

PARAGUAY - Floods

Date: February - August, 1983 (FY 83)

Location: Affected area extended from Concepcion on the Paraguay River south to the confluence with the Parana River along the Argentine border

No. Dead: Not reported

No. Affected: From 70,350 to 121,000 persons

Damage: 1,082 km of land along the banks of the Paraguay River under water; up to 25% of cotton, rice, and soybean crops destroyed; between 350,000 and 600,000 head of cattle dead from starvation or drowning; damage to agriculture and livestock estimated at \$82 million

The Disaster

Between February and June of 1983, prolonged heavy rainfall caused the worst flooding in Paraguay's recent history. The country's two major rivers, the Paraguay and the Parana, overflowed their banks along a 1,082 km stretch between Concepcion and the Argentine border. The most severe flooding occurred in the department of Neembuco. Two of its largest cities, Alberdi and Pilar, were reported to be submerged beneath two to three meters of water, and approximately 10,000 persons had to be evacuated from Pilar (total population 18,000). In addition to the damage to utilities, roads, buildings, and farmland, the heavy rains destroyed almost 25% of Paraguay's cotton and soybean crops, the country's two major agricultural exports, and between 350,000 and 600,000 head of cattle were believed lost due to starvation or drowning. Farther north, in the capital city of Asuncion, the floodwaters reached record levels and up to 80,000 people in the city were directly affected. The cities of Concepcion, Villeta, Humaita, and Encarnacion were also seriously affected.

By June, as flood waters gradually began to recede, services were restored and evacuees returned to their damaged homes. However, unusually heavy rains in southern Brazil caused tributaries flowing into the Parana River to overflow, temporarily halting the recession of the floodwaters. Remarkably no deaths were reported.

Action Taken by the Government of Paraguay (GOP) and Local Voluntary Agencies

The Government of Paraguay began responding to the disaster in March by evacuating flood victims and providing food, medicines, and medical personnel. A National Coordinating Committee was established under the leadership of the First Lady to collect and distribute supplies and cash donations from many national organizations, businesses, and individuals.

Virtually all agencies of the GOP were involved in the relief effort. Corposana, the national water commission, ensured a steady supply of potable water to the affected areas. The national merchant marine and military coordinated the evacuation of flood victims and built temporary camps near Asuncion. The Ministry of Public Health supplied medical and sanitation services to the evacuation camps and the Ministry of Education opened temporary schools to reduce the disruptive effect of the floods on children's education.

The tremendous outpouring of help from the Paraguayan populace was largely responsible for minimizing the calamitous effects of the flood. The National Council of Voluntary Agencies was designated by the GOP as the central collection point for private donations, thus facilitating accountability, coordination among organizations, and reasonably equitable participation by voluntary agencies, municipalities, and government agencies. The National Republican Commission of Social Aid was entrusted with relief efforts in the central region of Paraguay (Asuncion and surroundings), while the Paraguayan Red Cross concentrated its efforts in Pilar and Encarnacion, distributing food, medicines, and warm clothing to victims in the evacuation camps. The Catholic Church was also active in providing assistance and mobilizing the population in relief efforts.

Assistance Provided by the United States Government (USG)

On March 22, 1983, the U.S. Ambassador, along with the USAID Director and the Mission Disaster Relief Officer conducted an aerial survey of the flooded areas. Following this assessment, the U.S. Ambassador determined on April 13 that the flood disaster warranted USG assistance and made available \$25,000 from the International Disaster Assistance account. Of this amount, \$10,000 was provided to Paraguay's Bureau of Indian Affairs to purchase foodstuffs for approximately 3,000 displaced Indians along the upper Paraguay River. Another \$3,000 was used to provide a U.S. Air Force helicopter mechanic to service the GOP helicopters used for rescue missions and the delivery of supplies. The remainder was allocated for local purchases and support for a flood evaluation team (see below).

In response to a request from the GOP Minister of Foreign Affairs, the Office of U.S. Foreign Disaster Assistance (OFDA) sent a flood evaluation team to Paraguay to assess the situation and recommend short and long term mitigation measures. The flood evaluation team was composed of two hydrologists from the U.S. Geological Survey, two civil engineers from the Tennessee Valley Authority, and a flood forecaster from the National Oceanic and Atmospheric Administration. After performing an on-site survey of the flood regions, members of the team briefed GOP officials and prepared a report containing recommendations for minimizing the effects of the flooding.

In response to the critical need for emergency shelter for the thousands of displaced persons, OFDA furnished 180 rolls of plastic sheeting material, 1,000 wool blankets, and two large canvas tents which were used as emergency field hospitals. The value of these commodities was estimated at \$64,800. However, only the transport costs of the blankets and tents and the replacement and transport costs of 20 rolls of plastic were paid from FY 1983 accounts.

Summary of USG Assistance

Ambassador's authority.....	\$25,000
Five-person flood evaluation team for three week TDY.....	\$36,328
Airlift of 1,000 wool blankets and two tents from U.S. stockpiles.....	\$7,000
Value and transport costs of 20 rolls of plastic sheeting.....	\$10,545
TOTAL.....	\$78,873

Assistance Provided by U.S. Voluntary Agencies

Catholic Relief Services - furnished rehabilitation services to brick-makers from Encarnacion at a value of \$5,000 and contributed \$10,000 worth of relief supplies.

Mennonite Church - sent 500 kg of foodstuffs, value not reported.

Seventh-day Adventist World Service - sent 5,000 pieces of clothing, value not reported.

TOTAL.....\$15,000

Assistance Provided by the International Community

International Organizations

Pan American Health Organization - provided essential medicines, antibiotics, and medical supplies valued at \$25,000.

UNDRO - issued an appeal for international assistance at the request of the GOP. An UNDRO delegate was sent to Asuncion on a one month mission to assess the flood situation and assist in improving GOP flood mitigation and disaster preparedness capabilities. UNDRO also provided a cash grant of \$20,000.

Governments

Brazil - contributed 250 doses of anti-tetanus serum, 50 doses anti-snakebite serum, and assorted medicines valued at \$7,182.

Canada - gave a cash grant of \$20,325 through LORCS.

Chile - donated 1,300 blankets, 60 cookers, 1,000 sandbags, 50 infant cots, 2,000 plastic food containers, and 100 campbeds, mattresses, pillows, and lamps; value not reported.

China, Republic of - gave a cash grant of \$17,188.

France - gave a cash contribution of \$6,250.

Germany, Federal Republic of - contributed a cash grant of \$20,408 and 20 tents.

Japan - gave a cash grant of \$160,000.

Korea, Republic of - contributed clothing and \$31,250 in cash.

Netherlands - provided 5.5 MT of food, 290 blankets, 20 kilos of medicines, and a cash contribution of \$34,483.

South Africa - gave a cash contribution of \$6,250.

Switzerland - contributed a cash grant of \$14,423 through LORCS.

United Kingdom - provided 11,000 sachets of oral rehydration salts, 500,000 water purification tablets, 250,000 doses of antibiotics, 8 rolls of plastic, 1,000 blankets, and food valued at \$12,500.

Uruguay - donated food, clothing, and medicines; value not reported.

Vatican - gave a cash grant of \$10,000.

Voluntary Agencies

Australia Red Cross - gave a cash grant of \$869.

Canada Red Cross - gave a cash grant of \$5,691.

Finland Red Cross - contributed a cash grant of \$18,348.

German (F.R.) Red Cross - provided 20 large tents, 20 first aid kits, and 30 sleeping bags, valued at \$17,915.

Japan Red Cross - contributed a cash grant of \$8,510 from the Japanese shipbuilding industry.

New Zealand Red Cross - donated a cash grant of \$331.

Norway Red Cross - contributed a cash grant of \$14,084.

Spain Red Cross (SRC) - provided medicines, food, and blankets valued at \$12,949 and sent a SRC representative as the League of Red Cross Societies delegate to Paraguay.

TOTAL \$463,956