross Societies for help.

An international committee chaired by the Resident Representative of the UN was formed. Its function was to assist Nepalese officials in implementing relief activities.

ASSISTANCE PROVIDED BY THE U.S. GOVERNMENT:

Disaster relief provided by the USG consisted of an allotment of flying hours flown by Arizona Helicopters, Inc. (contractor to USAID) for reconnaissance and cargo delivery. The American Ambassador exercised her disaster relief authority to commit AID contingency funds from the worldwide disaster relief account to pay for costs of the air operation. Total amount expended for this purpose was \$3,549

ASSISTANCE PROVIDED BY U.S. VOLUNTARY AGENCIES:

The American National Red Cross made a cash donation of \$5,000

Mennonite Central Committee

MCC had six people working for the Butwal Technical Institute assisting the Nepalese build a power plant located a mile

up the Tinau Riger in a narrow gorge. They were building a tunnel 1,625 feet long and six feet high with an entrance exit and two service tunnels. The roof connecting the two parts was not yet completed when sandy, silty waters flooded the tunnel leaving a knee-deep deposit. The turbine and generator installed in a room in the tunnel were also flooded. In the narrow river gorge, water rose 45 to 50 feet above the normal level, covering all tunnel entrances. Fortunately, the flood came in the early morning when no one was at work.

Losses incurred by the surprise flood were limited to 3 cement mixers, and construction tools. A cable-way spanning the river was dislodged, and a footbridge leading to the powerhouse was torn away.

The tunnels, the entrances and the power plant were being built to cope with just such a disaster. Although a setback in construction resulted, the basic structure of the project remained intact.

MCC personnel helped Nepalese in clean-up work and power plant construction was resumed.

ASSISTANCE PROVIDED BY OTHER NATIONS AND INTERNATIONAL ORGANIZATIONS:

League of Red Cross Societies—In response to a request from the Nepalese Red Cross for outside assistance, the League issued an appeal to national societies. Response to this appeal was:

Australia—cash and supplies	\$	7,270	
Austria—supplies		2,290	
Canada Red Cross—cash and supplies	\$	400	
Government—cash		9,790	10,190
Ceylon—supplies, no value given			
Denmark Red Cross and Government—cash		2,680	
Germany (Dem. Rep.)—supplies		11,910	
Greece Government—supplies		7,850	
India—supplies		200	

Japan—cash and supplies	2,000
Korea (Rep.)—cash	150
Lebanon—cash	50
Netherlands—supplies	1,420
New Zealand—cash	1,100
Norway—cash	1,400
Philippines—cash	250
Singapore—cash	330
South Africa—cash	280
Sweden—supplies	10,650
Thailand—cash	500
United Kingdom—cash	2,390
USSR—cash	1,480
Yugoslavia—supplies	1,630

The U.S. Mission reported the People's Republic of China contributed medical supplies valued at	50,000
	<u>\$116,020</u>





TURKEY

Earthquake May 22, 1971 5:30 PM

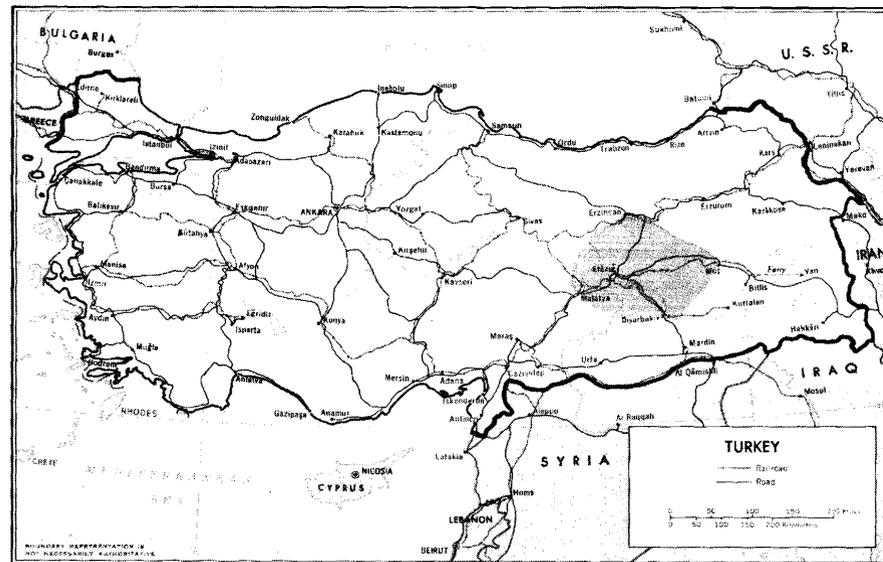
. . . measuring 6.8 on the Richter scale kills 878, injures 1,200, leaves 27,465 homeless in Eastern Turkey. Nearly 60,000 people directly affected. 5,493 homes destroyed, 3,408 sustained substantial damage, 3,318 suffered slight damage. 334 public buildings ruined or in need of extensive repair. Estimate of dollar damage was not available.

Value of U.S. Assistance	\$225,360
Value of Assistance by Other Nations and International Organizations	\$688,850
	\$914,210

DETAILS:

The epicenter was 38.8° North and 40.5° East. Smaller warning tremors at Noon and at 5 p.m. prompted many people to move their possessions outside in anticipation of the major shock which did follow. The earthquake zone extended as far as Erzincan to the north, Malatya to the west, and Mus to the east. It was located in an irrigated valley with an estimated population of 100,000. Bingol, a town of 17,000 people, lying on the western edge of the zone, was the largest population center seriously affected by the earthquake. Of the 878 people killed, 865 were from the Province of Bingol and 13 from the Province of Elazig.

Sixty to seventy percent of the buildings and homes in Bingol were destroyed and almost all structures suffered some damage. All major government offices were severely damaged, including the governor's office, the municipality building and



several hospitals. The Turkish Post, Telephone and Telegraph Office (PTT) was destroyed which delayed news of the disaster from reaching Ankara for several hours. In several areas of the town, entire city blocks collapsed into rubble heaps five to six *Earthquake levels homes to mere heaps of rubble in Bingol.*



feet high. These were areas where mud brick construction and mud ceilings predominated. Even steel reinforced concrete and stone buildings did not escape damage. The Military Base in Bingol did not appear to be affected, probably due to superior construction. Since the quake occurred shortly before sunset many people were trapped inside their homes till the following day. The number of seriously injured increased due to lack of immediate medical attention.

In smaller villages closer to the epicenter, damage was even more extensive, although affecting fewer people. Most village houses are 1-½ or 2 story mud, stone and wood frame units, animals occupying the lower level and families the upper. Be-

cause of the hour many animals were inside for the night which resulted in a large loss of animals as well as human life. The extended family pattern predominates in this area, and the loss of each house affected a large number of people. There were some villages in which 100 percent of the homes were destroyed. For example, in Medze, about four miles east of Bingol, all 21 homes were destroyed, 21 people were killed, 150 animals lost, and approximately 160 people were left homeless. A total of 164 villages suffered major damage.

ACTION TAKEN BY THE GOVERNMENT OF TURKEY AND LOCAL ORGANIZATIONS:

Immediate search, rescue and recovery operations were undertaken by the people themselves with some assistance from the Military and the police. Soon after the earthquake, however, the Governor of Bingol took charge of all relief and reconstruction activities. He worked closely with the Director of Immediate Relief of the Turkey Red Crescent Society (Kizilay), and with representatives of the Turkey Military Unit in Bingol. Surrounding provinces were instructed to make disaster supplies available, and the Elazig Governor also sent a large number of trucks and jeeps to transport and distribute supplies.

The most immediate relief needs consisted of bandages, antibiotics, wound dressings, related medical supplies, tents, blankets, ambulances, food and water. Supplies from the damaged Bingol hospital and from Kizilay met some of the medical needs but were insufficient. The damaged hospital facilities in the region were temporarily replaced by setting up a military field hospital. There was also a general shortage of tents and blankets since Kizilay reserve stocks had been almost depleted by the Burdur quake several weeks earlier. Requests for outside assistance from other governments and Red Cross societies met with a generous response. Kizilay, however, did provide from its own resources 8,035 tents and 4,300 blankets.

Due to the isolation of many of the towns in the area, it was very difficult to assess the extent of damage. As reports from these areas began to come in, estimates were constantly re-

vised upward and need for additional and more diverse relief supplies increased accordingly. The Bingol Governor's office gathered information and was able to report effectively on the area. This action prevented rumors and exaggerated reports on the damage.

To ensure that relief supplies were distributed only to the needy, the Governor required each village muhtar (headman) to provide him a list of the houses in his village, the number destroyed, the number of people affected and the amount of relief supplies required. He then personally discussed the list with the muhtar (who was an elected civil official) and revised or approved it. The muhtar took the approved list to the Supply Depot in Bingol where he could withdrawn relief commodities. In many of the isolated towns people were not aware that they could obtain assistance from the government or Kizilay teams making damage assessments. In the town of Bingol each city block organized itself and appointed one man to represent it before the Governor to obtain relief supplies. The Turkish Military provided potable water to Bingol, donated bread from their own kitchens and helped with food distribution.

Kizilay coordinated all international assistance and also the collection and distribution of relief supplies gathered from other areas throughout Turkey. It set up portable field kitchens in Bingol and fed several thousand people daily. Red Crescent officials in Ankara monitored the first relief supplies sent in. They then arranged for transportation aboard Turkish Military transport planes to a supply depot which Kizilay set up at the airport at Elazig, the closest to Bingol. Kizilay kept its officials in Elazig and Bingol apprised of commodity movements by telephone and radio.

Various GOT vehicles were used to take the supplies from Elazig to Bingol (a three hour drive) where a large collection depot had been set up. A Military Officer was initially responsible for this depot, but later Kizilay officials took the responsibility for movement of all commodities in and out.

The Government of Turkey supplied 600,000 Turkish lira (about \$40,000) and 67 tons of food for emergency relief. Cash

donations by Turkish citizens in Burdur and Bingol amounted to 7,115,826 Turkish lira (about \$479,000).

The Government of Turkey through the Ministry of Reconstruction and Resettlement took the major initiative for financing and implementing reconstruction work. These efforts began less than a week after the earthquake. Heavy equipment was moved into the area to remove rubble and clear sites for construction of prefabricated housing. On July 15 the Prime Minister announced that the Government of Turkey would invest 480 million Turkish lira (\$32,534,000) for Burdur and Bingol earthquake related rehabilitation projects. This financing was obtained partly from additional taxes placed on certain consumer goods.

ASSISTANCE PROVIDED BY THE U.S. GOVERNMENT:

The Government of Turkey and Kizilay asked for outside assistance identifying such priority requirements as tents, blankets, medicines and 4-wheel drive vehicles. Taking into consideration other contributions, the U.S. Ambassador determined that the USC should contribute tents, blankets and medicines. Accordingly, he authorized the U.S. Military to deliver a plane-load of antibiotics, syringes, needles, dressings, other medical items, and twelve 20-man tents from the USAF base at Incirlik, Turkey, to Ankara. He also requested AID/W to increase the funding level from the Ambassador's \$25,000 authority to \$225,000 to cover estimated cost of purchasing and airlifting 1,000 family-size tents and 10,000 blankets from the United States.

AID/DRC set up obligations for these funds, initiated procurement of the tents and blankets and authorized the Resources Transportation Division to arrange for charter airlift of the supplies to Turkey.

Supplies provided by the U.S. Military in Turkey were turned over to Kizilay at 10:00 a.m. local time on May 25 at Ankara's Esenboga airport, for immediate air movement by Turkish Military planes to the disaster area. The twelve 20-man tents were

used in the Bingol Supply Depot to shelter relief commodities from the rains that followed the earthquake.

Tents and blankets from the United States arrived at the Ankara airport on May 27 and 28 and were turned over to Kizilay. All of the tents and blankets were transported to the earthquake area and distributed by Kizilay within a week after the disaster occurred.

Of the total of \$225,000 obligated from the contingency fund, total expenditures amounted to \$177,084. Breakdown of these expenditures follows:

Reimbursement to U.S. Military for supplies and airlift costs	\$ 12,000	
AID/DRC purchase of 1,000 tents	\$ 87,400	
AID/DRC purchase of 10,000 blankets	31,900	
Cost of U.S. inland transportation and charter airlifts to Turkey	45,784	
	<u>\$165,084</u>	165,084
Total Cost to A.I.D. Contingency Fund		\$177,084

USAID also authorized CARE to release 13,120 pounds of USG P.L. 480 Food for Peace vegetable oil; 44,000 pounds of flour, 9,300 pounds of non-fat dry milk from its stocks located in Malataya, Elazig and Bingol. Estimated market value

	\$ 7,803
Value total USG Contribution	\$184,887

U.S. Embassy and A.I.D. officials worked closely with Kizilay representatives in Ankara, Elazig and Bingol as well as the Bingol Governor and his staff in assessing relief needs and developing an appropriate U.S. response.

USAID made the following comments in its summary report on this disaster:

"In future disasters of this nature, USAID should send an observer to the scene immediately. Because of the relationships with the Turkish Red Crescent which were cemented

by US cooperation after the Bingol earthquake, a USAID official should travel with their officials to the site of any major disaster. This would help provide both USAID and Kizilay officials with realistic facts on the extent of damages and relief needs and help in developing U.S. response to GOT requests for assistance.

"AID/W should be guided almost entirely by USAID communications in terms of assessing relief needs. It appears that the Turkish embassies or the International League of Red Cross and Red Crescent Societies often are asked to make requests for certain commodities or assistance after a disaster strikes. However, by the time the requests are actually made they may be outdated and bear little relevance to the actual current needs."

ASSISTANCE PROVIDED BY U.S. VOLUNTARY AGENCIES:

CARE

CARE obtained approval from USAID to release above P.L. 480 food and hired trucks to carry these supplies to Bingol where Kizilay used them in their portable field kitchens. CARE also provided from its own resources the following:

Olives, helva, cabbage, beans, squash and other vegetables and arranged for their transportation to small villages where they were distributed to affected families by CARE representatives. Total cost	\$ 2,000
600 car coats and 300 cartons of CARE packages from in-country stocks	12,600
Tool kits to help individuals rebuild their homes .	<u>873</u>
	\$ 15,473

Church World Service

CWS made a cash donation to the World Council of Churches for the earthquake victims of

	\$ 1,000
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American National Red Cross

ANRC airlifted 10,000 22-cc vials of gamma globulin and 3,000 blankets which arrived in Ankara via PanAm on or about June 2. Estimated value including airlift \$ 24,000
\$40,473

Value of total reported contributions by Other Nations and International Organizations \$688,850

Worldwide relief was spontaneous and, for the most part, supplies were airlifted to Ankara and distributed within days after their arrival by the Government of Turkey, Kizilay, the Governor of Bingol, and Turkish Military.

ASSISTANCE PROVIDED BY OTHER NATIONS AND INTERNATIONAL ORGANIZATIONS:

World Council of Churches

WCC made a cash grant of \$5,000 for emergency relief, of which \$1,000 came from CWS in the U.S. and is credited to CWS above \$ 4,000

OXFAM, War on Want and British Red Cross provided 400 bell tents at a cost of \$33,600 plus air charter of \$9,600, total \$ 43,200

The U.S. Mission reported cash donations by foreign countries, without individual identification, of 3,588,511 Turkish lira with an equivalent value of about \$241,650

The League of Red Cross Societies launched an urgent appeal to all National Societies who donated, during the first week, cash and supplies including 3,000 tents and 32,000 blankets valued at \$400,000

There was no breakdown giving dollar value by country. The U.S. Mission reported, however, that the following Red Cross Societies provided tents, blankets, medicines and other supplies:

- | | | |
|----------|-------------|----------------|
| Austria | Iran | Sweden |
| Belgium | Israel | Switzerland |
| Bulgaria | Italy | Tunisia |
| Ceylon | Japan | United Kingdom |
| Finland | Kuwait | USSR |
| France | Netherlands | West Germany |
| Greece | Norway | Yugoslavia |
| Hungary | Spain | |

YEMEN ARAB REPUBLIC

Drought

... over a period of 3-7 years in parts of the Yemen Arab Republic causes 2,000,000 people to verge on starvation—20,000 villagers abandon their homes.

Value of U.S. Assistance	\$3,341,029
Value of Assistance Other Nations and International Organizations	4,192,260
	<u>\$7,533,289</u>

DETAILS:

The Yemen Arab Republic situated in the southern part of the Arabian Peninsula has a population of 5 to 6 million who live primarily in small villages. It is largely dependent on its agricultural resources, and once was considered the bread-basket of the Arab peninsula.

For three successive years rainfall has been far below average, and in some areas there has been no rain at all. It was reported that in one district there had been no rain for seven years. Part of the country north of Sanaa had only 2 to 15 percent of the normal average.

Although certain parts of the country were affected by drought for seven years, conditions worsened throughout the country from 1967 onwards. Crop failures occurred in late 1969 and early 1970, but widespread famine was not immediately evident because Yemini farmers had some reserve stocks from previous years. They were able also to sell their animals or obtain loans and from the proceeds could purchase food. By early summer 1970, the people were desperate; hundreds of thousands became entirely dependent upon the free distribution of food by the government and voluntary agencies.

Areas seriously affected included the hills in the southern part of the country, around Taiz-Turba, the central northern high plains and most of the coastal plain. Hardest hit was the Ti-hama, normally a good agricultural zone of about one million inhabitants paralleling the Red Sea Coast. Here the situation was so severe that some thousands of people abandoned their villages and moved to urban areas such as Sanaa. Sanaa is the capital of the YAR and has a normal population of about 150,000.

By early winter 1970, unseasonably late rains had arrived and began to revive local agricultural production.

ACTION TAKEN BY THE YEMEN ARAB REPUBLIC AND LOCAL ORGANIZATIONS:

The Yemen Government was unable to pay for food imports in the quantities needed. The Prime Minister appealed to the U.S. Government Interests Section in Yemen for relief food support. It was determined that the only feasible program would be free distribution of USG-donated P. L. 480 Title II food commodities directly to the needy through a cooperating sponsor. Catholic Relief Services (CRS) volunteered to serve in

Mountain people prepare to return home with grain distributed by CRS.



that capacity and promptly reached a three-way operational agreement with the YAR and U.S. Governments. An estimated 700,000 people received food under this program. The YARG paid for living and operational expenses of three American CRS staff members, project supervisors, at a cost of 240,000 Yemeni Riyals (\$40,000). Salary of end-use checkers hired by CRS and expenses incurred in unloading food and local transport were also paid by the YARG.

Due to the limited country communications and transport problems, it was decided that USG foodstuffs would be distributed solely within the Tihama disaster area rather than throughout the whole of Yemen. Accordingly, the Governor of Hodeida Province was delegated by the YARG to provide all possible support for the distribution program. A Hodeida committee was quickly established to estimate sub-areas of greatest need and oversee distribution operations. The Governor organized port unloading procedures and commandeered a number of privately owned trucks for inland transport. A brigadier general from the Yemen Arab Republic Army assigned to the operation proved invaluable as an overseer and coordinator. Recipient committees were formed in some of the larger villages and towns. A number of these (although with reduced membership) continued in existence to coordinate distribution of CRS "rehabilitation" donations procured from European sources. Senior officials of the Yemen Arab Republic were available at all times to implement, coordinate and provide *ad hoc* solutions to incidental problems. The U.S. Interest Section stated: "In the event of a future famine emergency, CRS or another cooperating sponsor would be fortunate to have the support and cooperation rendered by the Yemenis during the 1970 disaster."

Most of the major cereal-grain relief shipments from other donor governments were turned over to the Yemen Arab Republic Government for disposition. Unlike the USG food donations which arrived in a matter of weeks after the Yemeni appeal, these food shipments arrived after the peak hunger period was past. Sanaa officials were inclined to release commodities in the market in order to generate development project funds.

The newly created Yemen Red Crescent set up a medico-social-relief action for the drought victims in cooperation with Yemen authorities.

ASSISTANCE PROVIDED BY THE U.S. GOVERNMENT:

By good fortune, the U.S. Government was able to divert a Title II grain shipment bound for Tanzania to Hodeida, Yemen Arab Republic. It arrived in a matter of weeks after the initial Yemeni appeal and subsequent signing of the USAID/CRS/YARG agreement. This was the first large scale shipment to reach the country.

The Principal Officer of the U.S. Interests Section exercised his disaster relief authority to commit AID contingency funds for the purpose of paying costs of bagging 8,036 tons of bulk sorghum and wheat offloaded from the "S.S. Mahout." These costs amounted to\$19,286

Other than this use of contingency funds, USG assistance consisted of FFP commodities contributed through Catholic Relief Services and the World Food Program for direct, free distribution to the needy. These food donations consisted of the following:

**For Distribution by CRS under agreement w/USAID/YARG:
Metric Tons**

702.4	bulgur wheat	\$ 47,159
1,402.1	non-fat dry milk	787,997
6,000	sorghum	310,800
3,000	wheat	173,000
1,497.4	wheat soy blend	262,648
12,601.9		<u>\$1,581,604</u>
	Plus ocean freight costs, about	600,000
		<u>\$2,181,604</u>

World Food Program (Also see other nations section)

7,500	wheat	\$ 608,000
	Plus ocean freight	450,000
		<u>\$1,058,000</u>

Total value USG contribution \$3,258,890

ASSISTANCE PROVIDED BY U.S. VOLUNTARY AGENCIES:

Catholic Relief Services

CRS provided three staff members who coordinated distribution of all USG FFP commodities. The CRS operation was particularly effective because the food was distributed directly to the needy. CRS also obtained food and medicines from European sources, which is included under "Other Nations Contributions," and donated from its own resources in the U.S. medicines valued at \$67,139

American National Red Cross—cash	5,000
Church World Service—cash through WCC	10,000
Total Assistance—U.S. Voluntary Agencies	<u>\$82,139</u>

ASSISTANCE PROVIDED BY OTHER NATIONS AND INTERNATIONAL ORGANIZATIONS:

World Council of Churches (WCC) and Caritas

WCC issued an appeal to member churches for contributions for Yemen famine relief. In its report, it indicated donations had been made in response to LICROSS, WCC and CWS appeals, but donors and their contributions were not always clearly identified. CRS reported obtaining from European sources (including Protestant churches and Caritas) high value packaged foods and medicines worth more than \$400,000

Countries contributing to this were United Kingdom, West Germany, Holland, Denmark and Austria. Additionally, WCC indicated that Norway had donated medicines valued at \$29,300 and food valued at \$21,400 for a total of \$50,700

League of Red Cross Societies (LICROSS)

Mr. P. C. Stanisis of the League travelled through the country and brought back an alarming report about the distressing situation and the need for food, medicines and personnel. LICROSS provided two delegates to advise the newly formed Yemen Red Crescent on setting up its medico-social-relief pro-

gram. Also, the League requested a number of member societies to provide support for the program with the following response:

Algeria—supplies	\$ 5,000
Belgium—cash	700
Canada—cash and supplies	11,860
Denmark—cash	2,660
Finland—supplies	3,040
Germany (Dm. Rep.)—supplies	4,860
Netherlands—cash	5,810
Norway—cash	4,650
Sweden—cash	9,640
Switzerland—cash	4,650
United Kingdom—cash	4,070
USSR—supplies	22,360
Yugoslavia—supplies	4,070

International Union for Child Welfare—cash 1,190

World Food Program—In addition to the 7,500 metric tons of wheat provided by the USG for the WFP feeding program, other donor countries contributed 4,500 metric tons of wheat and 1,320 metric tons of high protein foods and oil, valued at about \$ 660,000

European Common Market
14,000 metric tons of cereals, valued at about ... \$1,134,000

Governments:
West Germany—16,000 tons cereal grains, flour, plus airlift of approximately 30 tons of biscuits and other processed foods. Value of the 16,000 tons cereals/flour about \$1,296,000

USSR—2,000 metric tons cereals, valued at about \$ 162,000

People's Republic of China—5,000 metric tons of cereals, valued at about 405,000

Total Assistance Other Nations and International Organizations

	<u>\$4,192,260</u>
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MALAYSIA

Floods

December 26, 1970
to January 5, 1971

...from 10 days of torrential monsoon rains—81 inches measured—creates havoc in Western Malaysia where 61 people were killed. 243,000 were evacuated, thousands of whom were left homeless. Estimated dollar damage \$37 million

Value of U.S. Assistance	\$265,749
Value of Assistance by Other Nations	604,950
	<hr/>
	\$870,699

DETAILS:

Although it was the monsoon season, such a deluge was most uncommon and unexpected. Rivers and streams poured over their banks, spreading death, destruction and misery throughout Western Malaysia. It was considered the worst flood disaster since 1926.

Rural areas of the States of Pahang, Trengganu, Kelantan, Selangor, Negri, Sembilan, Malacca, and Johore were hardest hit where many villages were completely swept away. It also struck the capitol, Kuala Lumpur, and the major West Coast town of Malacca.

Flooding peaked in many areas on January 5, at which time large numbers of people were stranded on roof tops or high points of ground, and calls for evacuation were widespread. Local police lacked adequate water transport to meet the mushrooming needs. Selangor police headquarters was under



water and the National Police Headquarters was without telephone or power except for radio communications. Dozens of East Coast rural communities were isolated with no means of communicating with State Relief Centers.

The rains slackened by January 5, by which time six feet of water covered downtown Kuala Lumpur. Squatter settlements adjacent to the rivers were washed out. A number of American residences in the city were flooded, but no American lives were lost. The Bentong road was blocked by 50 landslides, and in one section 100 feet of the road disappeared. Police ordered access routes to Kuala Lumpur blocked, because massive traffic jams had occurred. Besides road damage, landslides in Kuala Lumpur also caused extensive building damage.

By January 8 the flood had eased and was continuing to improve as fair weather held in many parts of the country. Although much of Western Malaysia, including Kuala Lumpur, was fast returning to normal, parts of the States of Pahang, Malacca and Johore remained under water, and a fresh flood was reported in the coastal areas of Selangor. By January 12 essential services in Kuala Lumpur had been largely restored. A clean-up effort in one area of the city was enlivened by the escape of 65 crocodiles from a Croc Farm.

Besides Malaysian self-help, rescue and relief missions were carried out with helicopters, ships and boats provided by other countries. Some 234,000 people were officially listed as evacuated, though thousands of others had evacuated themselves. Tens of thousands of others lost property and suffered crop loss.

It was estimated close to 100 bridges of substantial construction were destroyed as were innumerable small rural bridges. Communications and transportation lines throughout the stricken part of Malaysia were interdicted, and road and rail transport were impossible in most areas for at least a week. No estimate of crop damage was made, but small landholders were most affected. The major rice producing areas were largely unaffected. Loss of earnings was extensive, largely attributable to the inability of workers to gather latex or mine

tin ore. Damage to commercial firms in Kuala Lumpur was also heavy since many were located close to rivers. Business was halted in the city for several days.

By January 13, 151,000 people who had been evacuated from their homes had returned.

Several days after the peak floods in West Malaysia, the East Malaysian State of Sarawak experienced moderate flooding with one death.

ACTION TAKEN BY THE GOVERNMENT OF MALAYSIA AND LOCAL ORGANIZATIONS:

Although the Government of Malaysia was without a disaster preparedness program in anticipation of such a flood disaster, it geared itself within 24 hours to deal with the emergency.

A coordinating organization, headed by the Chief of the Armed Forces Staff and a Cabinet Minister, was created. It included representatives from all elements of government with a capacity to render assistance, i.e., the Military Services, the Ministry of Health, the Ministry of Social Welfare, etc. In the affected states, similar state coordinating mechanisms, under the direction of the Chief Minister, were established. Cabinet sessions were held regularly throughout the emergency period to coordinate and develop rescue and relief operations. Prime Minister Razak was kept informed of developments and provided ultimate direction for the relief program. He visited several flood-stricken areas at the height of the emergency as did several of his Ministers.

The American Embassy reported that the Government of Malaysia marshalled an impressive rescue operation throughout the period of the floods, fully utilizing its Armed Forces' capabilities, to provide helicopters, trucks and boats.

The Ministry of Health initiated a wide-scale typhoid and cholera inoculation program. A number of schools and other organizations gave on-the-spot assistance, and the Malaysian Red Cross conducted a broad program to meet housing, clothing,

food and medical needs of the victims.

Some \$3 million had been expended by the Government of Malaysia by March 15, 1971, for short-term assistance to those whose livelihoods had been affected. The GOM stated at that time that this amount would be increased. Estimates for medium-term and long-term assistance were not available but were expected to include the resettlement of people to higher ground.

A National Disaster Relief Fund was established. Indicative of the universal civic sense of Malaysian society was the immediate and continuing flow of donations to the Fund by firms, organizations and individuals totaling 13.5 million Malaysian dollars having a US dollar equivalent of \$4.5 million. Unfortunately, at the end of the emergency the special governmental coordinating mechanisms which had been created to deal with the disaster were dissolved, leaving Malaysia without a permanent disaster organization.

The American Embassy reported that many of the lessons learned from the May 1970 civil strife disaster—and the programs adopted to deal with that situation—were applied to the floods. Foreign observers, including American Embassy personnel close to the flood relief assistance scene, were impressed with the ability of the GOM to develop realistic requirements and to take appropriate action.

ASSISTANCE PROVIDED BY THE U.S. GOVERNMENT:

President Nixon sent the following message to His Majesty Abdul Halim Mu'azzam Sha: "Your Majesty: I have been saddened to hear of the death and destruction being caused by the floods in Malaysia. I have instructed Ambassador Lydman to confer with your Prime Minister and other appropriate officials of your government with a view to recommending how we can most effectively assist and cooperate in Malaysia's own relief efforts. On behalf of all Americans, I extend my heartfelt sympathy to you and to the people of Malaysia."

The American Embassy received the first formal request for

airlift and other assistance from the Government of Malaysia the afternoon of January 5. The Embassy Deputy Chief of Mission visited the National Coordination Center on January 5 to obtain details of the flood situation and to estimate help needed. As a result of rapid Washington reaction, the Ambassador was in a position on the morning of January 6 to inform the GOM that the U.S. would assist in every way possible.

The first USAF C-124 with two UH-1 helicopters, 13 U.S. Army personnel with essential tools on board, arrived at Kuantan early on the morning of January 7. It was followed by an airlift of four additional helicopters, boats, vaccines and other supplies. USG helicopter operations were completed on January 18 and departed Kuantan January 21, 1971.

Ambassador Lydman was personally active in emergency relief operations. Key Mission personnel worked around the clock, maintaining liaison with the GOM in connection with U.S. relief assistance. Defense Attaché personnel remained on duty throughout the period in liaison with the GOM Ministry of Defense and Royal Malaysian Air Force.

Private American citizen residents contributed volunteer assistance to the Malaysian Red Cross as did the wives of U.S. Embassy employees.

State/AID Washington responded immediately to the requests of the Ambassador. AID/DRC obtained a funding level of \$260,000 to cover USG assistance, arranged with the Department of Defense for helicopters, personnel, medical and other supplies and bought and arranged air delivery of boats from the U.S.

The following is quoted from a letter from the GOM to Ambassador Lydman, dated February 22, 1971: "The Malaysian Government deeply appreciates the generous US donation of aluminum boats with related gear, relief and medical supplies, as well as the services of helicopters. I am pleased to say that the speed with which your Government delivered the boats and other material supplies in response to our request had contributed in great measure to the success of our flood relief



Two giant USAF C-124 transport planes delivered 50 of these boats to Kuala Lumpur arriving January 10 and 11, 1971."

operations. I would also like to take this opportunity of thanking you and your staff, especially Mr. John Helble, for the personal interest shown in making possible the valuable assistance rendered by your Government."

Ambassador Lydman cabled the following in a message to Washington and U.S. Military Commands involved in the total relief effort: "I would like to take opportunity at this juncture to express my deepest personal appreciation to all those among respective addressees who, in response to GOM appeals to this mission, played a role in developing and implementing USG assistance to Malaysia during recent flood crisis. In every case, requests submitted from here were handled with amazing speed and efficiency. Requests were approved in record time, manpower and material were assembled with outstanding degree of speed and efficiency and necessary equipment and men were delivered and operational in country with truly

remarkable timeliness. Result contributed substantially to Malaysian Government's efforts to save lives and relieve suffering of tens of thousands of Malaysians . . . There is no doubt this has been recognized in Malaysia as demonstration of warm friendship and goodwill which US holds for Malaysia." Ambassador Lydman singled out Lt. Col. Arthur A. Dalone, who commanded USG aircraft, and Major Timothy Merrill, who commanded U.S. Military personnel working with the GOM inoculation campaign, for special praise.

Following is a breakdown of USG assistance and costs:

Purchase 50 boats at \$298 each	\$ 14,900
Plus inland freight	335
Purchase 50 outboard motors at \$463 each, together with gas tanks, propellers, other accessories	25,525
Plus inland freight	447
Reimbursement to U.S. Military for:	
C-141 airlift cost for above boats, motors, other supplies	78,828
UH-1 helicopter operations (6) in Malaysia, 211 hours at \$124 per hour	26,164
C-124 airlift operations at \$205 per hour, for 71.7 hours	14,698
C-130 airlift operations at \$528 per hour, for 30.5 hours	16,104
Medical supplies, including antibiotics, vaccines, disposable needles/syringes, 20 jet inoculation guns, etc.	14,942
50 life preservers	1,575
General disaster supplies and support equipment for U.S. Military relief operations	8,527
7,000 blankets at \$7.42 each	51,940
Per diem, other costs, approximately	6,015
	<u>\$260,000</u>

Note: All bills were not received when this report was prepared. Some of above costs are estimates. Actual expenditures could be from \$3,000 to \$5,000 higher.

USG P.L. 480 Food for Peace commodities consisting

of 12,140 pounds of non-fat dry milk, 12,500 pounds bulgur wheat, 2,500 pounds flour and 350 pounds CSM were provided through Catholic Relief Services. Market value was \$ 4,082
 Total USG assistance \$264,082

ASSISTANCE PROVIDED BY U.S. VOLUNTARY AGENCIES:

Catholic Relief Services made above P.L. 480 food available.
 Church World Service made a cash donation for flood victims in the Kapit District, Sarawak, through the United Methodist Committee for Overseas Relief of \$ 1,667

ASSISTANCE PROVIDED BY OTHER NATIONS AND INTERNATIONAL ORGANIZATIONS:

Governments:

Australia—three DC-3s and two Iroquois helicopters, Bailey bridging and other material. Aircraft deployed at outset of floods. Value \$100,000
 plus
Canada—cash 12,820
Federal Republic of Germany—cash donation to National Disaster Relief Fund 8,300
India—supplies 13,500
Indonesia—cash 5,300
Japan—cash to Relief Fund 10,000
New Zealand—textbooks and other education relief 12,000
Singapore—four Alouette helicopters, one Army medical team, 300 tons of foodstuffs. All arrived within three days of beginning of floods. No value was reported to AID/DRC. Estimated this to be about 50,000
Thailand—300 tons rice; no value given. Estimated by AID/DRC 39,000

United Kingdom—provided British transport ship which moved large quantities of food and supplies from Singapore to Kuantan; three British Wessex helicopters for offloading operations from ship and other missions; C-130 shuttle missions from Singapore to Kuantan; inflatable rubber life rafts; lifejackets; blankets. All items provided from outset of flood. No value given, but roughly estimated by AID/DRC \$100,000

Red Cross Societies:

Australia —supplies	\$ 870
Burma —supplies	840
Cambodia —cash	180
Canada —cash	7,500
clothing	*
Ceylon —unspecified	*
People's Republic of China —blankets and other supplies. Offer was announced in early February and supplies delivered early March. Value was reported at	208,000
Great Britain —cash	2,400
Japan —supplies, including 11 tons of cheese	15,000
Korea (Republic) —cash	150
Monaco —cash	360
Netherlands —1,500 blankets and 4,560 bottles of milk	2,880
New Zealand —cash	1,200
Norway —cash	3,500
Philippines —cash	250
Singapore —cash and supplies	1,020
South Africa —cash	280
Sweden —3,000 blankets	2,320
Switzerland Red Cross and Government —supplies ..	6,800
Thailand —cash	480
	<hr/>
	\$604,950

* Value not reported



PHILIPPINES

Five Typhoons

August 31 to November 19, 1970

... leave 2,474 people dead or missing—over 1,000 injured—almost 2 million homeless—over 273,000 homes and 31,000 classrooms destroyed—thousands of acres of crops, bananas, rice, coconuts, destroyed or damaged—total estimated dollar damage \$186 million.

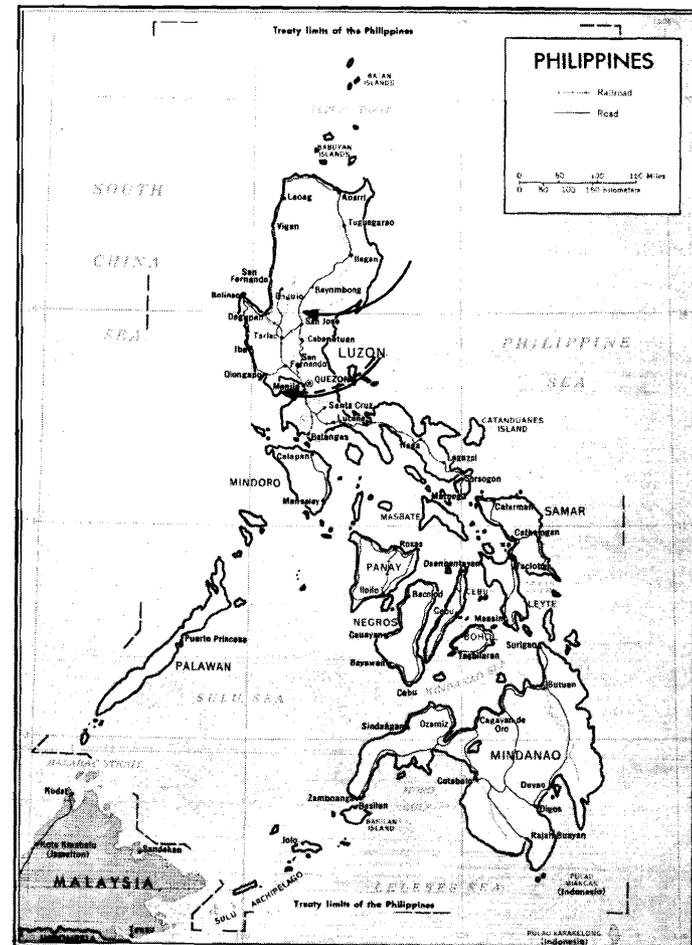
This was the devastating effect of five major typhoons which lashed the Philippines from August 31 to November 19, 1970, with winds ranging from 90 to 150 miles per hour, accompanied by torrential rains and floods.

Values of U.S. Assistance	\$4,991,423
Value of Assistance by Other Nations	323,310
	<u>\$5,314,733</u>

DETAILS

Typhoon Fran (Meding)—42 dead
 12,000 homeless
 2,000 homes destroyed
 \$989,867 estimated dollar damage

This storm combined with local weather fronts to bring record rains and flooding to the Manila area. Beginning with a thunderstorm in the early morning hours of Monday, August 31, continuous torrential rains fell on Manila for six days. Heavy



flooding was observed in many parts of the city as early as Monday evening. Tuesday morning, September 1, several major rivers began overflowing. On this day the heaviest rainfall of any 24-hour period in 103 years occurred—an estimated 15 inches. The Presidential museum and office building were flooded, and schools became emergency shelters for many evacuees. Other hard hit areas besides Manila were Bulacan and Pampanga.

Typhoon Georgia (Pitang)—95 dead
66,000 homeless
11,400 homes destroyed
\$1,362,730 estimated dollar damage

Hardly had disaster relief centers established for Typhoon Fran's victims been closed when, on September 12 Typhoon Georgia struck, bringing further death and destruction, especially to Aurora sub-province of Quezon province on the east coast of Central Luzon. Wind and rain damage extended across Northern Luzon from Aurora through Nueva Ecija, Nueva Vircaya, Isabela, Tarlac, Pangasinan and Zimbales. There was, however, little flooding in Manila as a result of this typhoon. Casiguran in Eastern Luzon and two nearby towns were virtually flattened by the more than 90 miles per hour winds. All public buildings in Casiguran were reportedly destroyed; bridges washed out; up to 95 percent of the houses were destroyed or damaged and livestock losses were heavy. It was said that inadequate typhoon warning resulted in hundreds of the townspeople being caught on their fishing vessels causing almost 100 to drown. Loss of life ashore, despite very heavy property damage, was limited to two persons. News of the disaster was slow to reach Manila because of downed telephone lines. There was a more than 48-hour delay in reporting the devastation caused by Georgia.

Typhoon Joan (Sening)—723 dead and missing
910 injured
978,000 homeless
150,800 homes destroyed
\$73 million estimated dollar damage

On Tuesday, October 13, Typhoon Joan battered the Bicol area with winds up to 150 miles per hour—the strongest for that region in 30 years. Substantial villages on the unprotected east coasts of Catanduanes, Albay and Camarines Sur were totally levelled by wind action, while floods from the accompanying rains made giant lakes many kilometers in length in part of western Camarines Sur, from which the water did not recede for several days. Crop losses to flooded rice and to coconuts were great, the Camarines Sur "rice bowl" being one of the areas seriously affected.

This is what happened in one town in the Bicol region—Baa. At 10:00 a.m. the children were all sent home from school. Early in the afternoon lashing winds collapsed the central school building leaving only a foot of the concrete walls standing. Soon thereafter the entire galvanized iron roof of the public market flew across the street. In the evening the Baret dam of the National Power Corporation at the Buhi-Baao boundary broke. Rushing water wiped out five houses and a health center at the foot of a hill.

Almost all communications facilities in Bicol were destroyed by the winds. The first direct information from the area to reach Manila the afternoon after the storm was a telegram to Church World Service through the radio services of the Volcanology Watch Service, which maintains an observation station at the foot of Mt. Mayon at Tiwi, Albay. This pitiful message appealed for aid stating that Tiwi had been almost totally destroyed with many killed and injured. It was forwarded to President Marcos who read it on an emergency TV broadcast. Radio communications were soon reestablished with the Albay Provincial capitol, Legaspi, which was on the southern fringe of the destructive winds. Philippine and U.S. aerial reconnaissance followed. By October 15, this aerial observation showed that hundreds of barrios in Catanduanes, Camarines Sur and Albay had been flattened and were totally isolated. The people had little food except for damaged bananas and downed coconuts. Local grain supplies had been mostly destroyed and were almost unobtainable in the region.

After passing through Bicol, Joan roared with somewhat diminished but still damaging fury through parts of Quezon, Laguna,

Batangas, Rizal, Bulacan, Pampanga, Bataan and Zambales before moving west into the China Sea. The Manila area also received heavy winds and rain but relatively light damage.

Although hundreds of lives were lost, the death toll was considered small in light of the almost incredible destruction of homes and public buildings. This was attributed to good advance warning on the typhoon's arrival.

On October 26, it was reported that epidemics of dysentery, diarrhea and typhoid had broken out in two of the typhoon-ravaged provinces.

Typhoon Kate (Titang)—828 dead and missing
75 injured
236,000 homeless
40,000 homes destroyed
\$12.5 million estimated dollar damage

Almost before Typhoon Joan had stopped blowing in the north, the next typhoon of the season, Kate, struck the east coast of Southern Mindanao on October 18. Though its winds lacked the fury of Joan, it brought high tides and waves to a part of the Philippines unaccustomed to and unprepared for typhoons. Kate swept through Palawan, buffeting the Western Visayas as it moved on.

Since this part of the Philippines is considered almost typhoon-free, most houses are of very light construction. Many of the people living along the coastlines of the region are fishermen. Farmers and fishermen also live in the wide flatlands along the rivers of Mindanao, especially North Cotabato. Most of these rivers overflowed their banks, flooding large areas of farmland and damaging crops. Mindanao is a major coconut area, especially in its eastern provinces. Kate's winds were great enough to damage part of the trees. Kate did more damage and caused much more loss of life than would normally be expected of a typhoon of similar intensity in the usual typhoon belt, i.e., the Eastern Visayas and Bicol.

Typhoon Patsy (Yoling)—786 killed and missing
2,074 injured
68,900 homes destroyed
430,000 homeless
\$97,656,250 estimated dollar damage

November 19, 1970, dawned in Manila with gray skies and brisk winds. Early morning newscasts advised that the city was already in the radius of Typhoon Patsy, whose moderate winds were expected to past somewhat to the south during mid-afternoon. No real alarms were given so most Manilans proceeded to work as usual.

Driving rains commenced about eight in the morning with increasingly heavy gusts of wind. By ten, sheets of rain had reduced visibility to a few blocks. Winds rapidly increased. About 10:45 power failed. Screaming winds carried heavy objects such as sheet roofing and flying timbers through the air. As one eyewitness put it "*galvanized rooftops sailed away like flying carpets.*" Offices were ordered closed, but roads were already blocked by floods, downed trees, wires and stalled autos.

The U.S. AID Mission reported that its 18th floor Disaster Center in the Ramon Magsaysay Building swayed almost as heavily as in recent grade 6 earthquakes. Looking out the window from this vantage point, mission personnel could see whole roofs and trees blow by 200 feet in the air.

Windshields were blown out and hoods were torn from parked cars; some autos were bowled over like toys. Those familiar with killer typhoons in Okinawa and Taiwan realized that Manila was having a big one.

Suddenly—at about noon—the winds stopped, and a wan sun appeared through a veiled overcast. Despite warnings from the experienced that this was the typhoon eye, many seized what looked like an opportunity to get from their offices and schools to their homes. Some died, some were injured, others were forced to seek shelter as the typhoon winds abruptly returned in full force from the opposite direction following a

twenty-five minute lull. It buffeted Manila for four hours with peak winds ranging from 90 to 125 miles per hour. The Philippines Weather Bureau said Patsy's winds were the most powerful to hit Manila since 1882.

Patsy smashed into Manila eight days before the much-heralded arrival of Pope Paul VI, for which the city had been making elaborate preparations. Triumphant Papal welcoming arches were toppled on the broad four lane Roxas Boulevard, smashing cars. Huge trees, billboards, signs, walls, windows, cars and ships were knocked down, ripped apart, shattered, turned upside down and sunk.

The domestic and Manila International Airports were closed for three days. Three ocean-going vessels went aground along Manila Bay's wall. The bow of one, a training vessel of a maritime academy actually pressed against the wall while another, the President Roxas, a passenger liner of the Philippines President Lines, lay but 50 yards out. Harbor officials reported 21 vessels of all types had been sunk. One fishing boat went down with 27 persons aboard. Only 13 could be saved.

Thousands of downed light poles and telephone wires, including both reinforced concrete and steel poles, made it immediately evident that the central electricity supply would be unavailable for many days and that this would affect the water supply.

Patsy's fury was also felt in the rural areas. Pampanga province north of Manila reported 40 percent of the roofing on houses and public buildings had blown off and 70 percent of the sugar and rice crops had been damaged. By November 21 a radio report reached Manila telling of the tremendous damage that had occurred in Quezon Province where Patsy first struck before reaching Manila. It swept into the Philippines just below the 15th parallel striking a number of unprotected offshore islands in Quezon and Camarines Norte Provinces. Some of them were totally engulfed by high seas with almost total destruction and heavy loss of life. Patsy also brought heavy damage to areas slightly north and west of Manila before whirling into the China Sea.

ACTION TAKEN BY THE GOVERNMENT OF THE PHILIPPINES AND LOCAL ORGANIZATIONS

With **Fran's** floods, the Government of the Philippines (GOP) used police and armed forces to evacuate people from areas flooded by the overflowing rivers. The President declared a disaster and a GOP disaster coordinating center was organized. Most telephones were out, as was power in many parts of the city. Communication was by heavy, high clearance vehicles only.

New Philippine Disaster Coordination Center in Manila.



Initial coordination with the Department of Social Welfare and other responsible GOP offices was difficult because most building complexes were flooded and telephone lines were down. However, key government officials were contacted in their homes and disaster liaison with government agencies commenced.

The GOP coordinated its food distribution program closely with the U.S. AID Mission and voluntary agencies. It began

distributing rice to emergency evacuation centers set up in schools, churches and government buildings where cooking facilities were available. Nutribuns were distributed and became famous overnight. The President even appeared on television eating one. (Nutribuns were recently introduced in the Philippines through an AID/voluntary agency-assisted school nutrition program. The high protein, extra nutritious roll was created to tackle the problem of undernourished children in elementary schools of Tondo, one of Manila's most crowded slum areas. So successful was the test program of the new

Delivery of the famous nutribuns to one of the typhoon stricken regions.



supplemental food that plans were made for it to replace the regular school feeding program. Because of its ready-to-eat state and nutritional value, it was a product easily adapted into a disaster relief program.)

The Government, unable to use its newly-established Disaster Relief Center in the flooded Department of Social Welfare, established an emergency center in the Military Communications Operations Infrastructure Center at Camp Aguinaldo. This cen-

ter was better prepared for emergencies with its radio and military and police telephone nets. Nevertheless, the telephones were so overburdened that getting a call into the Center proved virtually impossible until several days after the worst flooding was past. President Marcos convened several disaster coordination meetings at Camp Aguinaldo. Mrs. Estela Sindico, Undersecretary for Social Welfare, was detailed to coordinate civilian relief and established her headquarters there.

Filipino and American response and organization for the typhoon disaster proved quite effective. A high spirit of service was noted in the Filipino community. Radio and TV stations gave excellent coverage and served as collection points for substantial public donations of food, clothing and money. Value of these contributions was not available.

The GOP had not yet closed its disaster coordination effort at Camp Aguinaldo for the Manila flood, when it swung into action on the Typhoon **Georgia** disaster in Quezon Province. It set up a regional task force there under the command of a senior constabulary general officer. He moved into Casiguran and through his leadership soon brought strong coordination to relief and rehabilitation efforts. He also developed a six-month assistance program, including rehabilitation phases for the region, which was carried out through him by troops assigned to civic action work.

Considering the remoteness of the area and communications difficulties, relief operations to Casiguran for Typhoon Georgia were considered most effective.

When Typhoon **Joan** hit Bicol, the National Disaster Control Center (NDCC) immediately set up a Regional Disaster Coordination Center in the provincial athletic stadium at Pili, Camarines Sur. This was headed by General Guadencio Tobias and followed NDCC's successful pattern for disaster relief operations at Casiguran for Typhoon Georgia.

Although some Department of Social Welfare personnel were detailed to assist in disaster relief, because of the elections principal civilian responsibility for relief distribution was en-

trusted to the supervision of the Philippine National Red Cross which performed commendably.

Pressures for help within the disaster area were tremendous with each barrio and town demanding priority. General Tobias insisted that first priority for supplies and helicopter lifts should go to areas which were inaccessible from the ground

USAF C-130 airdrops 35,000 nutribuns on the island of Polillo



or sea. Within 72 hours of these deliveries, food and other relief supplies were delivered to other areas accessible by road. No needy part of the country was overlooked.

Typhoon **Kate** followed on the heels of Joan but struck in an area not usually affected by typhoons. Its damages were more widespread and generally higher than those caused by Typhoon Joan and more susceptible to local solution. The Na-

tional Disaster Control Center nevertheless immediately diverted some of its attention to disaster relief for Kate's victims. Surveys of disaster needs were made with the help of U.S. aircraft, and relief supply lifts by sea and air were made to the region sufficient to tide the people over and encourage self-rehabilitation.

Again President Marcos declared a state of national calamity following Typhoon **Patsy**. The Government of the Philippines came into the emergency with the National Disaster Relief Center already in operation supported by the experience of the four previous typhoons and floods. The Philippine Under Secretary of Defense was in charge.

Emergency disaster relief first focused on rescue operations, medical assistance, development of emergency power, the provision of foodstuffs, and the clearing of roads. All available local stand-by generators were marshalled and reassigned to hospitals in Manila and vital water pumps on the city water system. Several bakeries with their own emergency power were organized for continuous nutribun production since there was not adequate water for the people to use even for cooking. In cooperation with the U.S. AID Mission, mobile transceivers were put into operation so that all key Filipino, USAID and voluntary agency personnel could be in constant radio contact.

The Government of the Philippines requested and received USG air support, and many airlifts and airdrops of medical supplies, nutribuns and clothing were made to the seriously affected islands. Longer range surface aid shipments were also scheduled.

President Marcos and cabinet officers made flying surveys of the countryside. Price controls were ordered for galvanized roof sheeting, rice, milk, medicines and cement. Schools in Manila remained closed through November 27 and most government offices were put on short hours. The Health Secretary reported no serious health problems or outbreaks of disease resulting from Typhoon Patsy.

The Philippines National Disaster Control Center includes in its membership responsible officials from all the technical departments of the Government. When major disasters strike, each of these officials undertakes disaster relief and rehabilitation efforts for his technical area. Thus, Public Works, Agriculture, Health, Education, Finance and others planned disaster assistance programs and made immediate and long term inputs to these five typhoon disasters as required.

Value of the GOP and local emergency relief operations was not available. Some other costs related to typhoon reconstruction and recovery were as follows:

President Marcos increased tariffs on oil, hops and malt imports to bring in 44 million pesos, equivalent about	\$ 7,000,000
GOP appropriated 15,287,000 pesos for school reconstruction	2,400,000
Other funding and commodity inputs for agricultural recovery were made by the Bureau of Plant Industry, Rice and Corn Administration, Bureau of Animal Industry, Philippine National Bank, the Greater Manila Terminal Food Market for purchase of rice, to finance faster turnover of needed food products, purchase of rice from Australia, and a contribution of 2,400 tons of corn for animal feed	1,650,000
	<u>\$11,050,000</u>

In addition agricultural production loan funds amounted to 31,800,000 pesos (about \$5 million).

ASSISTANCE PROVIDED BY THE U.S. GOVERNMENT

With the advent of Fran's floods, USAID/Philippines put into effect its disaster plan and commenced immediately coordination with the Government of the Philippines and its National Disaster Control Center. The Mission's Disaster Relief Officer

traversed the Manila flood areas in a six-by-six truck on September 1 to reach the Insular Bakery which bakes nutribuns for the Tondo School Program. The bakery, then without power, was authorized to continue baking nutribuns for flood victims on an around-the-clock basis. Work started immediately with a skeleton labor force, mixing the dough by hand for the oil-fired oven. These handy "complete meals" were distributed to typhoon victims wherever needed. Trucks and "ducks" were used to bring them to thousands stranded in their homes without food. Food for Peace commodities were moved from warehouses to utilization sites. These nutribuns were a valuable contribution by USAID, U.S. voluntary agencies and the Government of the Philippines to the disaster assistance program for all five typhoons. Hundreds of thousands of them were distributed from September 1 through most of November 1970.

Other Embassy and USAID personnel worked in relief operations and made personal donations. U.S. military units were called upon to provide medical supplies, air and surface transportation, engineering support (bridging), generators, water tanks and food. American Ambassador Byroade declared three separate disaster situations (for floods following Typhoons Fran and Georgia; for Typhoons Joan and Kate, and for Typhoon Patsy). He authorized from \$10,000 to \$25,000 for each under his disaster relief authority and asked AID/W approval for additional funding to cover expenses of baking nutribuns, to reimburse the U.S. military for supplies and expenses related to air support, for disaster related U.S. Mission costs, and for a cash contribution to Philippines Secretary of Social Welfare.

U.S. Navy and Air Force helicopters and C-130's and a U.S. Coast Guard amphibious plane were used to rescue victims, survey damages, deliver and air drop food and other supplies to isolated areas. At the time of Typhoon Joan, Joint US/Philippines military maneuvers had been planned and a U.S. Navy landing task force was in the Manila area. President Marcos, after overflying the disaster region with USAID Director Niblock, requested Ambassador Byroade to ask for the diversion of the task force with its aircraft carrier and helicopters to Bicol for relief operations. Despite continuing heavy winds and seas, the task force steamed immediately to Lagonoy Gulf off



US aircraft carrier 'Okinawa' was diverted from Subic Bay to provide helicopter assistance for the hard-hit Bicol area.

Eastern Bicol. At the same time, the Philippine Navy ships were loaded with relief supplies, mostly USAID/voluntary agency Food for Peace commodities in Manila, and dispatched to Bicol to provide food for the U.S. Navy helicopter airlifts. At first U.S. Navy shore operations were centered at Pili where the athletic field was transformed into a helicopter loading base and later they were at Tabac, Albay. More than 100 missions of food and medical supplies were flown from dawn to dusk to inaccessible barrios. Seriously injured typhoon victims were evacuated with return flights.

USAID telecommunications personnel established a radio net to link up the USAID Disaster Center with the Philippines National Disaster Control Center and Catholic Relief Services headquarters.

USAID worked with the Catholic bishops and school superintendents in the Bicol area in the development of a food-for-work school salvage project, whereby PTA's mobilized local labor to clean up debris from damaged and destroyed school

houses. Salvaged material was used to repair schools and build temporary structures.

Both U.S. Clark Air Force Base and Subic Bay Navy Base responded to the call for generators, water tank trucks and trailers, and personnel to man them, to meet the critical power and water shortage that occurred in Manila following Typhoon Patsy. USAID's own power specialists, most of them regularly assigned to the Rural Electrification Project, worked around the clock for weeks coordinating and supporting this unique effort. The benefits of this operation cannot be overstated. For days much of Manila depended on water thus produced.

The White House desires to be kept informed of events and USG relief actions on all major disasters. Situation reports by the State Department and Disaster Memos by AID/Disaster Relief Coordinator were sent to the White House on these typhoon disasters in the Philippines.

On January 19, 1971, the U.S. Mission was advised that AID/W had approved a \$1.5 million project from AID contingency funds to build 1,500 new typhoon resistant classrooms to replace some of those that had been totally destroyed.

President Marcos expressed his appreciation for U.S. assistance by presenting awards and citations as follows: Presidential Awards to Ambassador Byroade on behalf of the U.S. Disaster Task Force/Manila; to the U.S. AID Mission; to Admiral Muse on behalf of the U.S. Navy; to General Tanberg on behalf of the U.S. Air Force Task Force. Personal awards of the Legion of Honor went to the USAID Director, Thomas C. Niblock; to Colonel Alfred K. Patterson; and to Admiral Muse on behalf of John LaCava, U.S. Navy Commander of Amphibious Ready Group Alpha of the Seventh Fleet.

In making these presentations, President Marcos said: "Mr. Ambassador, it is my hope that you will convey to the American people that these awards are simple expressions of thanks. They cannot convey and they cannot express and articulate the depth and the intensity of gratitude to you and to the American Government and to the American people. Let it be said

that we as a people are grateful; we as a people know that you are our friends. We will, in every manner, seek to help ourselves, but we know, too, our limitations."

The American Ambassador expressed his personal appreciation to U.S. civilian and military agencies and units in the Philippines, and to State/AID offices in Washington for their excellent support.

Breakdown of USG Assistance

	AID Contingency Fund	Department of PL 480 Food Defense
Typhoons Fran and Georgia		
Check to Secretary of Social Welfare to finance construction of houses for resettlement of typhoon victims	\$ 10,000	
CRS, CWS, CARE and SAWS diverted 701,166 lbs of USG PL 480 Food for Peace flour, bulgur, nonfat dry milk, vegetable oil, cornmeal, rolled wheat, CSM and WSB, value	\$ 62,940	
USAID provided 1,353,146 lbs PL 480 FFP commodities damaged by the flood for use as animal feed, value	117,940	
Typhoons Georgia, Joan, Kate USG PL 480 Title II grant of 5,400 metric tons bulgur and 5,000 metric tons of rolled oats to the World Food Program for emergency typhoon relief, valued at \$1,334,000 plus ocean freight \$850,000, total	2,184,000	

Typhoons Joan and Kate

Baking costs for 337,825 nutribuns	2,356	
Procurement local food supplies	4,496	
U.S. military air support costs \$	21,827	
Local procurement of seeds/fertilizer	11,566	
Expenses of diverting the aircraft carrier "Okinawa" from Subic Bay to Bicol area and return (estimated time 57 hours) considered training expense for the Navy since the ship was in the Subic Bay area for maneuvers. Therefore, this non-reimbursable cost to AID is considered a contribution to the relief operations, valued at		\$100,000
CRS, CWS, CARE and SAWS diverted 2,109,052 lbs wheat flour, bulgur, nonfat dry milk, veg. oil, CSM, cornmeal, valued at		\$ 155,254
Typhoon Patsy		
Baking costs for 405,331 nutribuns	\$ 3,032	
Costs of accommodations for US military personnel involved in disaster operations .	3,595	
Diesel fuel	876	
US Navy relief operations costs	2,372	
Air travel costs	1,245	
Labor and vehicle operations	1,606	
TDY and Maintenance	7,170	

US military generator costs ..	3,078	
Shipping and handling costs for Civil Defense biscuits sent from US to replace food items used for typhoon disasters. Biscuits themselves were donated by Civil Defense ...	15,793	200,000
CRS released 1,746,644 lbs USG PL 480 FFP wheat flour, nonfat dry milk and veg. oil, and CWS 7,500 lbs CSM, with total value of		\$ 161,045

Typhoon Disasters School Rehabilitation Program

USAID project to build 1,500 new classrooms	1,500,000	
TOTAL USG ASSISTANCE ...	\$1,589,012	\$2,681,179 \$300,000 (\$4,570,191)

ASSISTANCE PROVIDED BY U.S. VOLUNTARY AGENCIES

Catholic Relief Services, CARE, Church World Service, and Seventh-Day Adventist Welfare Service released above PL 480 food commodities from their ongoing program. They joined with Philippine officials and USAID in coordinated relief effort. CARE, Catholic Relief Services, and USAID worked with the Bureau of Public Schools to implement the nutribun program. The Salvation Army was also very active in relief activities following Typhoons Joan and Kate and was most useful in giving direct aid to the Philippine Red Cross and the Philippines National Disaster Coordination Center. The following supplies were provided by U.S. voluntary agencies from their own resources:

Typhoons Fran and Georgia (Floods)

Clothing, medicines and seed by:	
Catholic Relief Services (CRS)	\$ 85,470

Church World Service (CWS)	1,612	
Seventh-Day Adventist Welfare Service (SAWS)	16,940	
American National Red Cross—cash	15,000\$119,022

Typhoons Joan and Kate

CRS—clothing (\$9,392) and medicines (\$5,692)—total	\$ 15,084	
CWS—clothing (\$57,236), seeds (\$5,201) and food (\$7,551)	69,988	
American National Red Cross—friendship boxes	29,952\$115,024

Typhoon Patsy

CRS—clothing (\$152,175) and medicines (\$6,561), total	\$158,736	
CWS—clothing (\$4,537) and food (\$845), total	5,382	
American National Red Cross—friendship boxes	23,068 187,186
Total assistance U.S. voluntary agencies		\$421,232

ASSISTANCE PROVIDED BY OTHER NATIONS AND INTERNATIONAL ORGANIZATIONS

World Food Program

The World Food Program established an emergency feeding program to feed from 400,000 to 600,000 typhoon victims for six months as they rehabilitated their farms and businesses. Food for this program was provided by the U.S. Government and value of this 10,400 metric tons of bulgur and rolled oats is shown under USG assistance above.

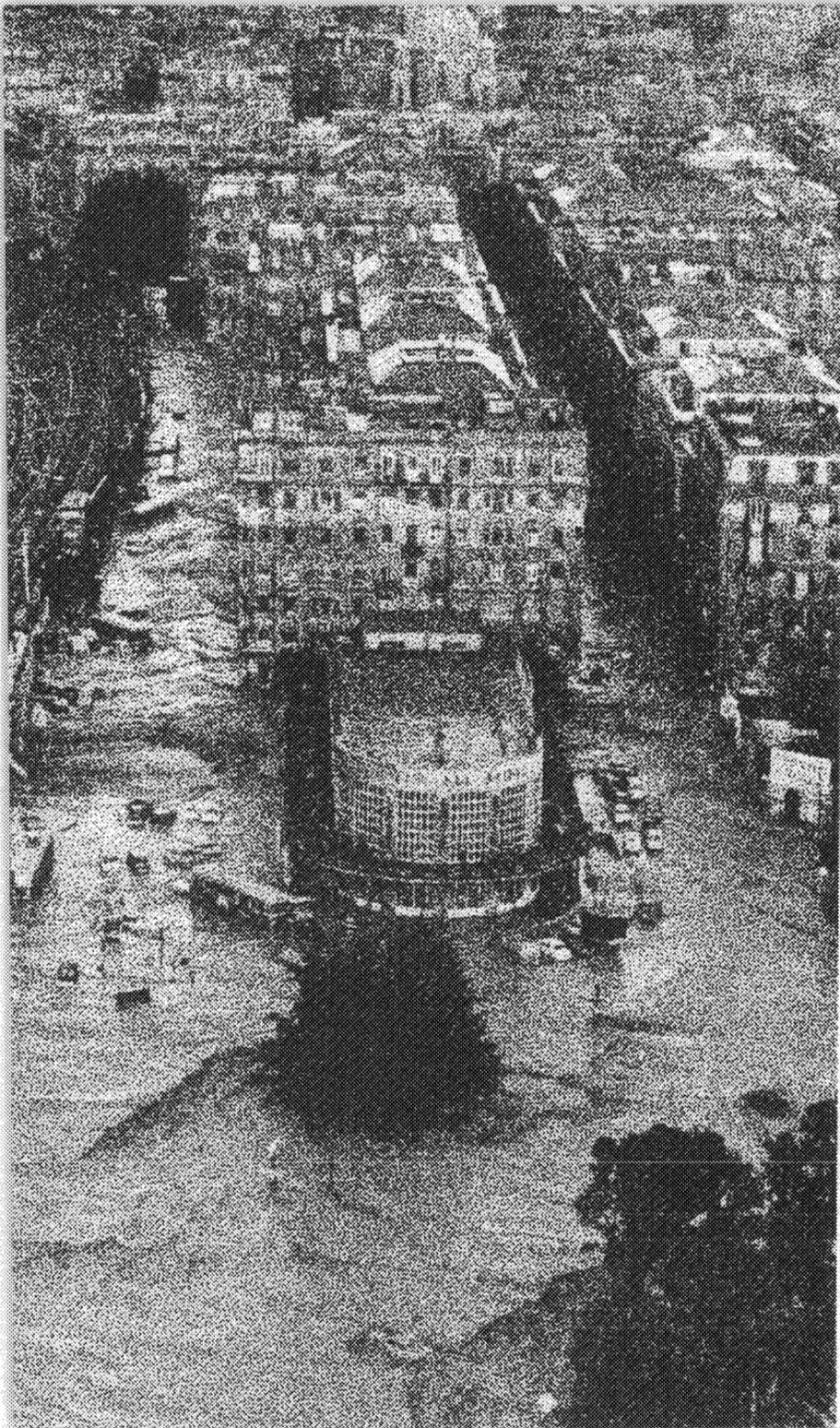
SEATO Council made a cash donation of\$ 3,000

World Council of Churches—cash	\$10,000
Australian Council of Churches—cash	2,220

Brot Fur Die Welt thru WCC	5,500	
Christian Aid—United Kingdom	2,400	
Diakonisches Werk (Germany)	5,500	25,620
Australian Catholic Relief	1,650	
Secours Catholique (France)	2,000	
Caritas Internationalis	5,000	

The following Red Cross Societies or Governments made contributions in response to an appeal by the League of Red Cross Societies:

Australia—cash	\$ 2,240
Belgium—cash	470
Burma—supplies	840
Cambodia—cash and supplies	7,020
Canada Red Cross—cash and supplies ...	\$13,630
Canada Government—cash	53,900
Ceylon Government—supplies	420
People's Republic of China—supplies	83,000
Federal Republic of Germany—cash	13,790
Ireland—supplies	2,390
Japan Red Cross—supplies	\$13,900
Japan Government—cash	13,000
Republic of Korea—cash	250
Malaysia—supplies	1,630
Monaco—cash	360
Netherlands—cash	2,320
New Zealand—cash	3,330
Norway—cash	1,160
Singapore—supplies	650
Sweden—cash	29,400
Switzerland—cash and supplies	20,600
Thailand—cash	240
Turkey—cash	2,000
United Kingdom—cash	2,230
USSR—supplies	16,800
UNESCO—Staff Association—cash	470
Total Assistance Other Nations	\$323,310



ITALY

Floods

October 7-9, 1970

...strike picturesque Genoa with devastating fury. 22.5 inches of rain falls during 18-hour period. 37 people were killed or missing and 1,650 left homeless. Property losses were extremely heavy. Estimated dollar damage—\$268.3 million. Disaster relief by the Government of Italy and from private sources in Italy valued at \$120 million.

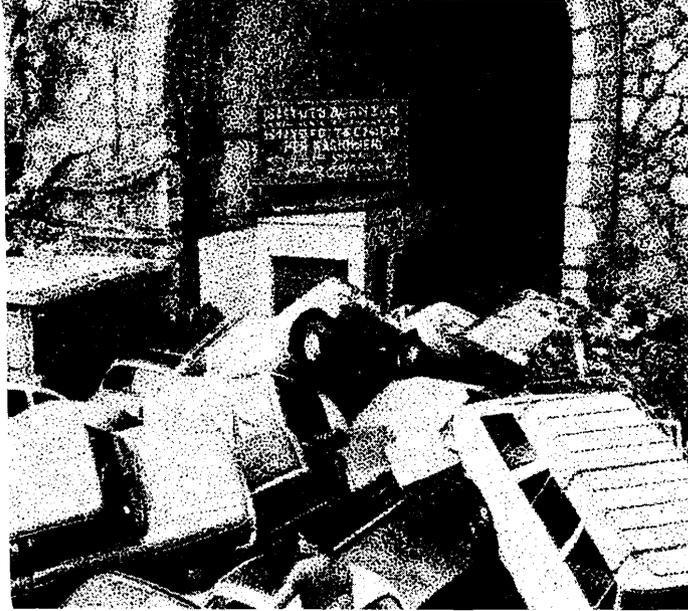
Value of U.S. Assistance \$16,958

DETAILS:

Most severely hit areas adjoined the Bisagno, Polcevera, Cersusa and Leira rivers and lesser streams. Worst hit was Genoa when the Bisagno River burst its banks in the city's center, and a six-foot wall of water surged through the streets sweeping away cars, buses, animals and trees. Buildings collapsed and an ancient Roman bridge was washed out. In the nearby industrial town of Voltri, some streets were filled with nine feet of mud and slime. People were swept from bridges, drowned in their homes and/or trapped in cars overtaken by the deluge.

All Genoa Province, with its 1.3 million population in an area of 710 square miles was damaged to some degree. Industrial damage was extensive, temporarily leaving 50,000 workers without employment. 152 homes were destroyed and river beds, roads, railways, drainage and sewage networks, commercial and private vehicles, telecommunications systems and powerlines were seriously affected. Many years would be required to effect full repair and recover losses.





Cars caught up in swirling flood waters and deposited at tunnel entrance

ACTION TAKEN BY THE GOVERNMENT OF ITALY

Rescue and relief operations were organized and coordinated by the Prefect of Genoa drawing on all sectors of the local government as well as the International Red Cross, the Italian Red Cross, volunteer workers and various relief and charitable organizations. 30 Italian cities led by Bologna, Milan, Turin, Florence, Pisa and Livorno, sent relief contingents of police, firemen, vehicles, blankets, food and medicine. Immediately after the flood, the Genoa-Prefect established a wide range of ad hoc coordinating committees with specific aid and rescue responsibilities.

The dollar value of Italian self-aid donations from both public and private sources was estimated at \$120 million.

The U.S. Mission reported effective local disaster relief operations, despite some chaos during the first two days of the flood and in the first hours of shock and bewilderment. Although first appeals for help were made indiscriminately to anyone likely to be of assistance, once the Prefettura had established itself as the point of control and coordination and was made known to the public, rescue and relief operations were carried out in a commendable manner.

Women of Genoa turned out in force to help clean up the city.



ASSISTANCE PROVIDED BY THE U.S. GOVERNMENT:

First reports of the floods were received from the American Consul General in Genoa on October 9, and offers of U.S. assistance were immediately made. On October 12 the Mayor's office in Genoa asked for USG assistance in the form of trucks and personnel to support local relief forces removing debris. This request was followed by others for food, rations, blankets, clothing, heavy equipment, and 130 gallons of solvent to clear away heavy oil accumulation. The American Embassy Charge d'Affaires in Rome declared the disaster to be of a magnitude to warrant US assistance and authorized the U.S. Military to provide help on a cost reimbursable basis from AID.

20 US Army trucks, wreckers, and ambulances supported by a 42-man US Army team were sent to Genoa from Livorno and Vicenza. Men and vehicles were used for eight days, carrying volunteer workers to disaster points and clearing away mud, waste and debris from clogged streets, railways and buildings.

Following are U.S. Military charges against the AID contingency funds.

Clothing and textiles	\$ 8,834
Petroleum	93
Subsistence	3,789
Accessorial charges	1,780
Transportation charges	<u>2,482</u>
	\$16,978

The U.S. Consulate General in Genoa, working under the direction of the Rome Embassy, coordinated assistance with the American Embassy, Genoa and U.S. Military Commands.

On October 21, 1971, Captain Hardy W. Bryan and American Consul Stromayer were invited to call on Prefect Rizzo and Deputy Mayor Cerofolini. The Deputy Mayor expressed heartfelt gratitude on behalf of the city of Genoa for the magnificent demonstration of friendship and solidarity shown by USG and US forces to the city during a time of grave need. In a moving statement of gratitude, Prefect Rizzo stressed that in

times of Italy's greatest need the American Government and people always respond quickly and generously.

ASSISTANCE PROVIDED BY U.S. VOLUNTARY AGENCIES:

None reported.

ASSISTANCE PROVIDED BY OTHER NATIONS:

Federal Republic of Germany—\$4,800.



BARBADOS

Flood October 2-5, 1970

... resulting from 23 inches of rain in ten hours kills 3, injures 10 and leaves 200 homeless. 1,240 homes were destroyed or damaged. Estimated dollar damage \$500,000.

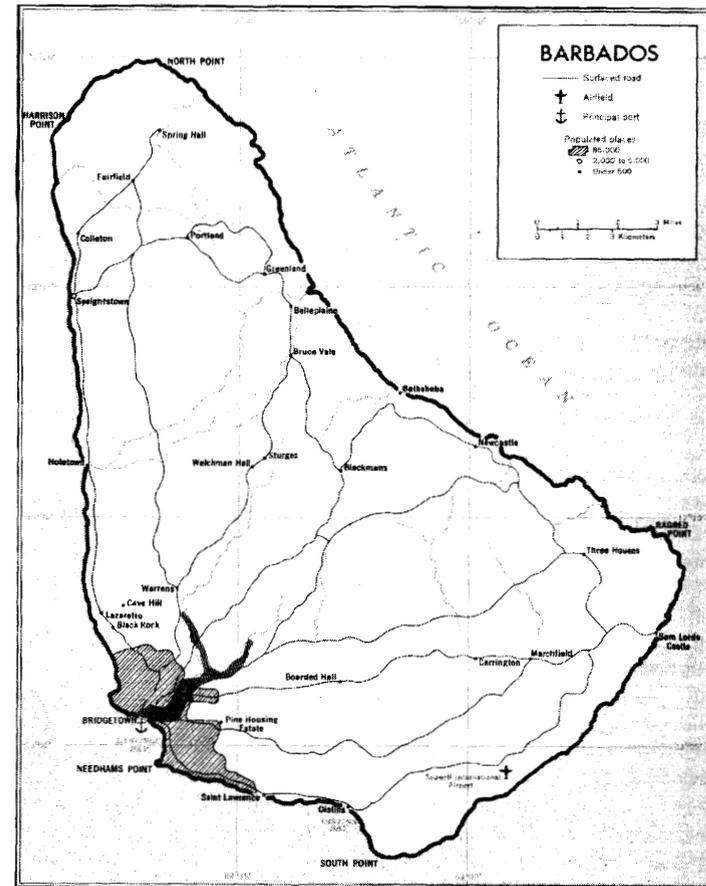
Value of U.S. Assistance	\$ 5,000
Value of Assistance by Other Nations	19,665
	<u>\$24,665</u>

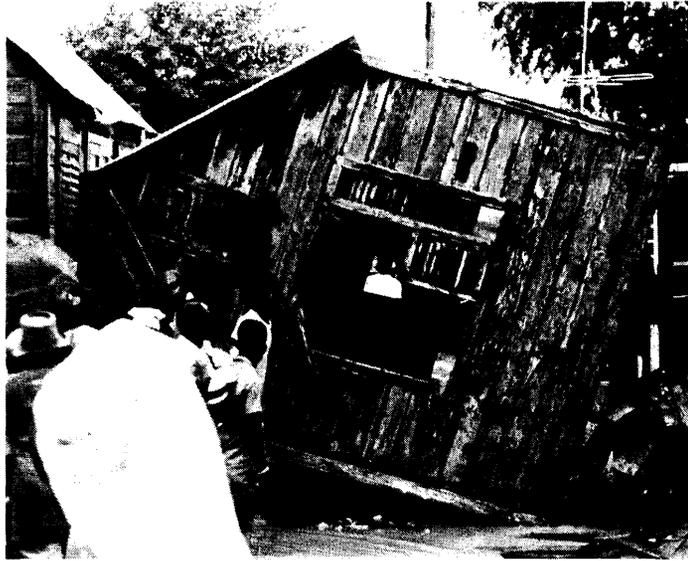
DETAILS:

The deluge was twice as great as in Barbados' 1949 flood and seven times greater than the 1964 hurricane. By comparison, the average annual rainfall is 60-65 inches. The effects of the flood were felt throughout the Island but were most severe in the hill parishes of St. Andrew and St. Joseph and low-lying areas in Bridgetown and parishes of St. Michael and Christ Church. In addition to destruction of homes, many fishing boats were lost and considerable damage was done to roads, bridges, piping systems and communications.

That there were only three deaths compared to 41 in 1949 was attributed to the fact that the heaviest downpour occurred during the day. Further loss of life would have resulted if this "tropical depression" had been accompanied by the usual high winds of a hurricane. Actual winds were in gusts of 40 to 45 miles per hour.

Accumulated rainfall flowed down to the sea through gullies, culverts, roads, cliffs and backyards, carrying along homes or parts of homes from which the inhabitants had escaped.





"Housing damage from the flood."

Total damage amounted to approximately \$500,000 and was divided fairly evenly between the private and the public sectors. The most costly damage to government property was to roads, bridges and the piping systems. Around St. Andrew Parish all bridges were down and the area was isolated for more than 24 hours. Damage to the private sector included the loss of fishing boats which was estimated at \$39,000. Some power and telephone circuits were interrupted for several days. Crop damage was not serious although extensive soil erosion and some leaching occurred.

ACTION TAKEN BY THE GOVERNMENT OF BARBADOS AND LOCAL ORGANIZATIONS:

The Government of Barbados maintains a disaster plan and has a Disaster Relief Coordinator. Inevitably there were problems

in coordination and some confusion because of communications difficulties, but this did not interfere significantly with the promptness or effectiveness of relief operations.

A Disaster Control Center was set up—initially at Central Police Headquarters and later shifted to the Ministry of Home Affairs, which is responsible for disaster relief. A number of relief centers were established to provide shelter for the flood victims. Also schools and buildings of the Barbados Regiment were opened for this purpose. A central depot for collecting needed material, such as food, clothing, medicine and cooking equipment was also established. Meals were provided to about 200 displaced persons for two days.

Needs were identified and a request for help was made directly by the Prime Minister to resident foreign diplomatic and consular representatives. No request for disaster aid was made to foreign governments until the nature and extent of the flood damage had been thoroughly investigated and a survey completed.

Actual relief operations were carried out by Barbadians themselves without outside assistance. The Barbados Red Cross contributed blankets and food. Other local voluntary agencies rendering assistance included the Salvation Army, the Boy Scouts, and the St. John's Ambulance Brigade.

Two special funds were set up to receive donations—the Barbados Flood Relief Fund, which was organized by the Chamber of Commerce and which collected approximately \$79,000; and the Central Emergency Relief Fund, which was organized by the government and which received about \$15,000, most of which came from foreign governments.

As of April 7, 1971, only half of the \$79,000 collected by the Barbados Flood Relief Fund had been spent, primarily on bedding, stoves, and repairs and replacements for the fishing fleet. These two new funding organizations ceased to exist once the emergency was over.



"Raging flood waters take out bridge."

The American Embassy commented that the Government of Barbados Disaster Relief Coordinator, Mr. Goeffrey Edwards, of the Ministry of Home Affairs, had attended the 1970 A.I.D.-sponsored disaster relief training course subsequent to the disaster and had submitted recommendations on how to improve the Barbados country disaster plan.

ASSISTANCE PROVIDED BY THE U.S. GOVERNMENT:

The American Ambassador exercised her disaster relief authority and made a cash contribution from the A.I.D. contingency fund to the Barbados Government's Central Emergency Relief Fund in the amount of \$5,000. Also a U.S. Navy helicopter was placed on standby in Puerto Rico in case it might be needed for evacuation purposes. It was not called forward, however.

The following is quoted from a disaster summary report by the American Embassy:

THE GREATEST ASSISTANCE THAT THE U.S. CAN RENDER IN DISASTER SITUATIONS IN BARBADOS OR THE OTHER ISLANDS IS PROBABLY IN SUPPLEMENTING COMMUNICATIONS AND BY PROVIDING SUPPLIES. GIVEN THE HILLY AND EVEN MOUNTAINOUS TERRAIN IN MOST ISLANDS, HELICOPTER SERVICES COULD PROVE TO BE EXTREMELY USEFUL. BECAUSE OF THE INSULAR ISOLATION OF THESE ISLANDS, SUPPLIES COULD BE NEEDED ON AN URGENT BASIS.

ASSISTANCE PROVIDED BY U.S. VOLUNTARY AGENCIES:

American Red Cross—cash \$ 300

ASSISTANCE PROVIDED BY OTHER NATIONS AND INTERNATIONAL ORGANIZATIONS:

Canada —cash	\$ 1,000
Republic of China —cash	5,000
West Germany —cash	1,365
contributed 500 tons of fertilizer	*
Israel —contributed 5,000 tons of fertilizer	*
United Kingdom —offered technical assistance in the form of engineers and surveyors needed in the reconstruction phase	*
Venezuela —mattresses, sheets, hammocks	*
contributed 500 tons of fertilizer	*
* Value not reported	
Organization of American States —provided disaster supplies valued at	<u>12,300</u>
Total Assistance Other Nations	\$19,665



BRAZIL

Drought

... a new cycle beginning in 1970 severely damages crops and livestock in Northeast Brazil. More than 10 million persons verge on starvation.

Value of U.S. Assistance	\$3,516,539
Value of Assistance by Other Nations	59,140
	\$3,575,679

DETAILS:

Northeast Brazil, subject to recurring drought, is referred to as "drought-polygon." But for more than a decade following the severe 1958-1959 drought, it had escaped with only minor rain shortages. A new drought cycle began in 1970 causing widespread crop and livestock damage by June of that year.

Seventeen million of the Northeast's 29 million people live in the rural parts of the drought region. According to Diaconia, a Brazilian distributing agency which cooperates with church-related organizations, including U.S. voluntary agencies, the infantile death rate in some parts of the Northeast varies from 50 percent to 70 percent due to malnutrition, verminosis and vitamin deficiency.

Reports of drought were heard as early as April. It began in the State of Piauí, then gradually extended to the State of Ceará and eventually seriously affected six other states.

During 1970, rainfall was only a quarter of the normal amount. Thousands of square miles of crops were wiped out. The soil became dry and cracked. Riverbeds dried out. Remaining livestock were forced to feed on cactus. By the end of June 1970,

the "Superintendency for the Development of the Northeast" (SUDENE) was estimating that over a million people had been hit by famine.

Conditions worsened. By September 1970 meager food stores from past years were exhausted and an estimated 2.5 million people became dependent on government aid to avoid starvation. It was reported that some starvation deaths had occurred but no statistics were available.

In many villages only old men remained. The young ones left to look for work elsewhere. Cattle wandered or were driven away in search of pasture, meaning lack of milk for the children. As the drought continued, the areas affected became more widespread. For the first time in 50 years the drought extended beyond the normally dry areas to the western edges of the sugar zone. Sugar mills closed several months early, throwing thousands of people out of work.

Scattered rains beginning in December of 1970 reduced the seriousness of the problem to a degree in some of the affected states. However, in other states conditions worsened through February and March as the normal rainfall cycle failed to develop. Rains began in most of the region in March and finally became satisfactory late in April 1971. Following this, prospects for the year's harvest became good.

The number of communities seriously affected by the drought by states were:

Piauí	— 50	Pernambuco	— 71
Ceará	—128	Alagoas	— 33
Rio Grande de Norte	—128	Sergipe	— 28
Paraíba	—104	Bahia	— 61

ACTION TAKEN BY THE GOVERNMENT OF BRAZIL AND LOCAL ORGANIZATIONS:

Brazil has an effective disaster relief program both at the Federal and state levels, backed by laws and decrees, and has several agencies which can be called upon to implement a relief

program when disaster strikes. One of these active in all disasters that occur in the Northeast is SUDENE.

With the forecast of an irregular rainy season in the "drought polygon", SUDENE prepared a Plan of Action for the expected emergency. It intensified direct field activities to ascertain the actual social and economic situation, sent food supplies to state governments immediately for the opening of Work Fronts, and informed the Minister of the Interior of the gravity of the situation.

Emergency measures began in April 1970. SUDENE contacted the Ministries of Finance, Planning and Agriculture to arrange for disaster funds. Further steps were taken to release the Special Fund for the States of Piauí, Ceará and Rio Grande de Norte, and for the participation quotas (normal tax refunds from the Federal Government) for the municipalities affected. Cattle raisers' payments to the Bank of Brazil were rescheduled.

Government food and supply agencies were instructed by SUDENE to ship staples to the drought area as quickly as possible to maintain stock levels and control prices.

As a result of these preparatory arrangements, SUDENE was able to authorize the opening of work fronts in the State of Piauí, where the drought was first felt in April.

Drought conditions began to occur in other states and by the end of April the lack of rain had seriously affected the interior of Ceará, Rio Grande de Norte, Paraíba and Pernambuco.

These new developments caused the transmittal early in May of a second report by SUDENE to the Minister of Interior who personally carried it to the President of the Republic. The President recognized the seriousness of the situation and authorized the opening of additional credit amounting to Cr \$15 million, equivalent of \$3 million. Work fronts were also opened by SUDENE in these states, and by the end of June they had been extended to the States of Sergipe, Bahia and Alagoas.

On June 4, 1970, President Emikui G. Medici visited the Work Fronts in Crateus and Currais Novos, where deeply impressed by the effects of the drought, he immediately determined that all Federal Agencies operating in the Northeast should participate directly in combatting it.

On June 16, 1970, the President declared a State of Emergency for the Northeast (by Decree No. 66731) and authorized the establishment of special credit amounting to Cr. 60,000,000, equivalent to about \$12 million, to be provided through the Ministry of the Interior to reinforce funds previously received by SUDENE. With financing available, SUDENE was able to give full attention to the relief operations and work fronts.

In late June there were 85 work fronts established with 239,600 rural workers employed. The highest number of work fronts was 147, and the greatest number of workers at any one time was 499,544. Enlistment in the Fronts was closed on November 30, 1970, and demobilization was initiated. By April 16 1971 only 16 Fronts remained with 13,600 workers. These continued until May when the last of the work fronts in the States of Alagoas and Sergipe were closed.

The work fronts were designed to rehabilitate the disaster area and to alleviate the severity of future droughts. Major work projects were construction of farm-to-market roads and reservoirs, and irrigation. Technical assistance was given by the Government of Brazil through Federal and State Agencies. In addition to food for work, the GOB paid a daily wage of Cr. 2.00 (about 45 cents) to each worker. Estimated monthly wage input was approximately \$3 million. Projects that were not completed when the work fronts were closed out were to be finished by the State Governments.

Food aid was not limited to people involved in the work fronts. A GOB report indicates food donations were distributed to over 10 million people.

During the relief operations, SUDENE made 88 water tank trucks available for urban populations and over 1 million units of tools for the work fronts. It purchased and distributed 1,003

vehicles of various types.

Public health activities, too, were carried out by SUDENE with the objective of protecting the population against communicable disease and treatment of the sick. These activities were coordinated on the state level by the Health Secretariats. SUDENE provided essential medicines for mobilizing health teams at a cost of Cr. 2.6 million, equivalent of about \$500,000. 374,962 persons were vaccinated against smallpox and 412,000 were immunized against typhoid.

With the expectation that the next agricultural crop would be one of the best in the past five years, the Government assured minimum prices for the purchase and/or storage of produce, gave special credits for agriculture and established a price support system for major commodities. This was done to help farmers expand cultivated areas and through selected or improved seeds, to increase productivity.

Expenditures for drought relief by SUDENE were:

Labor—administration and technical services ..	Cr 288,899,745
Equipment, food and medicines	Cr 43,390,213
	<u>Cr 332,289,958</u>
Dollar equivalent	\$ 66,500,000

Other local organizations aiding drought victims were the Brazil Red Cross and Diaconia which receives support from various Protestant relief groups. It opened work fronts in the States of Ceara and Paraiba, supplementary to those of the Brazilian Government. Money and food were donated to Diaconia by Church World Service and Lutheran World Relief, both U.S. voluntary agencies, by the Dutch Government, and by OXFAM, a British relief organization. It selected 10 communities in these two states according to the number of victims and their interest in community work. Priority for work assignments was given to fathers or breadwinners from large families. Each worker weekly received one ration for himself and one for each of his dependents.

ASSISTANCE PROVIDED BY THE U.S. GOVERNMENT:

Food commodities were requested by the Government of Brazil from the United States. A total of 17,575 tons of wheat, flour, bulgur, cornmeal, non-fat dry milk, vegetable oil, and CSM were donated by the USG in response to this request. Approvals for these P.L. 480, Title II grants were made under two authorizations—one dated August 7, 1970, and the other, February 11, 1971, as amended on August 31, 1971. Total CCC value of the food was \$2,488,559, including inland transportation and handling costs in the U.S., plus estimated ocean freight charges of \$970,000 for a total contribution of \$3,458,559

Also 160 tons of P.L. 480 food were made available to Diaconia by Church World Service and Lutheran World Relief. Estimated value \$ 14,000

Total Value USG Assistance \$3,472,559

ASSISTANCE PROVIDED BY U.S. VOLUNTARY AGENCIES:

Church World Service/Lutheran World Relief—CWS/LWR deployed above 160 tons P.L. 480 food commodities. Church World Service made a cash contribution of \$ 4,000

American National Red Cross
Multivitamins, valued at 39,480

Mennonite Central Committee
..... \$43,980

MCC worked through the local Diaconia organization. MCC assisted small landowners by giving them technical assistance. Its volunteers demonstrated how better crops could be produced by using better seeds, fertilizer and insecticides. MCC also offered financial credit to the people to buy

tools and introduced garden and small animal projects, which were practically non-existent in Zona de Mata area where MCC worked. *

* Value not reported.

ASSISTANCE PROVIDED BY OTHER NATIONS AND INTERNATIONAL ORGANIZATIONS:

The League of Red Cross Societies issued a limited appeal for sister societies to donate multivitamins and medicaments.

Dutch Government—34 tons of powdered milk and 17 tons of butter oil, valued by AID/DRC \$54,000

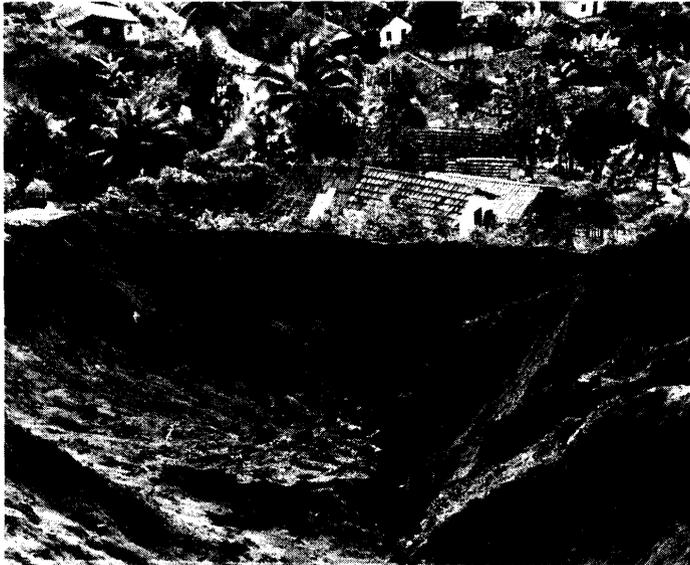
Japan—supplies valued at 800

Norway Red Cross—cash and supplies 1,940

OXFAM—cash donation to Diaconia for 1,000 pounds sterling 2,400

..... \$59,140





Linha do Tiro area where landslides and erosion caused heavy loss of homes and property.

ACTION TAKEN BY THE GOVERNMENT OF BRAZIL AND LOCAL ORGANIZATIONS:

Except for some contributions of food and medicine, relief operations from the beginning were entirely Brazilian, carried out by local, state and federal governments.

Rescue operations were conducted chiefly by "Operacao Alivio," a permanent organization of the Brazilian Army appointed by the Governor of Pernambuco to act in this capacity. This organization made flood forecasts, evacuated people from river banks and other threatened areas, placed the evacuees in pre-chosen centers and fed them. One hundred seventy-five thousand people were evacuated. After

48 hours, relief operations became the responsibility of the State of Pernambuco through a temporary special committee appointed by the Governor. Throughout the crisis period, firemen, soldiers and police cared for emergency cases.

The "Superintendency for Development of the Northeast" (SUDENE) provided food and technical assistance whenever necessary throughout the emergency.

Cleaning and draining canals after the floods in Recife.



Although accurate figures are not available on Brazilian donations of food, it was estimated it exceeded 136 metric tons. This represented only official donations and did not take into account the numerous private contributions for which no estimate was available. President Medici released the Curzeiro equivalent of \$500,000 for assistance to Recife and other municipalities.

The U.S. Mission said that the Brazilian relief operations were well planned and carried out with efficiency. As small problems arose they were solved by the Governor's Committee.

ASSISTANCE PROVIDED BY THE U.S. GOVERNMENT:

There was no official request for outside assistance by the Government of Brazil. However, Catholic Relief Services sent a shipment of medicines for the flood victims for which AID/DRC agreed to pay air transportation from the Contingency Fund in the amount of \$ 1,122

Relatively small contributions of USG P.L. 480 food commodities were also made to attend to "pockets" of need on a one or two day basis. These were provided by Church World Service/Lutheran World Relief and Catholic Relief Services supplies already in the country and consisted of 48.7 metric tons of wheat flour, CSM, bulgur, rolled oats, non-fat dry milk, vegetable oil and cornmeal with a value of \$12,859
 \$13,981

ASSISTANCE PROVIDED BY U.S. VOLUNTARY AGENCIES:

Church World Service—provided 120,000 water purification tablets and 500 blankets, estimated value . \$ 1,896
 Cash donation of 3,000
 \$ 4,896

Catholic Relief Services

70,000 penicillin tablets
 6,000 chloromycetin tablets
 1,890 vials rabies vaccine
 5,000 disposable syringes/needles
 These medicines were obtained through donations by the Catholic Medical Board and through purchases by CRS from funds donated by the Australian Catholic Relief.
 Total value CRS donations \$17,500

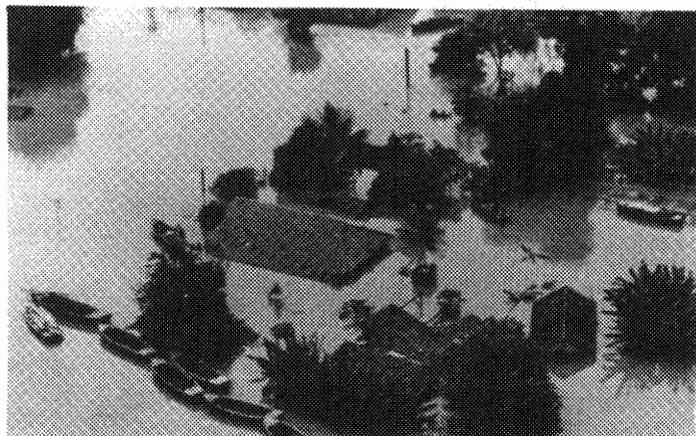
Mennonite Central Committee

MMC volunteers and community leaders made plans to build 30 houses for people of Amaraji who lost their homes in the flood *
 \$22,396

ASSISTANCE PROVIDED BY OTHER NATIONS AND INTERNATIONAL ORGANIZATIONS:

The U.S. Mission indicated there were some food donations from other countries but that the amount and value were not known.

* Value not reported.



BRAZIL

Floods

April 26-30, 1971

... caused by heaviest rains in Salvador since 1903 kill 109, injure 2,000, leave 11,000 homeless. 23 inches of rain fell in five days—21 in just 48 hours. Dollar damage in excess of \$5 million.

Value of U.S. Assistance\$9,921

DETAILS:

Hillsides covered with humble houses collapsed, burying dwellings below. Streams became torrents. They swept over their banks destroying houses clustered along the edge. Valleys were transformed into lakes littered with floating household possessions.

The homeless crowded into houses of friends and relatives or into schools, markets and warehouses converted into shelters by the state and municipal governments.

Local authorities estimated it would cost the equivalent of \$5.2 million to repair the many roads, bridges and tunnels severely damaged.

ACTION TAKEN BY THE GOVERNMENT OF BRAZIL AND LOCAL ORGANIZATIONS

The Brazilian Federal Government allocated one million cruzeiros (approximately \$200,000) from its national emergency relief fund. SUDENE, the Northeast Regional Development

Agency, contributed two million cruzeiros (\$400,000). Also, SUDENE requested and obtained approval from the U.S.AID Mission to transfer 34 metric tons of mixed PL 480, Title II, food commodities from one of its projects to flood relief. The national food supply agency, SUNAB, contributed beans, rice and manioc flour.

The Government of the State of Bahia gave land and materials for the construction of approximately 1,000 homes. Precautionary measures were taken by Federal and State Governments against outbreaks of polio and typhoid.

The Bi-national Center and Pan American School of Bahia conducted drives for clothing and other supplies for the flood victims. Local people, banks and firms made donations to the relief effort.

The municipal and state governments began rebuilding before the storm had subsided. Despite many difficulties, local authorities did almost everything which could be expected to get the city, and those of its citizens most affected by the storm, back on their feet.

ASSISTANCE PROVIDED BY THE U.S. GOVERNMENT

American Ambassador William M. Rountree was visiting Salvador for the first time during the worst part of the storm. As soon as he became aware of the extent of the damage, he exercised his disaster relief authority and made a cash donation from the AID contingency fund of 25,000 cruzeiros, equivalent of \$4,921. In addition, USAID authorized SUDENE to transfer 34 metric tons of PL 480, Title II, bulgur, wheat, oats, non-fat dry milk, and CSM to flood relief. Estimated value was

	\$4,921
	\$5,000
	<hr/>
	\$9,921

The American Consulate at Salvador and the Peace Corps were active in the recovery effort. Wives of officers of the post spent several days helping the Governor's wife sort and distribute clothing, food and medicines. The Consulate's driver and carry-all were put at the disposal of the state government for delivery of articles to the relief centers.

Peace Corps Volunteers were involved in every phase of the relief effort, including the organization of shelters, establishment of distribution networks, and surveys of official and spontaneously formed relief centers to determine the number of homeless and identify their needs.

The Consulate also lent to the Secretary of Health jet inoculation guns to administer typhoid and polio vaccines.

ASSISTANCE PROVIDED BY U.S. VOLUNTARY AGENCIES

Pennsylvania-Bahia Partners of the Alliance

It was reported that the Pennsylvania Partners had contributed sizeable quantities of medicines, but kind, amount and value were not given.

ASSISTANCE PROVIDED BY OTHER NATIONS AND INTERNATIONAL ORGANIZATIONS

Pope Paul VI—made a cash donation of 25,000 cruzeiros (\$4,921).



CHILE

Snow/Rain Storm

June 20-21, 1971

... severely affects Santiago, Valpariso and O'Higgins Provinces. 90,000 people are homeless, 15,000 houses damaged or destroyed.

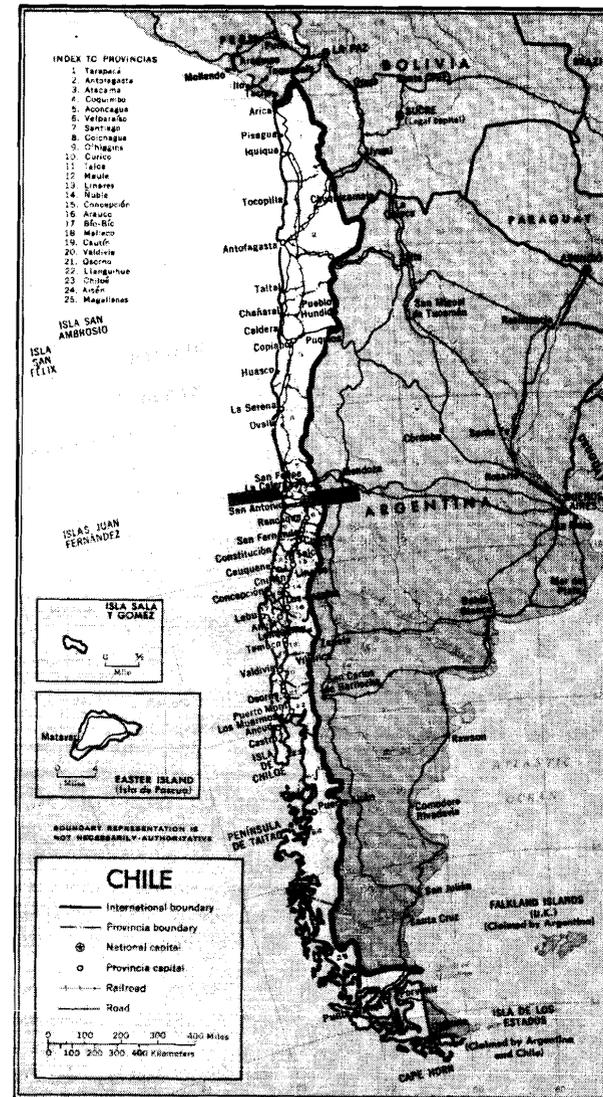
Value of U.S. Assistance	\$ 107,926
Value of Assistance by Other Nations	2,010,000
	<u>\$2,117,926</u>

DETAILS:

On Sunday, June 20, a severe winter storm struck the provinces of Valpariso, Santiago and O'Higgins. It was the first time in 25 years that snow fell in the city of Santiago and other low elevation areas. In the adjacent province of O'Higgins as much as three feet of snow were recorded in the town of Rancagua. Rancagua has a population of approximately 100,000.

Houses were destroyed or damaged by the wind or weight of the snow. Many of the houses and buildings in the poorer areas were not able to withstand even the weight of three or four inches. About 25 to 30 percent of the truck farm crops were burned by the freezing temperatures and a total of 25 layer broiler chicken houses collapsed. Several other farm and industrial buildings also collapsed.

An estimated 90,000 people were left homeless and without bedding and clothing. Approximately 4,000 people became ill as a result of the storm.





A GOC bulldozer works to divert water which overflowed the Mapocho River near Santiago. In the foreground—a young girl inadequately clad for the cold weather carries water to her home.

ACTION TAKEN BY THE GOVERNMENT OF CHILE AND LOCAL ORGANIZATIONS:

The Government of Chile declared the three provinces emergency zones and made use of its standing emergency allocation fund to provide roofing, blankets, mattresses, water containers and other supplies and to conduct relief operations.

There were 95 emergency centers established in Santiago, 13 in Rancagua and 7 in Valpariso. These sheltered approximately 14,000 people. Also, the Government of Chile distributed 2,000 emergency shelters to displaced persons to use while they were constructing new homes.

The health of the storm victims was a major concern of the Government relief agencies. They advised people who had been evacuated to the emergency centers to remain one to two weeks so they could be vaccinated and watched closely

for disease. The most common ailments following the storm were respiratory.

Chilean agencies involved in the relief operations were: Office of Emergency Planning, National Health Service and Asistencia Social.

While relief operations were still underway, an earthquake struck four provinces of Chile on July 8, 1971, including the three affected by this storm disaster. Value of the in-country assistance provided to the storm victims was included as a total in the earthquake summary report. A breakdown of aid to storm victims is not available. Since the earthquake occurred in Fiscal Year 1972, the case study on that disaster is not included in this FY 1971 report.

ASSISTANCE PROVIDED BY THE U.S. GOVERNMENT:

The American Ambassador in Santiago offered U.S. Government help, which was accepted by the Government of Chile. USG P. L. 480 food commodities were already available in the country and needed only to be deployed to disaster relief from on-going programs of the U.S. voluntary agencies. Distribution of this food was begun on June 22 and was provided through CARE, Catholic Relief Services, World Relief Commission and Seventh-Day Adventist Welfare Service. A total of 51.5 metric tons of wheat flour, processed grains, non-fat dry milk, CSM and vegetable oil were donated. Market value was \$8,456 plus ocean freight costs estimated at \$2,000 for a total of\$10,456

The Ambassador declared the disaster of sufficient magnitude to warrant outside help and exercised his \$25,000 disaster relief authority to request blankets, medicines, and other supplies from the AID/SOUTHCOM stockpile in Panama and from the U.S. AID/W approved the necessary additional funding from the contingency fund. A total of \$50,000 was allocated from FY 1971 funds and \$42,679 from FY 1972 funds.

AID/DRC and US SOUTHCOM received the request for blankets, medicines and other supplies on June 30. By July 1 the first planeload had arrived in Santiago from Panama, and two more airshipments were made from Panama and the US on July 4 and July 6.

Following is a breakdown of disaster supplies provided and the costs:

From Defense Supply Agency

Antibiotics, sulfa and burn ointments, immune globulin, medicaments, steam inhalators, otoscopes and laryngoscopes \$ 57,646

AID Excess Property

445 raincoats \$ 1,447
Plus airlift 423 1,870

AID/SOUTHCOM Panama Stockpile

2,000 wool blankets \$ 6,800
2,000 cotton sheet blankets 4,320
1,000 pr. rubber boots 3,000
1,000 cot sleepers 3,180
U.S. Military C-130E airlift costs—19.7 flying hours at the rate of \$569.00/hour 11,152
Airlift of blankets from Panama to Chile .. 1,274
Ocean freight charges anticipated to ship replacement supplies from U.S. to Panama 2,325 \$ 32,051

From U.S. Military Stocks/Panama

100 space heaters 900
24 packages of gauze 68
24 rolls adhesive bandage 7
Accessorial charge 137 1,112

Total charges to AID contingency fund \$ 92,679
Plus above P.L. 480 food 10,456
\$103,135

ASSISTANCE PROVIDED BY U.S. VOLUNTARY AGENCIES AND OTHER U.S. ASSISTANCE:

Ambassador Edward M. Korry made a personal contribution of 50,000 escudos to be used for roofing material for Rancagua, equivalent of \$ 3,570

CARE

In addition to release of CARE P.L. 480 food, CARE made local purchase of 460 blankets at a total cost of 1,221

This \$1,221 comprised cash donations from the American Women's Club to CARE. CARE indicated that \$523.38 of this was donated by Mrs. Patricia Korry, wife of the U.S. Ambassador to Chile. \$ 4,791

Catholic Relief Services, Seventh-Day Adventist Welfare Service and World Relief Commission released P.L. 480 food for use in the emergency shelters as indicated under USG assistance.

ASSISTANCE PROVIDED BY OTHER NATIONS AND INTERNATIONAL ORGANIZATIONS:

Russia—sent two planeloads of medicines, clothes, food, sugar, rice and milk. Value was not reported. The USSR also made a cash donation of . \$ 10,000

People's Republic of China made a cash contribution of 846,310 pounds sterling, equivalent of .. 2,000,000

Assistance was also reported from the Federal Republic of Germany and Poland but information on kind, quantity and value was not available.



COLOMBIA

Earthquake

September 25, 1970
8:02 AM

...injures six; leaves 3,000 people homeless in Bahia Solano;
281 homes destroyed; estimated dollar damage—\$400,000.

Value of U.S. Assistance\$4,750

DETAILS:

On Saturday morning, September 25, 95 percent of the houses in the Bahia Solano were destroyed by an earthquake which struck along the Pacific coast of Colombia. The earthquake measured 6.6 on the Richter scale. Lesser damage occurred in Pereira and elsewhere in the country. Damage to houses, public buildings, communication systems and crops was estimated at 8 million pesos.

ACTION TAKEN BY THE GOVERNMENT OF COLOMBIA AND LOCAL ORGANIZATIONS:

The Civil Defense organization, headed by General Joaquin Matallana, coordinated relief efforts with National and Department officials, religious authorities, the Red Cross, the Air Force, the Navy, citizens groups (created for the emergency) and counterpart agencies of CARE and Catholic Relief Services. Also assisting in the relief efforts was the Corporation for the Development of Choco, headed by Dr. Mauricio Obregon. In

some areas, committees were formed with the purpose of receiving and dispatching donations of drugs, clothing and food. The Navy and the Air Force aided in the evacuation of 210 families to Quibdo, the Capitol of Choco.

The National Government by decree appropriated 700,000 pesos to finance emergency expenses and to rebuild the village of Bahia Solano. The Corporation for Development of Choco invested about 6 million pesos. It was estimated that total in-country contributions amounted to 10,000,000 pesos, equivalent to about \$500,000.

ASSISTANCE PROVIDED BY THE U.S. GOVERNMENT:

On September 28, Dr. Obregon and the Secretary of the Office of the President, Dr. Rafael Naranjo Villegas, had conversations with U.S. Chargé d'Affaires, Mr. Robert A. Stevenson, asking for assistance from the U.S. Government. Under the American Ambassador's disaster determination, use was made of the A.I.D. contingency fund for the purchase and transportation of disaster relief supplies and equipment in the amount of\$2,000

An official from the U.S. Mission in Bogota was sent to Panama and arranged to obtain from A.I.D. excess property 500 new beds and mattresses and field jackets for approximately 1,000 people. In addition also from Panama excess property, a 9-ton dump truck, a 20-ton four-wheel drive truck and three 5-ton trailers were provided for earth movement and reconstruction purposes.

23,690 pounds of P.L. 480, Title II, non-fat dry milk, wheat cornmeal and vegetable oil were provided through CARE and Catholic Relief Services for 2,000 earthquake victims. Estimated value of this food .. \$2,750
Total value U.S. Government assistance \$4,750

ASSISTANCE PROVIDED BY U.S. VOLUNTARY AGENCIES:

CARE—Set up feeding centers in Quibdo and Bahia Solano and on September 26 began to supply food to the homeless utilizing USG P. L. 480 commodities.

Catholic Relief Services—In addition to providing USG P.L. 480 food, CRS supplied vitamins but quantity and value were not reported.

ASSISTANCE PROVIDED BY OTHER NATIONS AND INTERNATIONAL ORGANIZATIONS:

None reported.



COLOMBIA

Floods

Fall, 1970

Spring, 1971

... resulting from most severe winter/spring rainy season in 40 years, kill 307, leave 105,000 homeless and affect a total of 5 million. 11,762 homes were destroyed in Magdalena and Cauca River Valleys. Dollar damage as estimated by the Colombia Ministry of Agriculture—\$138.8 million—\$101.3 million to crops and livestock; \$26.7 million to roads, railroads, ports; \$10.8 million to homes, machines and buildings.

Value of U.S. Assistance	\$779,750
Value of Assistance by Other Nations	47,290
	<hr/>
	\$827,040

DETAILS:

Fall 1970 Floods

The annual floods began, as expected, in September of 1970 but reached catastrophic proportions during November and December as a result of exceptionally heavy and long lasting rains. By November 11, after four days of continuous rains, news media were reporting it to be Colombia's most severe winter rainy season in 40 years.

The Magdalena, Cauca and Atrato Rivers overflowed, inundating many villages along the rivers and causing extensive destruction to homes, crops, and animals. Hundreds of people sought refuge in treetops and on mountainsides. On December 12, landslides blocked Colombia's second largest river. A flash flood swept away houses, buses and cars (some 16 vehi-

cles in all). More than 100 persons were buried under tons of earth in the Cauca River Valley. It was reported that 80 passengers in two buses perished when they were trapped by a landslide. Four fishing families in a riverside settlement were carried away by the raging water.

The League of Red Cross Societies reported that over 5 million people were affected in 15 Departments. Especially hard hit were the Departments of Cesar, Bolivar, Antioquia, Atlantico, Cordoba, Magdalena and Sucre.

Spring 1971 Floods

The scene of the 1971 spring floods was a repetition of the September-December '70 disaster, but on an even wider scale. There was practically no dry season during the period from December to February, so that an early buildup of water occurred in March at the Middle Magdalena and Middle Cauca River Valleys. Floods soon resulted from Cali to Antioquia on the Cauca River with severe losses to coffee, sugar, sorghum and soy bean crops. Damage also occurred to roads and bridges. The National Railroad between Manizales and Medellin was cut in many places because of landslides. Estimated damage in the Department of Valle alone was placed at \$47 million and some 30,000 people were forced from their homes.

At the same time, the Upper Magdalena, between Neiva and Dorada, spilled over its banks. Here houses, roads, bridges and crops were destroyed or damaged and upwards of 5,000 people sought shelter outside their homes.

The flood moved down to the Lower Magdalena, affecting primarily the Departments of Bolivar and Magdalena. Losses in cattle and other livestock were substantial. The estimated loss in corn, rice and cotton was about 29%. Over 50,000 people fled their homes.

Then in June and July the floods affected Narino, Putumayo, Huila, Caqueta and Meta in Southern Colombia, driving 20,000 people from their homes.

ACTION TAKEN BY THE GOVERNMENT OF COLOMBIA AND LOCAL ORGANIZATIONS:

President Pastrana Borrero visited the flood region after the fall floods, and a state of national disaster was declared.

Although these floods were major disasters and some outside assistance was sought and given, Colombian agencies relied primarily on their own resources and administrative capabilities to cope with them.

Relief efforts were directed by the National Civil Defense following the fall floods. A Council of Ministers was called on April 5 by the President. An emergency committee was established under the National Planning Department to coordinate relief activities and to assist in reconstruction. The Committee prepared a priority list of needs and met weekly with Civil Defense, Red Cross, IDEMA and the Family Welfare Institute.

IDEMA (National Institute of Agricultural Marketing) delivered locally grown food to the affected areas. USG Food for Peace and World Food Program food supplies were also made available. Distribution of food and disaster supplies was made with the cooperation of the Colombian armed forces and US military helicopters from Panama.

Necessary steps were taken to immunize the disaster victims against typhoid. Medicines to treat diarrhea and acidity in children and for respiratory ailments were also brought in.

Assisting in the relief efforts were the Colombian Red Cross, Department and Municipal Governments, the Ministry of Government which sponsors local community action groups, the Lions Club and other private charities.

Estimated in-country donations were: \$1.5 million by ICT for reconstruction; \$4 million for Magdalena assistance; \$25 million for the cost of repair and reconstruction to the Public Works Ministry; and \$11 million set aside by the Monetary Group for agricultural rehabilitation. This does not include expenditures by Civil Defense, Colombian Red Cross, IDEMA

and local units of government or the value of aid from private groups. That this was significant was demonstrated by the outpouring of food, clothing, blankets, drugs and mattresses from the City of Pereira to help the victims in La Virginia.

The U.S. Mission said an improved effort had been made on the part of the Colombian Government to coordinate relief operations and made the following comment: "As the disaster progressed, the planning which preceded efforts allowed aid to be channeled more rapidly and effectively to the people in the flooded areas."

In a summary report prepared after the flood by the Colombia Ministry of Agriculture, it was pointed out that without improved flood control, this kind of disaster would happen again and again. The summary concluded that the Government of Colombia should have a water control program—that it could not afford to reestablish agricultural production and rebuild communications after every flood.

ASSISTANCE PROVIDED BY THE U.S. GOVERNMENT:

Fall 1970 Floods

Mr. Robert A. Stevenson, Chargé d'Affaires, declared the flood an emergency warranting U.S. assistance and authorized use of AID contingency funds for the purchase and transportation of disaster relief equipment, supplies and military personnel from Panama. AID/DRC approved expenditures in excess of the Ambassador's \$25,000 authority, and made the necessary arrangement with the U.S. Military in Panama.

USAID reported that the US Military personnel, helicopter support and disaster supplies were a decisive factor in the success of the relief operations.

50 tents, 100 cots from AID/SOUTHCOM disaster reserve/Panama	\$ 5,118
2 large tents, 92 ponchos, 25 gas stoves from U.S. Military	1,850
Helicopter support for 7 days	28,000
Transportation support equipment	800
	<hr/>
	\$ 35,768

The helicopter airlifted 120,045 pounds of food and 192 persons (doctors, nurses, Red Cross representatives, troops, and people needing medical attention).

CARE and Catholic Relief Services obtained USAID approval to use USG Food for Peace commodities to feed approximately 94,000 flood victims. These commodities consisted of 230 metric tons of non-fat dry milk, vegetable oil, bulgur, flour, CSM, rolled wheat and cornmeal. The market value of this food was \$ 78,250

In addition, the USG contributed 385 metric tons of wheat flour, cornmeal, non-fat dry milk and vegetables to the World Food Program for the flood emergency. Estimated CCC value of this food plus ocean freight was approximately \$184,000

Spring 1971 Floods \$298,018

The American Ambassador, Leonard Saccio, declared the spring floods an emergency warranting U.S. assistance, which consisted of the following:

Local purchase of drugs through the Colombian Ministry of Health	\$ 9,576
Transportation of emergency food	707
Purchase of 4 boats from U.S. Military/Panama to be used by Colombia Civil Defense for these and future flood disasters	2,592
Plus 17% accessorial charge	441
Purchase in U.S. of 4 outboard motors and other equipment for the boats	3,885
Cost of export packing and transportation to Panama	1,038
40 tents from AID/SOUTHCOM Reserve at Panama	3,600
Transportation costs to replace tents	1,026
Purchase kitchen equipment for 4 feeding centers on the Magdalena	2,200
Trucking charges from Washington, D.C. to Ft. Lauderdale for shipment of donated clothes and drugs	1,600
This shipment was picked up and delivered to Colombia by the Colombian Air Force.	<u>\$ 26,665</u>

USG P.L. 480 Food

From CARE and Catholic Relief Services stocks on hand in the country—600 metric tons of non-fat dry milk, vegetable oil, flour, bulgur, cornmeal, rolled wheat and CSM, valued at \$250,067

Through the World Food Program—217 metric tons of non-fat dry milk and 57 of vegetable oil. Estimated cost plus ocean freight \$205,000
\$481,732

Total USG Assistance both floods \$779,750

ASSISTANCE PROVIDED BY U.S. VOLUNTARY AGENCIES:

CARE and Catholic Relief Services made available 600 tons of USG Food for Peace commodities as indicated above.

CARE established a mobile kitchen in La Virginia, one of the hardest hit communities on the Cauca, with 5,000 people out of their homes. 3,000 hot meals were served daily over a two month period.

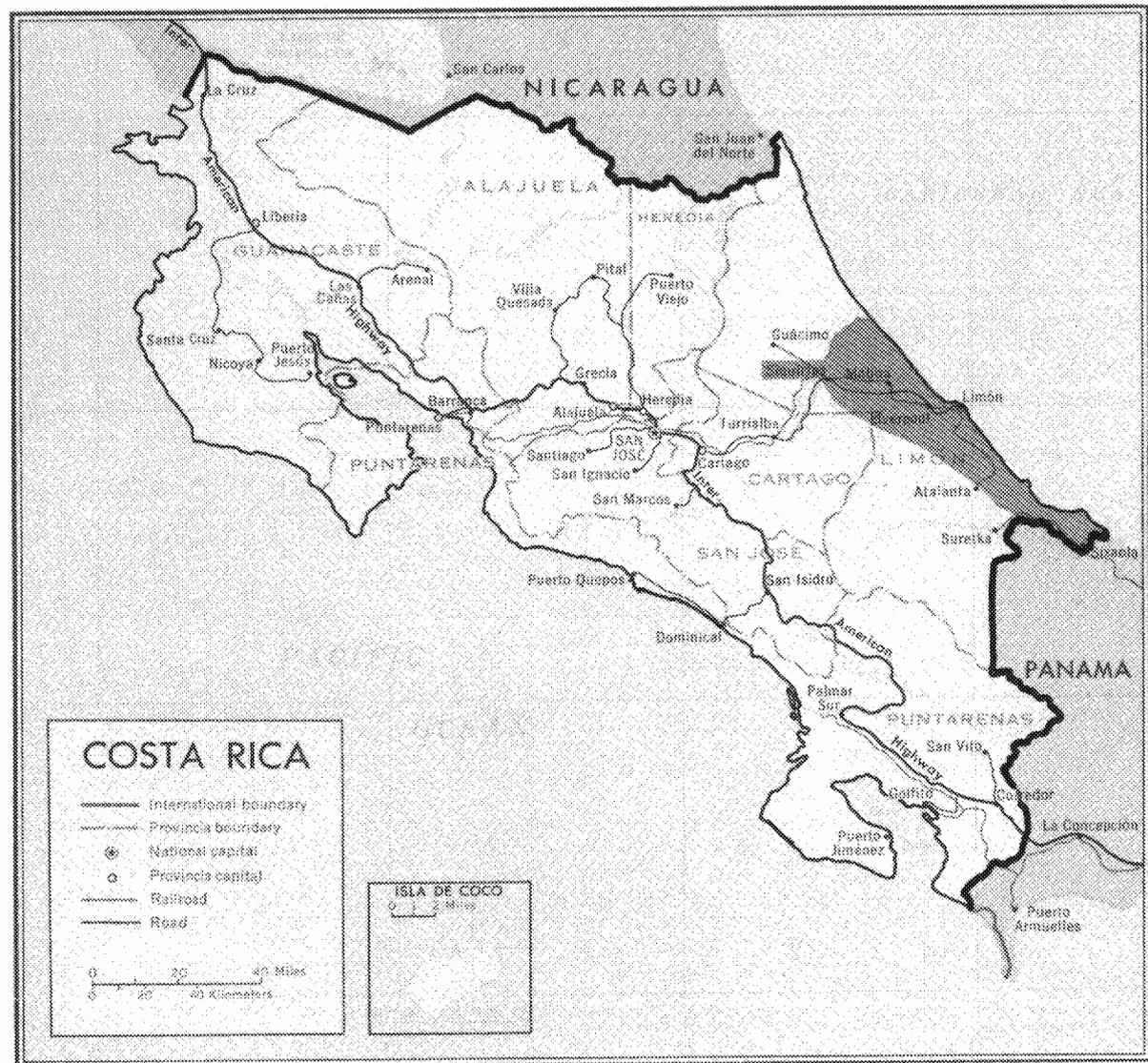
The U.S. Mission reported that both CARE and CRS used their own resources of foods, drugs and clothes to help the flood victims, but quantities and value of this assistance were not available.

ASSISTANCE PROVIDED BY OTHER NATIONS AND INTERNATIONAL ORGANIZATIONS:

The following was reported by the League of Red Cross Societies:

British Red Cross—cash	\$ 1,200
Canadian Red Cross—28 cases children's clothing and 850 blankets	9,900
Canadian Government—2,016 blankets	7,340
Dominican Red Cross—unspecified supplies	*
Guatemalan Red Cross—cash	2,000
Peruvian Red Cross—cash	2,500
Swedish Red Cross—100 sacks of clothing	9,700
Alliance of Red Cross and Red Crescent Societies of the USSR—medicaments and cloth	11,140
Magen David Adom in Israel—supplies	<u>3,510</u>

* Value not reported. \$47,290



COSTA RICA

Floods

December 4-14, 1970

... result in 1 death and the immediate evacuation of 5,200 persons—many by helicopter. Estimated damage and losses—to infrastructure \$15 million, to banana crops \$6 to \$9 million.

Value of U.S. Assistance	\$78,911
Value of Assistance by Other Nations	5,010
	<u>\$83,921</u>

DETAILS:

Severe rains flooded the eastern slopes and coastal plains of Costa Rica in an 85 square mile area from Siquirres to the Panamanian border. The Estrella Valley and the towns of Martina, Estrada, Sixaola and Siquirres and the province of Turraialba were principally affected. Much of this same area had suffered extensively from floods in April of 1970.

The flooded region is lightly populated except for small scattered communities, twelve of which became isolated during the disaster.

744 people were air evacuated; others left the disaster area by their own means. The displaced were temporarily housed in Siquirres until it was possible for them to return to their homes. However, the inhabitants of San Alberto de Siquirres could not return to their village and were resettled in other towns.

In contrast to the April 1970 floods, most of the rain fell in the lowlands rather than on the slopes, thus avoiding the ram-

ping floods of 1970, with its large toll of human lives and related damage. However, the affected zone is Costa Rica's banana growing region and the losses to this crop were a serious blow to the country's economy. It was estimated that exports for 1971 would be 4 million boxes less than had been anticipated. A total of 48,000 acres of bananas were either damaged or destroyed.

The Northern Railway mainline and the RECOPE oil pipeline linking Limon with the Central Plateau were both cut. The San Jose-Limon railway link was out of operation for three months. Because of the break in the RECOPE pipeline, it was necessary to transport refined products via Puntarenas and to utilize a truck-rail combination for shipments from Limon. It was impossible to assess the economic loss caused by shortage of gasoline and diesel oil.

Bridges and highways sustained severe damage, and the Government of Costa Rica estimated overall damage to the infrastructure at \$15 million.

ACTION TAKEN BY THE GOVERNMENT OF COSTA RICA AND LOCAL ORGANIZATIONS:

The Government Civil Defense Office worked with diligence and efficiency, mobilizing personnel to go to the affected areas and to set up relief centers for displaced people. It also conducted a very successful public campaign to collect clothes for the victims. The Ministry of Health obtained 50,000 pounds of locally produced powdered milk for the emergency with an estimated value of \$12,500.

As soon as the extent of infrastructure damage became known, the Government passed an extraordinary budget of \$900,000 for repairs and the rebuilding of highways, bridges, pipelines and other public facilities.

Helicopter support was requested from the U.S. to assist in the evacuation of flood victims and to deliver disaster relief supplies to isolated areas.

ASSISTANCE PROVIDED BY THE U.S. GOVERNMENT:

At the request of the Government of Costa Rica (GOCR) the American Ambassador and AID/DRC authorized the U.S. Military in Panama to deploy helicopters and cargo aircraft to the flooded areas. One CH-3 and two UH-1 helicopters flew relief missions throughout the Atlantic Zone; a C-123 made four re-supply airlifts between San Jose and Puerto Limon; and U-21, C-123 and C-130 aircraft operated between the Canal Zone and Costa Rica transporting equipment and passengers.

Helicopter operations were placed under the supervision of the U.S. Military Mission in Costa Rica, which enabled the USAID Disaster Relief Officer to devote his time to overall coordination of relief operations and liaison with Costa Rican authorities.

The helicopters flew 314 sorties, evacuated 744 people and airlifted 160,200 pounds of food and clothing.

USG P.L. 480 Food for Peace, Title II commodities were made available from CARE and Catholic Relief Services in-country stocks.

After the floods, USAID obligated funds for the services of an engineering consulting firm to advise the GOCR on protective works to be constructed and to pay for rental of road repair equipment on an interim basis until the GOCR obtained its special extraordinary appropriation of funds.

Recap of USG Assistance

AID Contingency Funds

U.S. Military airlift and helicopter support	\$46,478	
Per Diem U.S. Military crews	3,838	
Rental of road repair equipment	<u>12,121</u>	\$62,437
Engineering Consulting firm	7,500	

USAID Mission Funds

P.L. 480 Food for Peace

63,000 pounds of rolled oats, flour, bulgur, vegetable oil and non-fat dry milk, valued at	<u>3,974</u>
Total USG Assistance	\$73,911

The U.S. Mission made the following comments in its report on this disaster:

"The only kind of effective assistance in a disaster of this kind is the use of helicopters to airlift supplies and evacuate victims from areas which cannot be reached by land. Thus U.S. helicopters proved to be the most important aspect of the overall relief operation.

Our assistance was greatly appreciated by the Costa Rican Government and people as a sign of true friendship on the part of the United States. As in previous floods, the U.S. helicopters and crews were the subject of praise by the Costa Rican press, and the people in the affected areas showed their deep appreciation and gratitude for these efforts."

ASSISTANCE PROVIDED BY U.S. VOLUNTARY AGENCIES:

CARE and Catholic Relief Services released the above mentioned P.L. 480 food for flood relief.

CARE—cash donation for local purchase of 900 blankets, 144 baby bottles, special pump and equipment and medicines	<u>\$2,000</u>
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Church World Service—cash donation for local purchase of blankets and other disaster supplies for victims in the Limon area	<u>3,000</u>
	\$5,000

ASSISTANCE PROVIDED BY OTHER NATIONS AND
INTERNATIONAL ORGANIZATIONS:

Israel—supplies valued at \$5,010

ECUADOR

Floods

November 1970

March 1971

... cause evacuation of 10,100 in Imbabura and Guayas Provinces.

Value of U.S. Assistance\$1,843

DETAILS:

November 1970 Floods

During the early part of November, the Ambuqui River overflowed and seriously affected an estimated 100 persons in the Province of Imbabura. Eight families were left homeless, and many acres of recently planted land were covered with water. Dollar damage was estimated at \$20,000.

March 1971 Floods

Flooding occurred along the banks of the Babahoyo River in Guayas Province in the vicinity of Guayaquil. Some 10,000 flood victims in five or six villages were in need of assistance. Four of the villages—Samborondon, Juan B. Aguirre, General Vernaza and Urbina Jado—were completely inundated and the population isolated.

ACTION TAKEN BY THE GOVERNMENT OF ECUADOR

Distribution of food for the November flood victims was supervised by the local police in coordination with Caritas/Ibarra Inspector.

For the March floods, the Commander of the Second Military Zone of Guayaquil requested food assistance from Catholic Relief Services for 650 families. USAID authorized CRS to donate 20,000 pounds of USG PL 480 commodities. The food was delivered to Major Jorge F. Vasquez for distribution using Ecuador Army personnel and vehicles.

The Government of Ecuador, acting through the Ministry of Defense, provided local commodities for distribution to approximately 500 families, which were a separate group from those that received PL 480 food. This food consisted of rice, sugar, salt, spaghetti, lard and beans in the amount of 30,000 pounds, valued at about \$2,000. CRS Program Director, Richard A. Redder, made the following statement concerning GOE relief operations: "We are pleased with the manner in which this emergency was handled and with the cooperation and aid provided by the Ministry of Defense. The assistance was timely, distributions prompt and orderly, and, therefore, the recipients were very satisfied and grateful."

ASSISTANCE PROVIDED BY THE U.S. GOVERNMENT

The only assistance requested by the Government of Ecuador from the USG was through Catholic Relief Services for PL 480 food. Deployment of such food by CRS was approved by USAID as follows:

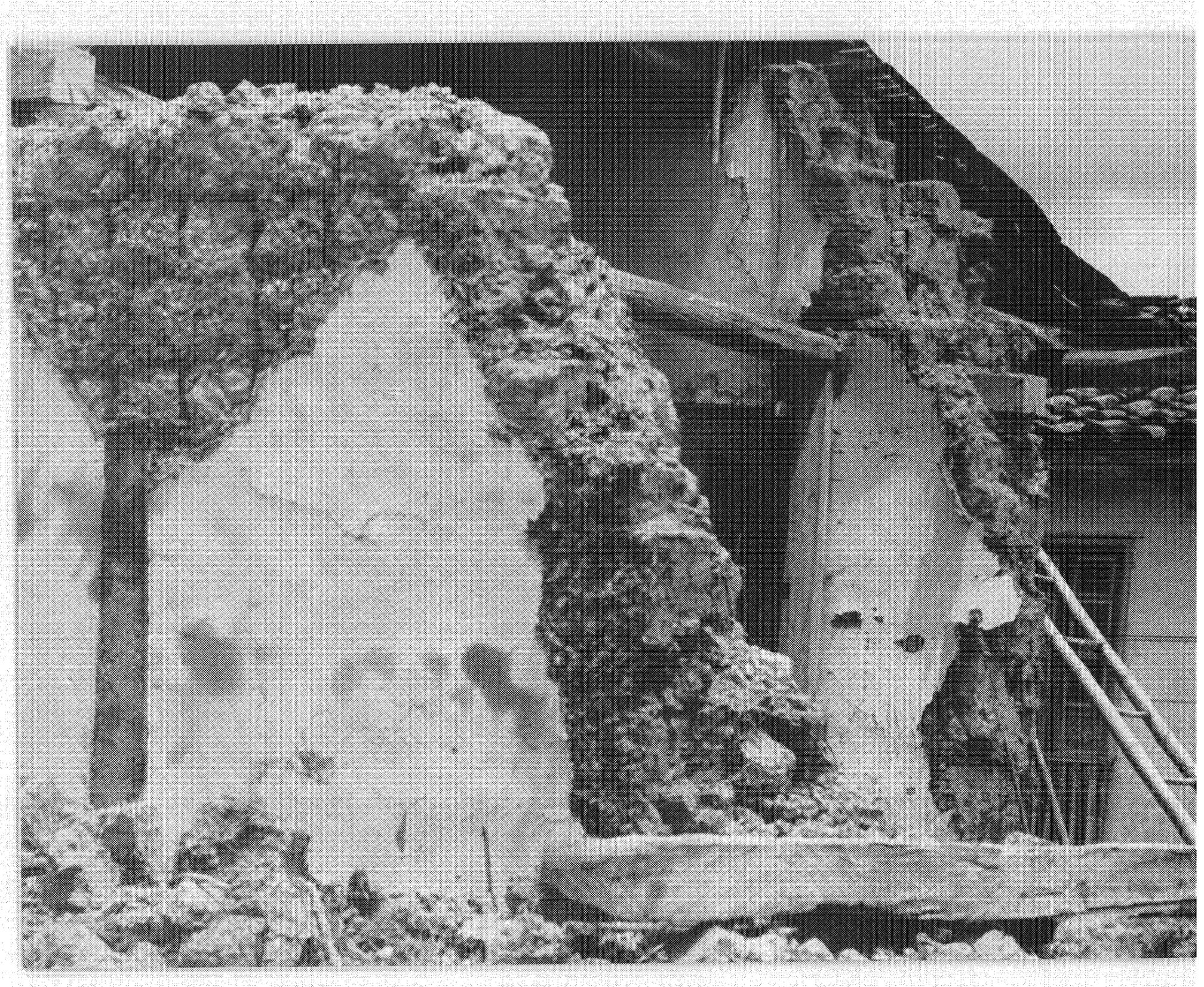
November Floods —1300 pounds of CSM, flour, bulgur and vegetable oil, and rolled oats with an estimated value of	\$ 86
March Floods —19,696 pounds of flour, CSM, bulgur and vegetable oil, valued at	1,757
	<u>\$1,843</u>

ASSISTANCE PROVIDED BY U.S. VOLUNTARY AGENCIES

A direct request for food assistance was made to CRS by the Government of Ecuador Army. CRS responded immediately with the previously listed PL 480 commodities. CRS representatives visited the flood areas and observed the relief operations. See comments under GOE section of this report.

ASSISTANCE BY OTHER NATIONS AND INTERNATIONAL ORGANIZATIONS

None reported.



ECUADOR—PERU

Earthquake

... measuring 7.6 on the Richter magnitude scale, lasting 40 seconds, strikes Ecuador/Peru border areas. Epicenter of the earthquake was 40°S, 80.7° W. In Ecuador, Loja Province was the most affected; in Peru, two provinces—Piura and Tumbes. Consequences to each country were:

Ecuador—29 persons killed, 120 injured, 27,992 left homeless, 60,000 affected; property losses—929 houses destroyed, 6,000 damaged, 200 public buildings and 192 schools destroyed; estimated dollar damage—\$4 million.

Peru—29 persons killed, 252 injured, 15,000 left homeless; property losses—5,000 houses damaged beyond repair; estimated dollar damage—\$2 million.

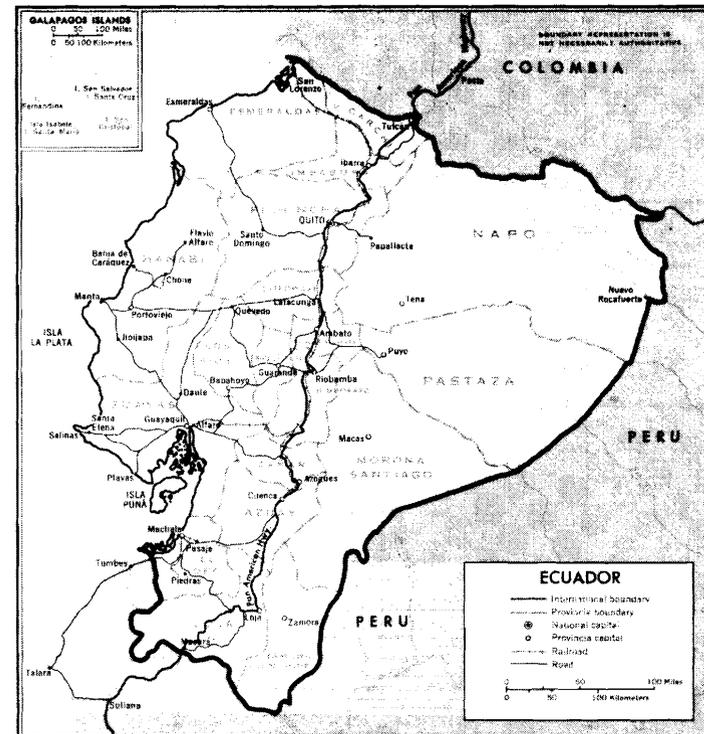
Value of U.S. Assistance	\$157,727
Value of Assistance by Other Nations	42,000
	<u>\$199,727</u>

DETAILS—GENERAL

On December 9, 1970, a strong earthquake struck the border areas of Ecuador and Peru at approximately 11:30 P.M., local time. A series of lesser tremors were felt throughout December 10, with a sharp one measuring about 5 on the Richter scale occurring about 12:45 A.M. By December 15, 50 aftershocks of varying intensities had been reported.

DETAILS—ECUADOR

In Ecuador, the earthquake affected approximately 60,000 people in a 100 square mile area of Loja Province. An Ecuadorian



army officer described the heaviest damage as being on a line commencing in the Northwest at Alamor through Celica, Cariamanga and Amaluza to the Southeast. The small centers north of Loja-Cariamanga-Macara road were badly hit. All roads, however, remained open.

In the Northeast, Cariamanga with a population of 9,000 sustained extensive structural damage to 90 percent of its houses, and the hospital and school were destroyed or damaged beyond repair. Severe property damage also occurred in some of the villages. Alamor had moderate to severe structural damage to its more than 250 houses, as did Sabiango, while damage to buildings in Celica was mild. Macara was only moderately affected. It had the only airstrip in the earthquake zone which could accommodate C-130 aircraft and became the base for receiving and disbursing supplies for other towns and villages.

While there were a few communities severely affected, damage generally was confined to cracked walls and caved-in roofs. Most of the schools reported beyond repair were old, small ones of simple construction in outlying areas. The several new Alliance for Progress schools fared quite well. In all, 6,000 homes were damaged—80 percent with collapsed or damaged roofs and 20 percent with cracked and broken walls.

Many of the people from villages in the outer regions came into the larger towns looking for food and water. The immediate needs for the entire area were for shelter (tents), food and construction material (roofing).

Ecuadorean physicians who visited the area found very few injuries. The few requiring hospitalization had already been evacuated to Loja or Macara. The most common medical problem among most of the population was anxiety, which in some cases required sedation. Problems of public health and sanitation were not critical nor was there an immediate danger of epidemic from water or pests. There was some overcrowding in a few of the tent cities and difficulty in obtaining enough water since the rivers at the end of the dry season were running low. Sanitation, poor to begin with, was essentially unchanged.



By December 14, it was reported that people in some of the towns were in the process of rebuilding and moving back into their houses. Other towns, lacking leadership, made no immediate effort to clean up or to reconstruct. Also many people were slow to return to their homes for fear of another earthquake.

A description of the province in which the earthquake occurred follows: Loja is the largest province in Ecuador with a scattered population of over 300,000. For the most part it presents a depressing scene, both from the standpoint of poverty and the terrain. Agriculture is generally restricted to deep cut narrow river valleys and gorges. Drought is an old story in this region. Communications and public facilities are limited. Brand new, colorful Alliance for Progress schools and occasional good sections of road stand out as the only signs of limited progress. Most of the houses in the countryside are adobe, or cane. The roofs are most frequently constructed of earth tiles.

DETAILS—PERU

Tumbes, a provincial capitol located on the Pacific coast, was the nearest Peruvian town to the epicenter of the earthquake. Communication to this extreme northern province was temporarily cut off. Initial news about the disaster was only available from travellers coming out of the province. The Province of Piura was also seriously affected.

In all, some 5,000 homes were damaged beyond repair. The greatest source of casualties was from falling adobe houses. Despite some damage caused by cracking, openings of the ground, slipped bridges and fallen debris, the roads remained transitable. The most serious damage occurred in the small agricultural or fishing villages. Larger towns with better quality house construction such as Sullana, Talara and Tumbes reported less damage. The City of Piura escaped with little or no damage to housing or public buildings other than medium damage to four schools. Irrigation systems in Chira and Tumbes River Valleys were seriously damaged. One US Peace Corps Volunteer in Tumbes Province received a broken leg.



As of December 14, the situation of these two provinces was nearly normal with no lack of food or medicines. News media, however, reported that on December 18, the President of Peru declared a state of emergency for the districts of Salitral, Querecotillo, Mancoro, Casitas, Corrales and Canaveral. The decision was taken to rehabilitate the region quickly and to bring about economic recovery in the shortest possible time.

ACTION TAKEN BY THE GOVERNMENT OF ECUADOR AND LOCAL ORGANIZATIONS:

The Ecuadorean Army was in charge of the earthquake relief program. It acted promptly and disaster operations were well organized. Four temporary commissions were established—Nutrition, Health, Clothing and Housing—all of which functioned with commendable dispatch under the direction and coordination of the Army, assisted by the Ministry of Public Health. Incomplete information on value of in-country contributions includes \$84,600 from public sources and \$135,640 from private sources, the bulk of which was raised through TV marathon shows. Contributions of the Ecuadorean Red Cross in medicines, roofing sheets and clothing totaled \$15,000.

The above figure for public assistance does not include services and cost of surface and air transport. (For example, an "air bridge" was set up between Guayaquil and Loja.) An Ecuadorean Air Force plane engaged in relief efforts crashed, killing all nine people on board.

Medical aid was prompt and well organized by Ecuadorean doctors and the Army.

The Army received, warehoused and trucked food to the affected areas and coordinated its use in established zones in cooperation with local civilian officials. Food, in pre-established amounts, was turned over to local school and public committees for distribution. The Army kept complete records of food distribution which later checked out very well with the established plan. At the start, efforts were made to serve the food only in prepared form. For example, in Cariamanga, prepared hot food was served at established feeding centers

for 15 days. Thereafter, it was distributed in bulk form. Local Army officers explained that the system broke down because teachers tired of preparing the food, and the distances many people had to come to get the food twice a day were excessive.

It was reported that 60,000 people—34,000 children and 26,000 adults—received food under the plan set up by the Government of Ecuador Nutrition Commission. The GOENC input was 730,000 pounds of rice, potatoes, salt, sugar, beans, onions and peas, while 423,000 pounds of USG P.L. 480 food commodities were made available by CARE and Catholic Relief Services.

Assistance was requested from the USG for tents, food and airlift and for a survey team. From January 12-16, 1971, Mr. H. E. Haight of the U.S. AID Mission made a field trip to some of the communities affected by the earthquake. He was accompanied by Sr. Cesar Astudillo of Catholic Relief Services. His trip report included the following statement concerning food:

“Probably more food went into the area than could be justified by requirements growing out of the emergency. Perhaps one half of the amount of food and one half the time of distribution would have sufficed. However, considering the poverty of the area and the psychological/morale factors involved this concrete evidence of government and outside concern was both appropriate and useful.”

Sr. Astudillo based on several years' experience in CRS' feeding programs, regarded this operation as the best run he had ever seen. He gave much credit to the Ecuadorean Army for its success.

ASSISTANCE PROVIDED BY THE GOVERNMENT OF PERU AND LOCAL ORGANIZATIONS:

Early on the morning of December 10, the Government of Peru dispatched two Peruvian Air Force planes to the earthquake area with 10 tons of medicines, food, clothing, and

other relief supplies. Soon after, teams of doctors, nurses and assistants went into the area. An antityphoid vaccination program was immediately carried out.

At noon on December 10, the Ministers of Interior, Housing and Health left in the presidential plane to make a personal survey and inspection and to set up relief procedures. They arrived in Piura at 1700 hours and quickly formed a Regional Relief Committee.

On December 11, a Peruvian Air Force Hercules flew in with additional food, medicines and supplies followed by truck convoys, including tanks of potable water for the smaller towns.

Besides the Peruvian Government and Military, JAN (Junta de Asistencia Nacional), CARITAS and the Peru Red Cross were involved in the relief operations. JAN and CARITAS received and distributed food provided by U.S. voluntary agencies. The Red Cross sent 12 tons of relief supplies and also participated in distributing them to the earthquake victims.

USG-donated tents



The Peruvian Military formed special groups to attend to tasks related to medical needs, housing repair, food distribution, damage surveys, irrigation repair and agriculture.

A U.S. Mission Report stated: "Rapid attention by the Government of Peru to disaster area problems displayed experience gained in previous disasters."

ASSISTANCE PROVIDED BY THE U.S. GOVERNMENT:

Ecuador

The American Ambassador declared the disaster to be of a magnitude to warrant USG assistance and authorized expenditures up to \$25,000 under his disaster relief authority. This was later increased with approval of AID/DRC Washington to \$95,000 to cover reimbursement to the U.S. Military in Panama for a Disaster Area Survey Team, 500 tents, medical supplies and two helicopters, which had been requested by the Government of Ecuador.

The Deputy Chief of Mission in the American Embassy personally arranged for the survey team, supplies and airlift from Panama.

USAID made the arrangements for use of in-county P.L. 480 Title II food for disaster relief in liaison with CARE and Catholic Relief Services and sent representatives to the area.

The Disaster Area Survey Team (DAST), headed by Major Juan R. Collazo, Jr., arrived in Ecuador on December 11 on board a US C-130, which also carried plasma and medicines. On December 12, two more C-130's airlifted two UH-1 helicopters, a communications team with equipment, portable generators and 144 tents, and a fourth C-130 flew in with 356 tents on December 13. The Command Post for DAST was set up at Macara where communications personnel and helicopters were based.

The primary mission of DAST was to assess the damage to population and structures and to determine the immediate as well as extended needs of the area. Its after-action report not only covered towns and villages visited in making the survey but also made certain recommendations for future use of DAST as follows:

1. That DAST bring one 1/4 ton vehicle as an essential item of equipment. A great deal of time was wasted by this DAST waiting for transportation into the area.
2. That the chain of command be clearly delineated on arrival of the DAST and that the Commander of DAST be given control of all US personnel in the disaster area.
3. That all MILGROUPS develop a disaster plan and coordinate with local government agencies in training personnel in preparation for a disaster relief effort.
4. That all MILGROUPS be prepared to brief the DAST on background information concerning the area of the disaster. Such information as geography, climate, population distribution, public works, and public health existing prior to a disaster is essential in making any accurate survey.
5. That accurate maps of the area be available for the DAST, also essential to an accurate survey.
6. That medical care, transportation and distribution of supplies be done by local organizations whenever possible so that the people of the area will gain confidence in their own resources and will not become overly dependent on outside assistance.

Summary of U.S. Government contributions:

500 tents from Panama	\$ 44,625
Ocean transport costs for replacing tents in stockpile	3,800
DAST Team, Army and Air Force personnel per diem and travel	2,860
Medical supplies from USARSO	5,871

Flying hour costs, U.S. Army helicopters	2,115
Flying hour costs, USAF C-130's	35,387
	<u>\$ 94,658</u>

P.L. 480 Food

CARE commodities—67,000 pounds of nonfat dry milk; 4,000 pounds flour; 1,000 each bulgur and rolled wheat and 12,358 pounds vegetable oil	
CRS—30,000 pounds CSM; 25,000 pounds flour; 60,000 pounds cornmeal; 31,700 pounds bulgur; 88,342 pounds rolled oats; and 23,100 pounds of vegetable oil	
CCC value this 343,500 pounds	\$ 34,431
	<u>\$129,089</u>

USG-donated tents:

The Ecuadorean Military at Macara acknowledged receipt of only 444 of the 500 tents delivered by the C-130's. Speculation was that the US helicopters had distributed the missing 56 tents directly to other sites in the disaster area.

Initial reports on the disaster were exaggerated. As a consequence, US response in tents and foods was in excess of actual need. See above comments under GOENC actions concerning food. The excess tents created no serious loss as the Ecuador Army established procedures (including a receipt form used at some locations) to re-collect the tents and warehouse them for use in future disasters. The Mission recommended that reference be made to the existence of these tents and the Military's verbal commitment to retain them for other disasters, should the US receive a new request for same in the future.

Peru

No outside assistance was requested by the Government of Peru. The U.S. Mission reported that the Government of Peru took prompt and effective relief action in what was considered a relatively minor disaster. However, USAID recommended

that the two northern districts affected be made eligible under the rehabilitation and reconstruction assistance grant for the May 31, 1970 earthquake.

The electric power system in Tumbes sustained damage estimated at \$125,000. Tumbes had a 25 percent shortage in electric power at peak demand hours prior to the earthquake and needed extra power supply. New power sources could not be sought by the Servicios Electricos Nacionales under its planned budget because it had become necessary to make repairs to the existing power system. It was recommended by USAID and approved by AID/W that two 800 KW generators, provided for areas affected by the May 1970 earthquake under the USG \$7.4 million reconstruction grant, be utilized in Tumbes. Value of these generators was included under the earlier earthquake report and is therefore, not included here.

Catholic Relief Services and Seventh-Day Adventist Welfare Service delivered P.L. 480 food to the two provinces but report on amount and value was not received.

ASSISTANCE PROVIDED BY U.S. VOLUNTARY AGENCIES:

Ecuador

CARE and CRS made above P.L. 480 food available:	
CARE—also donated 150 cases of baby food valued at	\$ 638
Catholic Relief Services—also donated cash for self-help and reconstruction	<u>20,000</u>
	<u>\$20,638</u>

Peru

Catholic Relief Services gave assistance through CARITAS, which was active in the relief effort. Kind, quantity and value were not reported.

Church World Service—On December 11, CWS sent two representatives and a truck with food commodities, as well as 25 tents and 500 blankets with an estimated value of	\$ 4,000
Seventh Day Adventist Welfare Service—Sent a truck with 8 tons of clothing, food, medicines, which arrived on December 11. Estimated value	<u>\$ 4,000</u>
	\$ 8,000

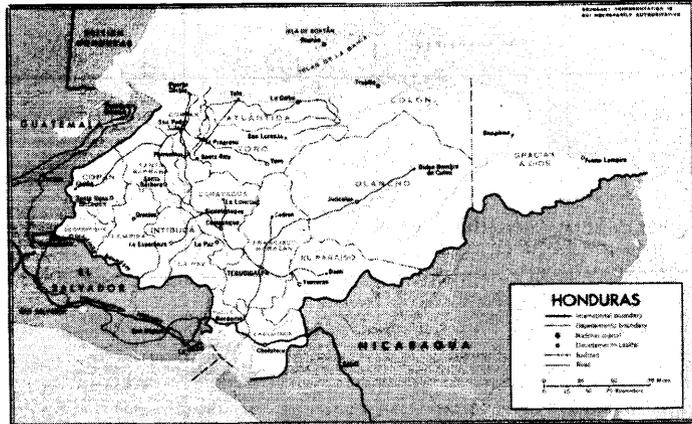
ASSISTANCE PROVIDED BY OTHER NATIONS AND INTERNATIONAL ORGANIZATIONS:

Ecuador

Organization of American States—Purchased 40,247 corrugated asbestos roofing panels (made in Ecuador and called "Ardex") to reroof 700 to 800 homes at a cost of	\$30,000
The Government of Peru sent 5 tons of clothing to Ecuador and 2,000 gallons of gasoline, and the Peru Red Cross furnished an airplane with medical staff and two tons of medicines and cloth. No value was given but this has been estimated by AID/DRC at approximately	<u>\$12,000</u>
	\$42,000

Peru

No requests were made for outside assistance from the OAS or other nations.



HONDURAS

Poisoned Food

May 10-12, 1971

... kills 37 of the Presidential Honor Brigade; 123 others are hospitalized.

Value of U.S. Assistance\$1,127

DETAILS:

Massive food poisoning took place in Marcala, an outpost 50 miles west of Tegucigalpa, among a company of the Presidential Honor Brigade, who were there for training.

Investigation revealed that "Baygon", a carbamate insecticide spray, had been used three weeks prior to the outbreak to spray the inside of a food storage room. All of the food had been removed prior to the spraying but was replaced in the room after three hours. It was believed that the insecticide had contaminated the sugar.

Subsequently, it was determined that Parathion, an organic phosphate poison used as an insecticide, had been identified to have contaminated the bread. Samples of biscuits from a batch served on May 10 and 11 were later analyzed at U.S. facilities in Panama and found to contain 790 ppm Parathion and 60 ppm Methyl Parathion per biscuit. Depending on an individual's body weight, it was determined that one or two biscuits with such a concentration could be fatal.

On May 10, 30 men became violently ill and on May 11 another 126 were stricken. By May 12, 160 cases had been reported. Some died at Marcala. Many of the victims were evacuated to San Felipe Hospital in Tegucigalpa.

ACTION TAKEN BY THE GOVERNMENT OF HONDURAS AND LOCAL ORGANIZATIONS:

Patients were treated locally, and the Honduran Air Force, assisted by the U.S. Military, evacuated the seriously ill to Tegucigalpa. The U.S. Military reported that local physicians had performed an outstanding job in treating the victims.

The Honduran Minister of Health took an active interest in the investigation to determine the cause of the poisoning.

ASSISTANCE PROVIDED BY THE U.S. GOVERNMENT:

A U.S. Army helicopter, assigned to Honduras in support of the Organization of American States, had stopped in Marcala on May 11. The pilot was requested by a U.S. Army Officer on duty in Marcala to take eight seriously ill Honduran soldiers to Tegucigalpa for treatment. While it was still enroute, a radio message was sent to Tegucigalpa asking that when the helicopter arrived it be returned immediately to Marcala to pick up nine others. Subsequently, many more became ill and were evacuated by the Honduran Air Force.

During the night of May 11, many of those who became ill were treated successfully by two U.S. Army medics.

On May 12, the U.S. Military Group in Honduras learned of the poisoning and that insecticide was suspected. The USMILGP coordinated helicopter transportation to Marcala of members of the Honduran Joint General Staff, who were investigating further into the cause of the tragedy.

On May 12, the Honduran President requested medical assistance from the U.S. through the MILGP. The USARSO Surgeon's Office in Panama was contacted by the Mission radio phone to permit medical consultation between local doctors and the USARSO Surgeon.

The American Ambassador exercised his disaster relief authority to commit A.I.D. contingency funds, and on May 13, three

U.S. Military doctors and two Medics arrived in Tegucigalpa to provide medical assistance. They brought with them approximately 250 pounds of medical supplies that were urgently needed since local supplies had been almost depleted.

The team met with hospital officials, examined and interviewed approximately 70 patients. Three members returned to the Canal Zone on May 14. Two remained to collect samples of blood and foodstuffs and departed on May 15. The samples were analyzed at Gorgas and U.S. Public Health Poison Examination Centers. Consumed bread was found to have been contaminated with insecticide.

Costs to the A.I.D. contingency fund for these operations were:

Five personnel TDY	\$ 257
Medical supplies	390
Aircraft flying time	480
	<hr/>
	\$1,127

The following is quoted from a report by the USMILGP: "The performance of the two US Army medics, SSG Phillips and SGT Kessler, was exemplary, and certainly resulted in the saving of life the first night of the crisis."

ASSISTANCE PROVIDED BY U.S. VOLUNTARY AGENCIES:

None.

ASSISTANCE PROVIDED BY OTHER NATIONS AND INTERNATIONAL ORGANIZATIONS:

None.



MARTINIQUE

Tropical Storm

... "Dorothy" strikes Martinique on August 20, 1970, causing more deaths than any storm in 10 years in the French Antilles—45 killed, 5,000 evacuated. Estimated dollar damage—\$31 million.

Value of U.S. Assistance\$24,196

DETAILS AND BACKGROUND:

The following record of previous storms since 1967 contrast their effects with "Dorothy" in terms of lives lost:

Year	Hurricane	Location	Killed
1970	Dorothy	Martinique	45
1963	Dora	St. Martin and St. Barteley	2
1963	Edith	Martinique	10
1964	Cleo	Guadeloupe	14
1966	Inez	Guadeloupe	26
1967	Beulah	Martinique	13

Practically all of the damage from "Dorothy" was caused by water. Winds reached a brief maximum velocity of 90 miles an hour but were scarcely noticed on most of the Island. An extraordinary amount of rain accompanied the storm. Six inches fell in a single hour. The results were torrents and landslides in the mountain valleys and floods in the coastal lowlands and in the city of Fort-de-France. The river Madame, which flows through Fort-de-France and drains the surrounding hills, can handle a flow of 100 cubic meters per second. At the height

of the rainfall the flow was estimated to be 300 cubic meters per second. The rushing water tore up roads, power lines, water conduits and destroyed four bridges. The floodwater and mud reached a depth of over 5 feet in Fort-de-France and seeped into merchandise stores and houses. Merchants sustained heavy stock losses, but the buildings, while dirtied by mud and water, did not suffer much damage.

Although as many as 5,000 people had to be evacuated temporarily from their homes, relatively few dwellings (150 by official estimate) were completely destroyed. These were in the areas where the majority of deaths occurred.

The estimated \$31 million in material damage included roads, bridges, waterworks, power equipment, sugar and banana crop losses, destruction of warehouse stocks, private dwelling and personal property.

ACTION TAKEN BY THE FRENCH AND LOCAL UNITS OF GOVERNMENT AND ORGANIZATIONS:

The Government of France, units of local government, the Army and the Martinique Red Cross cooperated in relief efforts. Details and value of this assistance were not available, but the following comment of the American Consul indicates relief operations were effective:

“French capability to deal with such disasters has greatly improved in the last several years. This is the result of (1) the considerable investment in infrastructure which was made during the 1960’s and the resulting increases in stocks of machinery such as bulldozers, scrapers, and various emergency supplies; (2) the more frequent and quicker communications by air and sea with metropolitan France; (3) the greater amount of merchandise stocked by local merchants; and (4) the greatly increased capability of the local Military in the civic action field resulting from the institution in 1960 of the Service Militaire Adapte (SMA), which includes a military public works program used to train local conscripts in various trades. The Army even brought in special engineers to install Bailey bridges sent from France.”

ASSISTANCE PROVIDED BY THE U.S. GOVERNMENT:

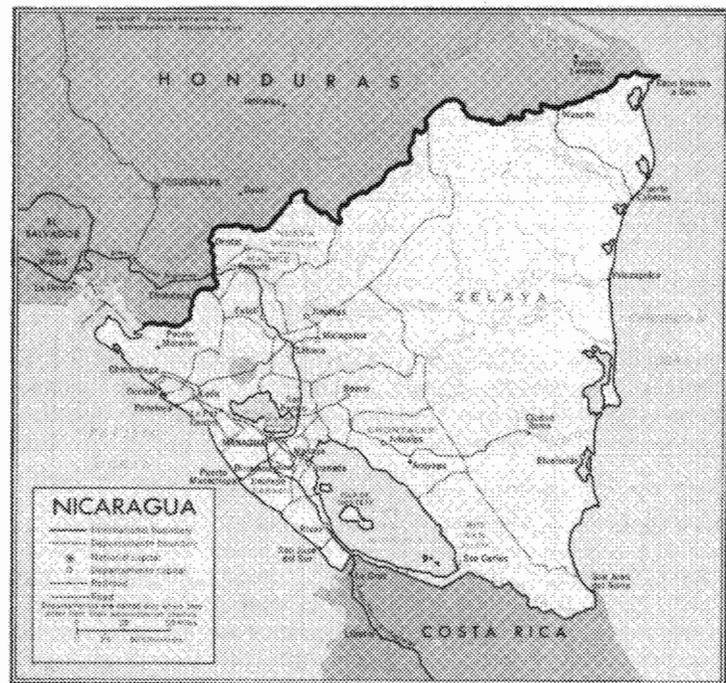
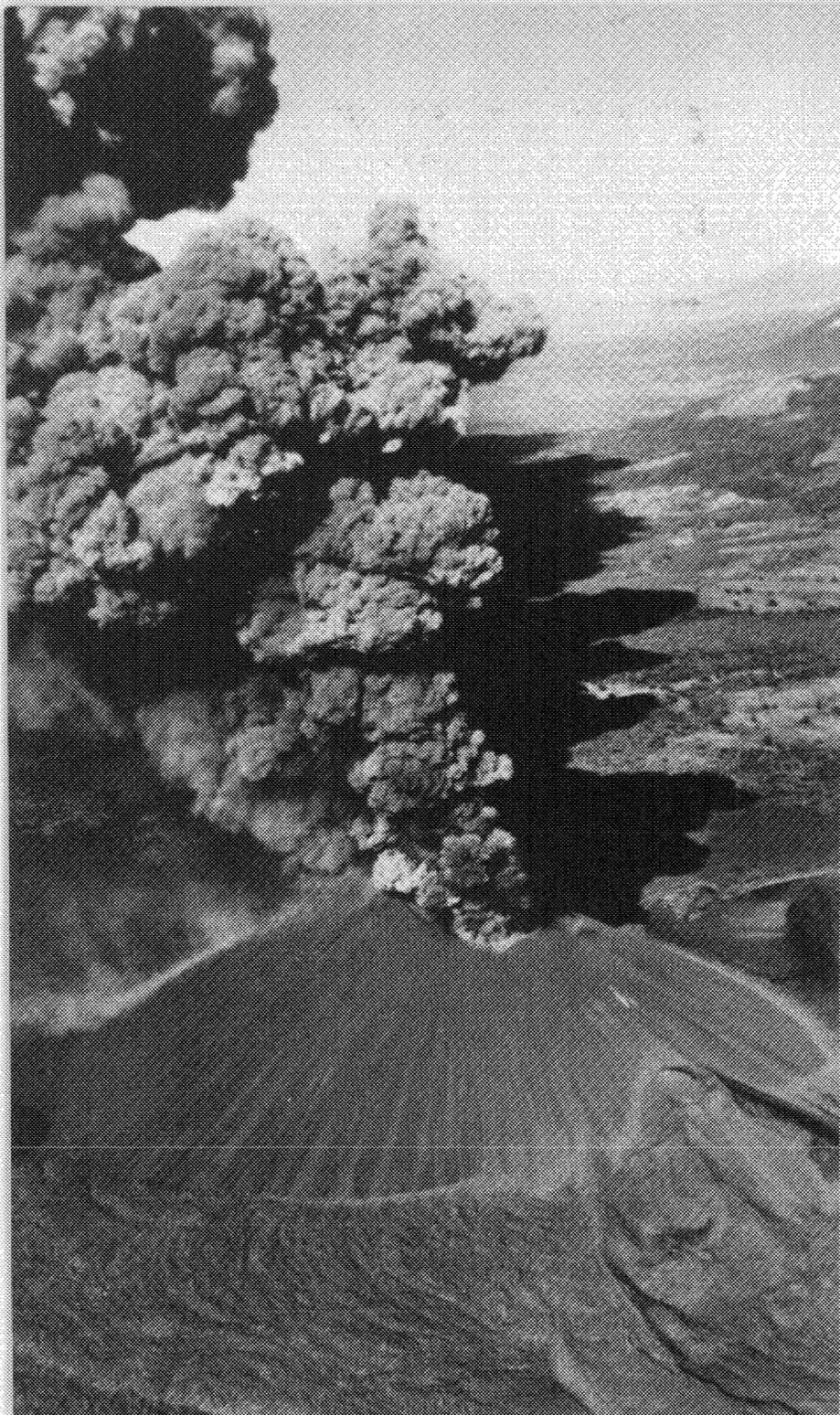
The American Ambassador exercised his disaster relief authority to make a cash donation from the A.I.D. contingency fund to the Prefect of Martinique for the local purchase of disaster supplies in the amount of \$ 5,000
 AID/DRC also authorized payment of airlift costs for a shipment of clothing by Catholic Relief Services for the storm victims. These charges amount to \$ 1,366
\$ 6,366

ASSISTANCE PROVIDED BY U.S. VOLUNTARY AGENCIES:

Catholic Relief Services donated three tons of light clothing, valued at \$10,330
 Seventh Day Adventist Welfare Service also sent 4,000 pounds clothing from the U.S. via Air France and made a cash donation of \$3,500, totalling \$ 7,500
\$17,830

ASSISTANCE PROVIDED BY OTHER NATIONS:

None reported.



NICARAGUA

Volcano Eruption

February 3, 1971

... of Cerro Negro, for the second time in two years, destroys 100 houses and deposits ash over a 3,400 square mile area. 600 people were left homeless, 1,000 were evacuated and 3,000 were directly affected. Considerable crop damage occurred. Estimated dollar damage—\$2 million.

Value of U.S. Assistance	\$29,630
Value of Assistance by Other Nations	18,140
	<u>\$47,770</u>

DETAILS:

The Cerro Negro Volcano, which has a long history of volcanic eruption, erupted once again at 09:30 hours on February 3, 1971, and continued for ten days, causing great damage to the surrounding area. The last previous eruption was on December 10, 1968. The 1971 eruption was the more serious of the two.

Cerro Negro is located in a chain of a group of five volcanoes on latitude 12°31' North and longitude 86°44' West. It is 33 miles northeast from the city of Leon and 35 miles northwest from Managua.

According to a Government of Nicaragua report, the fallout covered an area of more than 3,400 square miles with ash. The report divided the area into four zones. Zone 1, the most affected area, (approximately 35 square miles) was covered with 4 to 16 inches of ash. Zone 2, with a cover of from 1 to 4 inches, extended approximately 55 square miles. The other two zones were less affected. The city of Leon, with a population

of 60,000, was covered with over 1 inch of ash. The report stated that land in Zone 1 was unsuitable for further cultivation and recommended that families living in this area be resettled. The other three zones remained suitable for cultivation.

The livelihood of approximately 3,000 people was affected by the ash fallout. Of these 3,000, approximately 1,000 had to be evacuated to emergency camps.

ACTION TAKEN BY THE GOVERNMENT OF NICARAGUA AND LOCAL ORGANIZATIONS:

The Red Cross and the Leon Emergency Relief Committee, with assistance from the "Civil Action" of the National Guard, the Public Works Department, the Nicaraguan Institute of Development, the Leon Fire Department and many other government and private agencies, were quick to evacuate disaster victims and to establish emergency camps.

The Red Cross and the Leon Emergency Committee mounted a local press, radio and T.V. appeal, to obtain funds and supplies for the victims. These local donations amounted to approximately \$42,000 in local currency and \$14,000 in goods.

President Somoza declared the eruption a National Emergency on February 10 and established a Commission headed by the Minister of Agriculture and Minister of Economy to coordinate international assistance.

The U.S. Mission reported that while there were some problems in coordinating relief operations and some duplication of effort, the actions taken were responsive to the needs of the people and effective.

ASSISTANCE PROVIDED BY THE U.S. GOVERNMENT:

The American Ambassador did not exercise his authority to use A.I.D. contingency funds for disaster

assistance, but the U.S. Mission donated \$5,000 from USAID Special Development Fund to the Nicaraguan Red Cross \$5,000

In addition, USAID Food for Peace Officer authorized the immediate transfer of 8,251 pounds of P.L. 480 Food for Peace nonfat dry milk, flour, corn and oil from CRS in-country stocks to the Leon Emergency Committee. Estimated value \$ 710
 \$5,710

After an appeal to the Ambassador by the Minister of Agriculture, in his capacity as Emergency Coordinator, to airlift the homeless to new agricultural lands, the U.S. Military Mission sent two C-123 airplanes on March 19 from the U.S. Southern Command in Panama. Costs were not reported and A.I.D. was not requested to reimburse the Military from contingency funds. The two airplanes flew 109 sorties, in a 9-day airlift, that carried 885 people and 206,872 pounds of cargo, including various small animals, from Leon to the new agricultural colony of Neuva Guinea. A 5-man U.S. Army Community Development Team (chief of party, doctor, veterinarian, sanitary engineer, medical specialist) also from the U.S. Southern Command, spent five days in assisting the new colony.

The U.S. Mission kept very close contact with the disaster relief operation, and Mission personnel made many trips to the disaster area and to the emergency camps, including a visit by the Ambassador.

During the emergency period, the American Embassy indicated there would be no need to send tents from the A.I.D. Disaster Reserve in Panama. The Nicaragua National Guard had approximately 150 tents that had been supplied by AID/DRC for the January 1968 earthquake.

ASSISTANCE PROVIDED BY U.S. VOLUNTARY AGENCIES:

American National Red Cross

ANRC made a cash donation of \$5,000 and paid expenses of a League of Red Cross Societies Delegate in the amount of \$400. The ANRC also provided friendship boxes valued at \$4,000, for a total of .. \$ 9,400

Catholic Relief Services

The CRS Director in Nicaragua visited the disaster area with the USAID Food for Peace Officer. In addition to making available USG P.L. 480 food commodities, CRS provided 520 pounds of clothing, value \$ 520

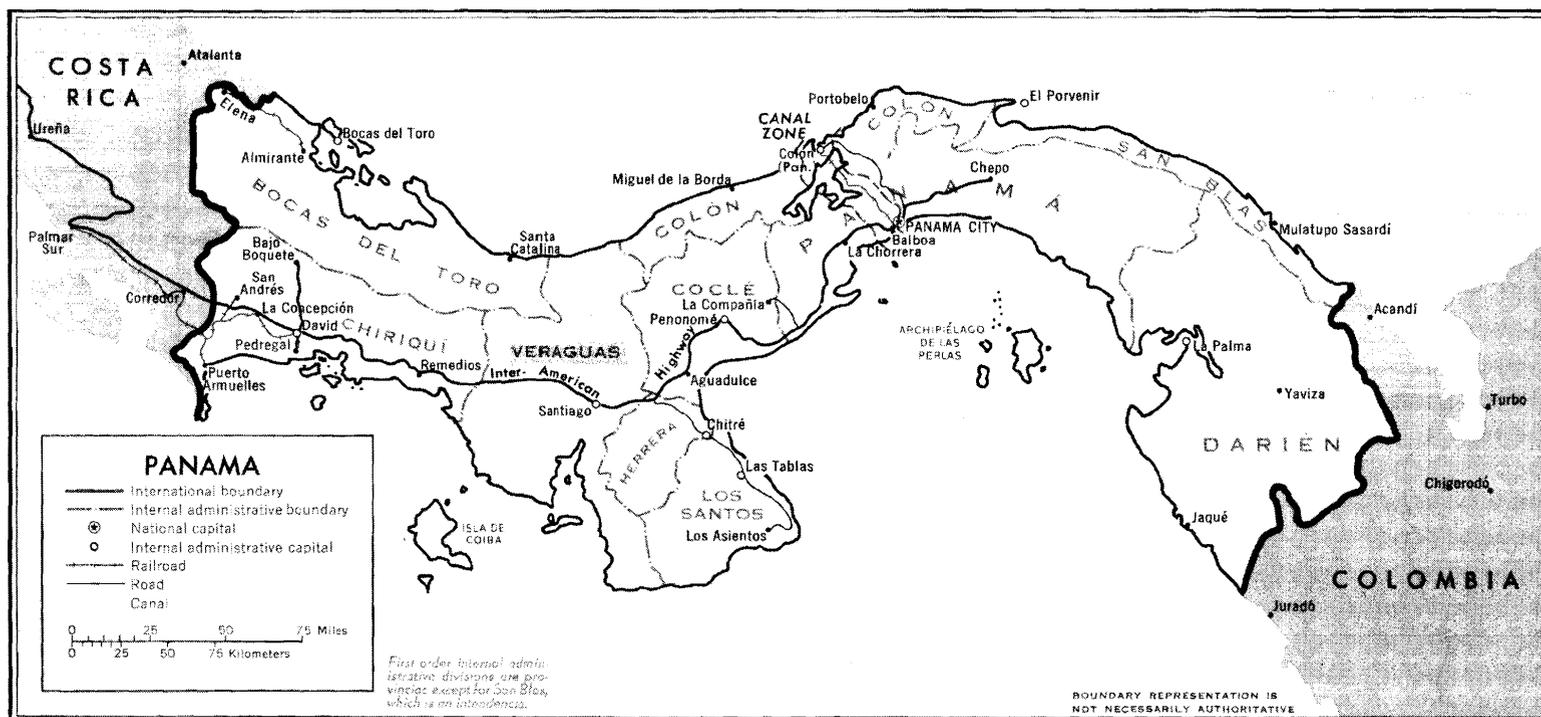
Sister City Program

The Hiialeah-Managua Sister City Program contributed 7 tons of medicines, food supplies and clothing. No value was reported and in absence of this, AID/DRC estimated it at \$1 per pound for a total value of \$14,000
 Total Assistance U.S. Voluntary Agencies \$23,920

ASSISTANCE PROVIDED BY OTHER NATIONS AND INTERNATIONAL ORGANIZATIONS:

United Nations—agricultural tools costing \$15,000
Canada—disaster supplies 2,740
Honduras—cash 400
 also medical team
 \$18,140

It was reported that Panama and Brazil also provided small amounts of medicine, clothing, food and some cash but quantities and value were not given. The Swiss Red Cross and El Salvador also offered assistance.



PANAMA

Crop Failures

1970

... resulting from unusually heavy winter rains affect 40,345 people in Veraguas Province.

CARE and Catholic Relief Services deployed 485,950 pounds of USG Food for Peace wheat, vegetable oil, cornmeal, rolled oats, bulgur wheat and CSM to feed 7,443 families for a period of one month, at the request of the Government of Panama Community Development Agency and with the approval of the U.S. AID Mission in Panama.

Value of USG Food Assistance\$32,268



PARAGUAY

Floods

January, 1971

... along the Paraguay River near Asuncion and Concepcion leave 27,000 people temporarily homeless.

Value of U.S. assistance\$34,036

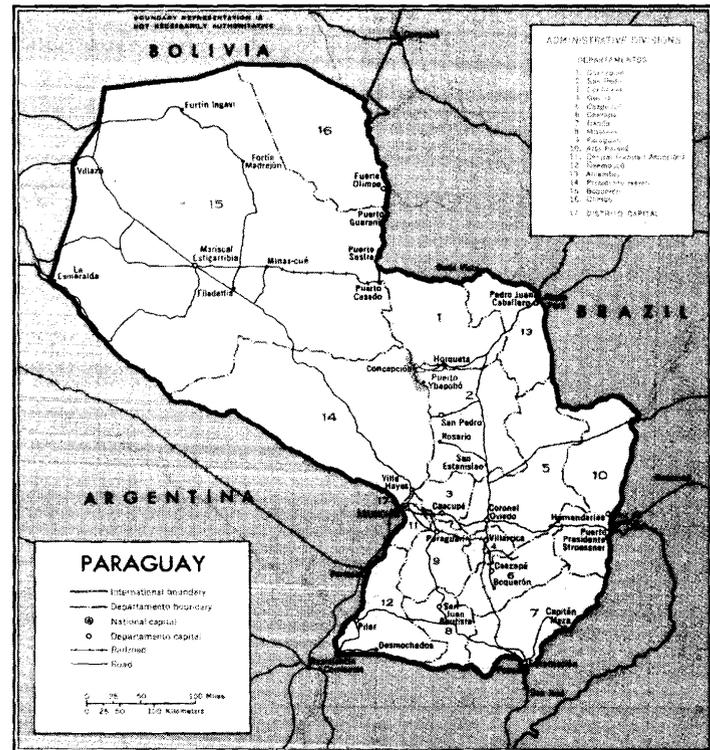
DETAILS

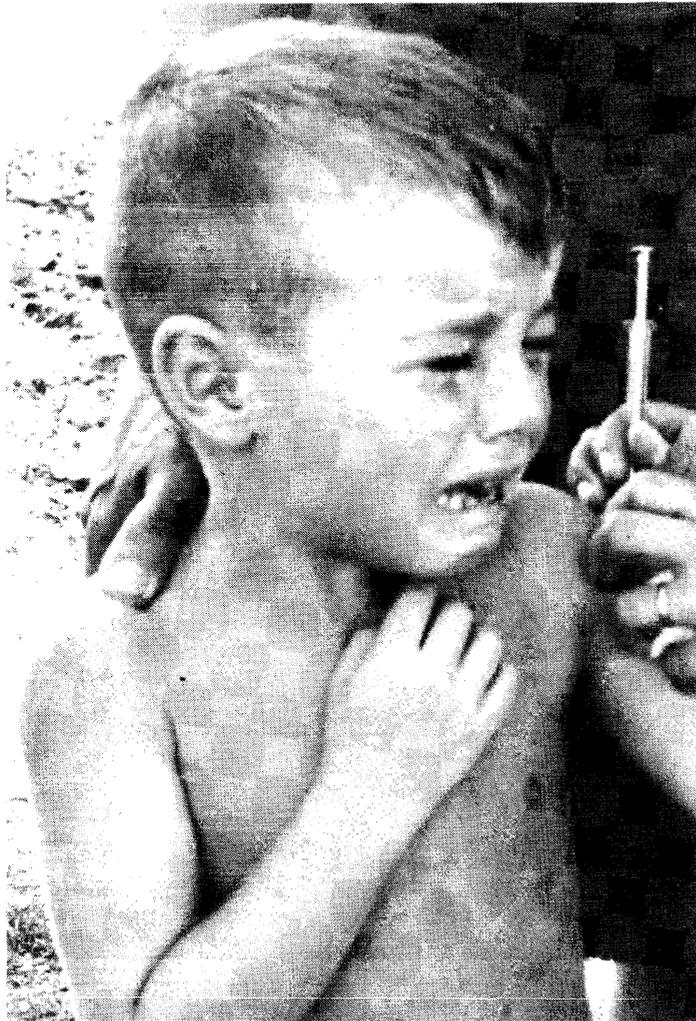
December rains were concentrated mainly during the second half of the month so that by January 1 the soils were at or near saturation. During the second week of January, abnormally heavy rains occurred and lasted through January 12 producing an immediate run-off.

Maximum rainfall was in an East-West band, including Asuncion and an area north to Concepcion, along the Paraguay River. The center of greatest rainfall was near Pozo Colorado, a military post in Chaco, which received 22.5 inches for the month of January compared to a normal 4.7 inches.

The river gauge at Asuncion was low but had been rising slowly. It rose from 1.8 feet on January 3 to 3.7 feet on January 8. Thereafter, it rose rapidly until it reached a peak of 20.8 feet on January 28.

Land and homes became flooded, and people began to evacuate their homes in Asuncion on January 13. At this time, the river gauge stood at about 13 feet. Upstream in Concepcion, the people had abandoned their homes earlier. The cities of Asuncion and Concepcion were the hardest hit measured in





Little Joe is not too happy with the typhoid vaccine that he is receiving."

terms of people affected, but other smaller towns along the river were also inundated.

Aside from damage to homes and garden plots, no lasting disaster consequences were foreseen. Most houses continued habitable after the floods.

ACTION TAKEN BY THE GOVERNMENT OF PARAGUAY

The Paraguayan Government did not organize a National Relief Commission. The Ministry of Interior coordinated the relief efforts of moving flood victims, providing shelter, and distributing food. The Catholic Church, through the Archbishop's representative, also played an active role aiding displaced people. Food was distributed to separate lists of flood victims by the Ministry of Interior and the Archbishop's representative during the months of February, March, April and May. There were 30 refugee centers established, and the Church provided aid through the parishes of 12 sectors. More than 15,000 people were vaccinated against typhoid in the refugee centers, and the Minister of Health reported no typhoid fever cases occurred.

The Paraguayan press, radio and TV responded actively, organizing collections for aid to the flood victims. Value of these contributions was not available, but cash, food, clothes, medicines, and other useful articles were donated.

Future Plans for Disaster Prevention

In some low-income areas of Asuncion, particularly around the bay, flooding is not an uncommon occurrence. To alleviate the situation, the Municipality and the Ministry of Interior are trying to resettle some families away from the low lands.

ASSISTANCE PROVIDED BY THE U.S. GOVERNMENT

The first official request from the Government of Paraguay was for food and was received by the American Ambassador on January 15. Acting on the Minister's request, the USAID Deputy Director, Peace Corps Director, Food for Peace Officer, Catholic Relief Services Director, and the GOP Ministry of Health concluded that food commodities from CRS Food for Peace stocks should be distributed to 200 displaced persons in Concepcion and 500 in Rosario. With the river continuing to rise, additional food donations were approved on January 19, and distribution continued through April. The U.S. Mission reported on April 22 that 281,054 pounds of USG PL 480 flour, milk, CSM, rolled wheat, bulgur and oil had been distributed to flood victims, valued at\$28,000.

On January 20, the American Ambassador exercised his disaster relief authority to make a cash donation from the AID contingency fund in local currency, equivalent to\$3,968.

The donation was made to CONEB, the Paraguay Federation of Voluntary Relief Agencies and Organizations, for local purchase of food, clothing, and drugs. Subsequently, this amount was increased to cover costs of 29,600 doses of typhoid vaccine, 3,400 disposable needles and syringes, one jet inoculator, and the services of a medical technician from the U.S. military in Panama, in the amount of\$2,068.

The vaccine was delivered on January 30. The medical technician arrived the same day and remained in Asuncion for over a week.

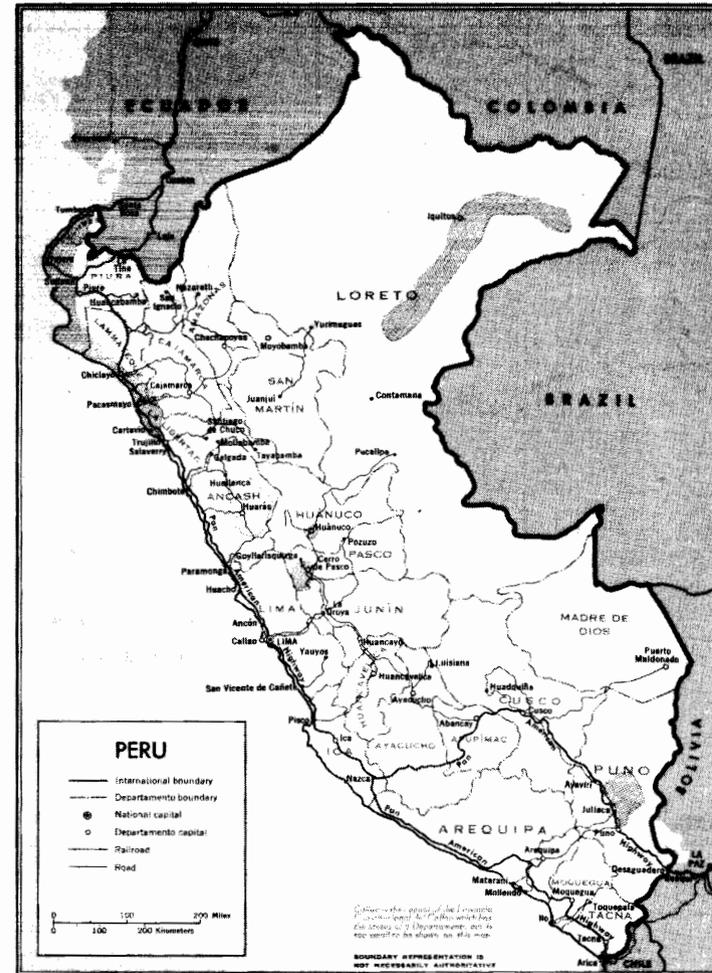
Total value USG aid\$34,036.

ASSISTANCE PROVIDED BY U.S. VOLUNTARY AGENCIES

Catholic Relief Services provided above PL 480 food and assisted with distribution.

ASSISTANCE PROVIDED BY OTHER NATIONS AND INTERNATIONAL ORGANIZATIONS

None reported.



PERU

Floods

February and April 1971

... in five separate areas, kill 250 and directly affect 330,000 people.

Value of U.S. Assistance\$532,648

DETAILS:

The five flooded areas were North Coast—Trujillo to Tumbes; Jungle Area; Lake Titicaca Region; Chungar; and Callejon de Huaylas.

North Coast—Trujillo to Tumbes

In this area where rainfall is rare, heavy rains caused considerable damage in desert cities and towns. Additionally, the rainfall in nearby mountains caused flooding in the river valleys leading to the sea. Numerous villages were cut off temporarily and thousands of acres of cropland were damaged or destroyed, especially in the Piura and Chira valleys. Roads, including the PanAmerican highway, were cut in several places or made impassable.

Jungle Area

On the eastern side of the Andes, the region along the Ucayali and Amazon Rivers suffered the worst floods in years. Annual

floods in this jungle area cause damage to river towns, but on this occasion damage was more extensive and thousands of people lost their homes, crops and animals.

Lake Titicaca Region

Constant heavy rains along the northern shores of Lake Titicaca and nearby mountains from late February to April breached the flood-control dikes along the Ramis River close to the Lake. As a result more than 60 square kilometers were flooded. Rising waters of Lake Titicaca united with Lake Arapa and the mouth of the Ramis River. An estimated 2,000 families were affected by this flooding. These families who moved to higher ground lost most of their crops. Loss of housing, plantings and pasture for domestic animals was a serious blow and of grave concern to local authorities. It was estimated that the flooding might continue for several months after the rains ceased, as Lake Titicaca does not have an outlet, depending upon evaporation for lowering of the lake level.

Chungar

On March 18 a flood/avalanche destroyed the small mining town of Chungar in the Central Sierra, west of Cerro de Pasco killing at least 250 people. In this disaster the steady down-pour loosened thousands of tons of rock which fell into a mountain lake on which Chungar bordered. Most of the town was wiped out.

Callejon de Huaylas

In this valley between the Cordillera Negra and Cordillera Blanca, steady rainfall for several months added to the destruction caused by the earthquake of May 31, 1970. The people were still living primitively in tents or in temporary pre-fabricated housing provided by the Peruvian Government, Red Cross, U.S. Government or other international voluntary agencies. Their lives were far from pleasant. Several bridges washed away, some on the main highway between Huaraz and Caraz.

The bridge over the Ranrahirca River was swept away four times during the year, isolating the lower end of the valley. The highway between Caraz and the Huallanca electric power plant was cut several times by landslides. Landslides also fell on the entrance road into the Callejon making transportation of consumer items into the valley hazardous.

ACTION TAKEN BY THE GOVERNMENT OF PERU AND LOCAL ORGANIZATIONS:

North Coast Area from Trujillo to Tumbes

Local authorities declared a state of emergency over most of these regions.

Jungle Area

The Government of Peru considered the new flood in this area a continuation of the 1970 flood emergency. Additional relief efforts included establishment of an airlift from Lima to inland staging points to deliver local foods, clothes and medicines and to transport equipment to repair bridges and roads.

Outside food assistance was sought from the U.S. Government. A Food-for-Work Program in the Department of Loreto was approved. The program was placed under the general direction of the Ministry of Agriculture, and the Government of Peru designated Catholic Relief Services/Caritas del Peru as the distributing agent for P.L. 480 Food. The Government of Peru provided \$60,000 for inland transportation, handling and storage of the food.

Lake Titicaca Region

An emergency assistance committee composed of local authorities and representatives from the Army, Ministry of Agriculture, Education, Housing and Health and volunteer agencies, headed by the Military Commander of the Zone, was formed

to survey the requirements and to channel available assistance to the affected families.

USG Food for Peace commodities were requested and made available.

Chungar

The Peruvian Red Cross, the Junta de Asistencia Nacional (JAN), the police and other relief organizations immediately organized to assist the survivors and bury the dead. The Ministers of Health and Mines inspected the disaster site on March 19 to assess damage and personally direct assistance operations. JAN and the Peruvian Red Cross sent a caravan of trucks loaded with blankets, medicines, roofing sheets and foodstuffs. Peruvian Air Force assigned three helicopters for use in surveying the site and to transport urgently needed equipment and supplies to the survivors. Nearby towns sent workers to assist in a clean-up project.

Callejon de Huaylas

The Government expressed concern that the floods would slow reconstruction and economic development in this earthquake affected area. Assistance was given to the flood victims, but specifics were not available.

Summary

In summarizing information on all of these flood conditions, the U.S. Mission commented: "On the credit side, the various government agencies concerned with immediate disaster relief are showing the experience gained in recent months and assistance of all types is rapidly reaching affected families. President Velasco, in a March 31 press conference, cited the capability of the Emergency Commission under the Chairmanship of the Minister of Health, to respond to such emergencies."

ASSISTANCE PROVIDED BY THE U.S. GOVERNMENT:

In the Lake Titicaca Region, at least 15 tons of USG Food for Peace commodities were made available from the national school feeding program. This food was assigned to the Military Commander in charge in the area and distributed to needy families. Value was not reported but is estimated at .. \$ 2,000

For the Department of Loreto, the USG was asked to approve a Food-for-Work Program for the flood victims, which called for a grant to the Government of Peru of 413 metric tons each of bulgur, cornmeal, rolled oats, and CSM and 225 metric tons of vegetable oil. Value of this 1,877 metric tons was \$357,648 plus ocean freight charges of approximately \$175,000 for a total of \$532,648
\$534,648

No USG assistance was requested for floods in the other areas of the country.

ASSISTANCE PROVIDED BY U.S. VOLUNTARY AGENCIES:

Catholic Relief Services and Seventh Day Adventist Welfare Services assisted flood victims through their regular programs, and Catholic Relief Services along with Caritas del Peru was given responsibility of distributing USG P.L. 480 food provided for the Food-for-Work projects.

ASSISTANCE PROVIDED BY OTHER NATIONS AND INTERNATIONAL ORGANIZATIONS:

None reported.

JULY 1, 1970 TO JUNE 30, 1971—REPORTED FOREIGN DISASTER STATISTICS AND EMERGENCY RELIEF EXPENDITURES

(Note: Includes FY 1972 funds on those disasters beginning in FY 1971 and continuing into FY 1972)

COUNTRY AND DISASTER	NUMBER KILLED	TOTAL REPORTED VICTIMS	FUNDS EXPENDED OR VALUE OF ASSISTANCE PROVIDED IN THOUSANDS OF DOLLARS (\$1 million will appear as 1,000)								
			CONTIN- GENCY FUNDS	OTHER AID FUNDS	VALUE OF ASSIST- ANCE OTHER US AGENCIES	P. L. 480 FOOD FOR PEACE		VOLAGS, OTHER U. S. ASSIST- ANCE	TOTAL U. S. ASSIST- ANCE	REPORTED ASSIST- ANCE OTHER NATIONS	REPORTED ASSIST- ANCE HOST COUNTRY
						GOVTS., INT.	VOLAGS				
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$		
AFRICA											
Dahomey—Floods	—	*	4				100		104	16	18
Zambia—Mine Dis.	89	589	1						1	*	*
Drought Emergencies											
Cameroon	—	400,000				487			487	783	*
Gambia	—	150,000				174			174	—	*
Ghana	—	12,000				116			116	—	*
Kenya	—	150,000				349		62	411	276	700
Mali	—	52,000*				3,473			3,473	—	*
Mauritania	—	505,000				1,717			1,717	—	218
Morocco	—	137,000					78		78	—	*
Niger	—	*				282			282	—	*
Senegal	—	5,000				2,367			2,367	—	*
Togo	—	150,000				564			564	—	*
Upper Volta	—	*				3,410			3,410	—	*
Cholera Epidemics											
Chad	2,312	7,476	56**		40			X	96	558	*
Ethiopia	500	4,000	15						15	9	20*
Ivory Coast	120	1,500	9						9	—	*

(Note: Includes FY 1972 funds on those disasters beginning in FY 1971 and continuing into FY 1972)

FUNDS EXPENDED OR VALUE OF ASSISTANCE PROVIDED IN THOUSANDS OF DOLLARS (\$1 million will appear as 1,000)												
COUNTRY AND DISASTER	NUMBER KILLED	TOTAL REPORTED VICTIMS	CONTIN- GENCY FUNDS	OTHER AID FUNDS	VALUE OF ASSIST- ANCE OTHER US AGENCIES	P. L. 480 FOOD FOR PEACE		VOLAGS, OTHER U. S. ASSIST- ANCE	TOTAL U. S. ASSIST- ANCE	REPORTED ASSIST- ANCE OTHER NATIONS	REPORTED ASSIST- ANCE HOST COUNTRY	
						INT.	ORG.					VOLAGS
			\$	\$	\$	\$	\$	\$	\$	\$	\$	
AFRICA—TOTAL	3,021	1,574,565	85		40	12,939	178		62	13,304	1,642	956*
WORLDWIDE CHOLERA ***	4,692*	44,266*	436						49	485	1,102	*
ASIA—NESA												
Cyprus—Cholera			1							1	1	*
E. Pakistan—Floods	*	10,000,000		21		7,150			62	7,233	1,086	12,185
E. Pakistan—Cyclone	300,000	3,648,000	2,658	497	400	12,747		X	2,032	18,334	30,384	51,200
E. Pakistan—C/Strife	200,000*	10,200,000	1,000	16,082**	160	16,168		X	722	34,132	25,236	*
Indian—EP Refugees	5,560*	10,000,000	5,000	15,250**	15,500	46,526	8,599	X	11,435	102,310	191,242	335,000
India—Floods	627	10,000,000	74				1,122		39	1,235	1	290*
Iraq—Drought	—	500,000				2,408				2,408	413	50,000
Jordan—Civil Strife	3,500*	1,000,000	4,212	5,000		1,015	191	X	1,398	11,816	7,352	1,820*
Lebanon—Border Clashes	30	50,030	12				7		188	207	41	10,000*
Nepal—Floods	350	20,350	4						5	9	116	*
Turkey—Earthquake	878	60,000	177				8		40	225	689	33,853
Yemen AK—Drought	—	2,000,000	19			1,058	2,182		82	3,341	4,192	40*
ASIA—NESA TOTAL	510,945	47,478,380	13,157	36,850	16,060	87,072	12,109		16,003	181,251	260,753	494,388
ASIA—EAST												
Malaysia—Floods	61	243,061	260				4	X	2	266	605	7,500*
Philippines												

(Note: Includes FY 1972 funds on those disasters beginning in FY 1971 and continuing into FY 1972)

FUNDS EXPENDED OR VALUE OF ASSISTANCE PROVIDED IN THOUSANDS OF DOLLARS (\$1 million will appear as 1,000)											
COUNTRY AND DISASTER	NUMBER KILLED	TOTAL REPORTED VICTIMS	CONTIN- GENCY FUNDS	OTHER AID FUNDS	VALUE OF ASSIST- ANCE OTHER US AGENCIES	P. L. 480 FOOD FOR PEACE		VOLAGS, OTHER U. S. ASSIST- ANCE	TOTAL U. S. ASSIST- ANCE	REPORTED ASSIST- ANCE OTHER NATIONS	REPORTED ASSIST- ANCE HOST COUNTRY
						GOVTS. INT.	ORG. VOLAGS				
			\$	\$	\$	\$	\$	\$	\$	\$	\$
Floods/Typhoons (2)	137	78,137	10			63	118	X	119	310	
Typhoons Joan/Kate	1,551	1,215,551	1,540		100	2,184	155	X	115	4,094	323
Typhoon Patsy	786	430,786	39		200		161	X	187	587	11,050*
ASIA—EAST TOTAL	2,535	1,967,535	1,849		300	2,247	438		423	5,257	928
EUROPE											
Italy—Floods	37	1,300,000	17					X	—	17	5
LATIN AMERICA											
Barbados—Floods	3	203	5						5	20	79
Brazil—Drought	*	10,000,000				3,459	14		44	3,517	59
Brazil—Floods	172	104,543	1				13		22	36	500*
Brazil—Floods	109	11,109	5				5		*	10	5
Chile—Snow/Rain Storm	—	90,000	93				10	X	5	108	2,010
Colombia—Earthquake	—	3,000	2	3					*	5	—
Colombia—Floods	307	5,000,000	36				262	X	*	298	47
Colombia—Floods			26			205	250	X	*	481	—
Costa Rica—Floods	1	5,201	62	8			4	X	5	79	5
Ecuador—Floods	—	10,100					2			2	—
Ecuador/Peru Border											
Earthquake—Ecuador	29	60,029	95				34	X	21	150	42
Peru	29	15,029							8	8	—

(Note: Includes FY 1972 funds on those disasters beginning in FY 1971 and continuing into FY 1972)

FUNDS EXPENDED OR VALUE OF ASSISTANCE PROVIDED IN THOUSANDS OF DOLLARS (\$1 million will appear as 1,000)												
COUNTRY AND DISASTER	NUMBER KILLED	TOTAL REPORTED VICTIMS	CONTIN- GENCY FUNDS	OTHER AID FUNDS	VALUE OF ASSIST- ANCE OTHER US AGENCIES	P. L. 480 FOOD FOR PEACE		VOLAGS, OTHER U. S. ASSIST- ANCE	TOTAL U. S. ASSIST- ANCE	REPORTED ASSIST- ANCE OTHER NATIONS	REPORTED COUNTRY ASSIST- ANCE HOST	
						GOVTS., INT.	ORG. VOLAGS					
			\$	\$	\$	\$	\$	\$	\$	\$	\$	
Honduras—Poisoned Food	37	160	1					X	1	—	*	
Martinique—Storm	45	5,045	6						18	24	—	*
Nicaragua—Volcano	—	3,000		5			1	X	24	30	18	56
Panama—Crop Failures	—	40,345					32			32	—	*
Paraguay—Floods	—	27,000	6				28	X		34	—	*
Peru—Floods	250	330,250				534				534	—	60*
LATIN AMERICA TOTAL	982	15,705,014	338	16		4,198	655		147	5,354	2,206	110,943
GRAND TOTAL—FY 71	522,212	68,069,760	15,882	36,866	16,400	106,456	13,380		16,684	205,668	266,636	744,837

* Incomplete or not reported.

** Both Fiscal 71 and 72 funds involved.

*** Worldwide Cholera statistics do not include those noted separately under individual countries on cholera, nor the 5,560 E. Pakistan refugees who died of cholera in India.

SEVEN-YEAR TOTALS—FOREIGN DISASTER STATISTICS AND EMERGENCY RELIEF EXPENDITURES—FY 1965 THROUGH FY 1971

FUNDS EXPENDED OR VALUE OF ASSISTANCE PROVIDED IN THOUSANDS OF DOLLARS (\$1 million will appear as 1,000)											
FISCAL YEAR	NUMBER KILLED	TOTAL REPORTED OR ESTIMATED VICTIMS	CONTINGENCY FUNDS	OTHER AID FUNDS	VALUE OF ASSISTANCE OTHER US AGENCIES	P. L. 480 FOOD FOR PEACE GOVTS. OR INT. ORG.	VOLAGS	VOLAGS, OTHER U. S. ASSISTANCE	TOTAL U. S. ASSISTANCE	REPORTED ASSISTANCE OTHER NATIONS	REPORTED ASSISTANCE HOST COUNTRY
1971	522,212 ¹	68,069,760	15,882	36,866	16,400	106,456	13,380	16,684	205,668	266,636*	744,837*
1970	72,915 ²	11,743,040	6,259	11,563	296	21,908	8,709	12,202	60,937	59,493*	96,595*
1969	1,018,534 ³	32,482,216	4,447	24,771	51	71,913	1,439	12,246	114,867	95,495*	130,974*
1968	4,103	5,455,602	1,357	6,398	3,112	20,440	1,223	7,866	40,396	16,504*	607,108*
1967	17,547	14,223,092	6,167	5,772	371	31,230	37,816	12,235	93,591	173,233*	2,964,747*
1966	7,086	4,139,646	652	983	56	21,459	2,271	1,572	26,993	9,566*	*
1965	47,089 ⁴	5,504,173	2,433	18,728	—	21,137	4,077	3,751	50,126	3,576*	*
7-YEAR TOTAL	1,689,486	141,617,529	37,197	105,081	20,286	294,543	68,915	66,556	592,578	624,503	(billion) 4,544,261*

* Incomplete or not available. Note that for FY 1965 and 1966 only limited information was available on assistance by other nations and none on self-help. In later years it became possible to obtain more information for these two columns but they are still incomplete.

¹ 500,000 deaths were result of Nov. 1970 Cyclone and 1971 Civil Strife in East Pakistan.

² Over 66,000 of total deaths due to May 31, 1970 earthquake in Peru.

³ Of deaths shown, one million were result of civil strife in Nigeria. This was an estimate—may be too high.

⁴ 36,000 of deaths were result of May 11, 1965 cyclone in East Pakistan.

REGION	NUMBER OF DISASTERS BY REGION							7-YEAR
	FY 1971	FY 1970	FY 1969	FY 1968	FY 1967	FY 1966	FY 1965	TOTAL
Africa	16	16	12	11	11	15	15	96
Asia—NESA	12	6	5	13	15	5	12	68
Asia—East	4	5	8	13	15	12	7	64
Europe	1	2	1	3	2	—	2	11
Latin America	17	22	10	15	19	16	14	113
Worldwide	1							1
	51	51	36	55	62	48	50	353