



Office of U.S. Foreign Disaster Assistance

DISASTER CASE REPORT

Agency for
International
Development

Washington D.C.
20523

INDIA - Floods

Data

Date: July, August, and September 1978 during the northeast monsoon season (FY 78)

Location: Northern states and union territories of India: Himachal Pradesh, Punjab, Haryana, Rajasthan, Delhi Union Territory, Uttar Pradesh, Bihar, West Bengal, Assam, Orissa, Jammu, Kashmir, and Andhra Pradesh

No. Dead: 1,402 (official); 3,800 (unofficial)

No. Affected: 60,187 villages with a total population of over 25 million people; some estimates go as high as 32 million people

Damage: At least one million houses destroyed and another one million damaged; 300,000 cattle lost; over 10.2 million hectares flooded; 18,000 schools washed away; 1,254 river lift schemes, 992 tubewells, and 1,045 surface irrigation and drainage schemes, all damaged or destroyed; heavy losses in industrial centers; extensive disruption of and damage to transportation and telecommunications networks

The Disaster

In the early autumn of 1978 severe and unprecedented monsoon floods occurred in various parts of northeastern India, particularly during the last four days of the monsoon (September 27 to October 1) when rainfall ranged up to 750 mm. or 30 inches. For the entire monsoon between June 1st and September 30th, the Calcutta Meteorological Office recorded 1,921 mm. of rainfall - 713 mm. above normal. September was the wettest month, with 914.7 mm. of rain. The record one-day rainfall of the century, on September 28 - 369.6 mm. - was more than the normal rainfall expected during the entire months of July or August.

Most of the flooding centered on the Damodar-Rupnarayan river system, and involved secondarily the longer Hoogly-Ganges system lying to the north and east. Although the floods affected many parts of northern India, the damage was most extensive in the states of West Bengal, Uttar Pradesh, Bihar, Punjab, Haryana, and the Union Territory of Delhi. Destruction was compounded by coinciding high tides in delta areas, the bursting of two dams, and the heavy discharge of water from other reservoirs. As an example of the latter, on the night of September 2, unusually heavy rain in the eastern part of the State of Bihar overfilled the reservoirs that irrigate

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Birbhum and Midnapore Districts in West Bengal. The sudden release of water from these reservoirs completely inundated over 3,000 sq. kilometers of land, mostly in Midnapore District. In addition to reservoir flooding, all road and rail links from Calcutta to outlying districts were breached, effectively isolating the city from Government authorities for several days. Even near New Delhi, the Yamuna River crested at 15 feet above flood level.

Action Taken by the Government of India (GOI), the State Governments, and Indian Voluntary Agencies

GOI

The GOI allocated Rs 504.7 million (approx. \$60.2 million) to the states affected by the floods to assist with flood relief work. The money was distributed as follows: Punjab Rs 30 million (\$13.6 million); Haryana Rs 30 million (\$3.6 million); Uttar Pradesh 250.5 million (\$29.8 million); Bihar Rs 144.2 million (\$17.2 million); West Bengal Rs 50 million (\$6 million). Rs 1.3 million was also allocated from the Prime Minister's national relief fund with the money being disbursed as follows: Delhi Union Territory and West Bengal together received Rs 500,000 (\$60,000); Uttar Pradesh and Bihar each received Rs 400,000 (\$48,000).

From central stocks, 60,000 metric tons (MT) of foodgrains were released by the GOI for distribution to flood victims in the various states as follows: Himachal Pradesh 5,000 MT of wheat; Punjab 5,000 MT of wheat; Uttar Pradesh 25,000 MT of wheat; Bihar 15,000 MT of wheat; West Bengal 5,000 MT of wheat and 5,000 MT of rice. In addition, the GOI Ministry of Health supplied on a credit payment basis drugs, disinfectants, vaccines, and insecticides valued at \$310,000. Inoculations against cholera were given in Uttar Pradesh and West Bengal.

State Governments

Haryana: those who lost their homes would receive a grant of Rs 300 (\$36); land taxes waived for those whose crops were damaged; recovery of loans postponed; employment offered in flood relief work.

Uttar Pradesh: distributed \$3 million worth of aid.

Bihar: distributed 3,000 MT of foodgrains plus kerosene, oil, sugar, matches, fodder, and medical assistance.

West Bengal: distributed clothing and \$24,000 from relief funds.

Delhi Union Territory: provided potable water, inoculation against cholera and typhoid, and sprayed as an anti-malaria measure.

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Himachal Pradesh: provided free timber and plots in safer areas for those who lost their homes; cash grants to families who lost breadwinners; two months' food rations for those who lost their crops.

Indian Voluntary Agencies

Indian Red Cross: national headquarters reinforced its state branches with \$360,000 in aid; state branches helped one million flood victims with dry rations, cooked food, baby food, biscuits, blankets, clothing, temporary shelter, and medical relief, all valued at Rs 10 million (\$1,176,500).

Caritas India: allocated \$300,000 for immediate relief.

Assistance Provided by the United States Government (USG)

On September 7, 1978, the U.S. Ambassador to India, Robert Goheen, determined that a disaster existed in India and contributed \$25,000 in support of CARE's relief activities. However, prior to the Ambassador's determination, the U.S. A.I.D. Mission in India authorized the diversion of P.L. 480 food-stuffs from voluntary agency stocks to relief programs. A total of 2,960 MT of P.L. 480 Title II commodities with a value of \$842,868 were diverted: 1,128.1 MT valued at \$127,868 to Catholic Relief Services (CRS) and 1,832.2 MT valued at \$670,000 to CARE.....\$867,868

+ \$45,000 172,668

The bulk of USG assistance was channeled through three agencies: CARE, CRS, and World Vision Relief Organization. CARE was granted \$898,500 for relief activities. CRS was granted \$915,123 to deliver food, clothing, blankets, plastic sheeting, small tools, and utensils. World Vision Relief

Organization furnished dry rations, clothing, plastic sheeting, and household articles with a grant of \$122,303.....\$1,935,926

In order to provide relief to flood victims in Calcutta and West Bengal, \$300,000 was allocated for the purchase of temporary shelter materials, cooking utensils, clothing, blankets, cooking fuel, medicines, food, and hiring of transport and personnel. Supplies purchased by the USG were distributed by CARE and CRS. To inspect and assess flood damage, an operations officer from the Office of U.S. Foreign Disaster Assistance was also sent to India.....\$303,940

FY 79 IDA funds: Increase in grant to CARE for plastic sheeting and other housing supplies. ... \$200,000

TOTAL	\$3,107,734
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Assistance Provided by U.S. Voluntary Agencies *

American National Red Cross - \$25,000 to the Indian Red Cross
Assemblies of God, Foreign Service Committee - \$20,000 in cash

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Baptist World Alliance - \$7,000 in cash

Christian Reformed World Relief Committee - \$5,000 for housing rehabilitation

Church World Service - issued an appeal for \$200,000 to support the relief efforts of its counterpart agencies in India. At least \$101,000 received

CARE - \$77,000 in clothing, plastic sheeting, infant food, and shelter materials for West Bengal

Catholic Medical Mission Board - cholera vaccine valued at \$6,250

Direct Relief Foundation - 7,360 lbs. of various pharmaceuticals and medical supplies valued at \$36,559

Foreign Mission Board, Southern Baptist Convention - \$11,000

Lutheran World Relief - \$425,000 to the Lutheran World Federation and \$15,000 to CASA

The Mennonite Central Committee (MCC) - 320 MT of wheat from MCC/Canada, \$4,000 worth of clothing, and \$45,000 in cash to be used for air-dropping food packages, purchasing cloth for clothing, and building tubewells

The Salvation Army - \$10,000 to its international headquarters for use in India

Seventh-day Adventist World Service - \$40,000 in cash

World Relief Commission - \$15,000 in blankets, sarees, and dhotis

World Vision Relief Organization - \$125,000

TOTAL \$810,000

Assistance Provided by the International Community *

International Organizations

European Economic Community - 500 MT milk powder, \$52,000 to CRS, \$558,684 cash, and \$429,969 in kind

The International League of Red Cross Societies (LICROSS) launched an international appeal for milk powder and for funds to support the Indian Red Cross in the local purchase of rice, clothing, blankets, and medicaments. National societies have contributed approximately \$3,509,926 worth of assistance. (See below).

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UNICEF - \$625,000 in cash for flood relief.

World Food Program - 2,000 MT edible oil and 2,000 MT non-fat dried milk valued at \$3.9 million

Governments

Australia - \$112,676

Canada - \$125,673

Federal Republic of Germany - \$473,709

Ireland - \$31,969

Japan - \$523,834

Libya - \$250,000

Netherlands - \$161,043

Pakistan - two planeloads of supplies

Sweden - \$899,888

Switzerland - \$12,131 in cash and \$61,374 in kind (Figures represent joint contributions from Government and Red Cross.)

United Kingdom - \$1,476,227 in cash and \$1,626,816 in kind

Voluntary Agencies **

Australian Red Cross - \$7,439 in cash

Bahrain Red Cross - \$1,890 cash

Belgian Red Cross - \$17,559 cash

British Columbia Agricultural Aid (Canada) - \$2,379 cash

Canadian Red Cross - \$15,501 cash

CARE/Canada - \$25,000 cash

Caritas Internationalis - \$426,636 cash

Cyprus Red Cross - \$507 cash

Danish Red Cross - \$59,319 cash

Federal Republic of Germany Red Cross - \$226,622 in cash and kind

Fijian Red Cross - \$250 cash

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Finnish Red Cross - \$10,168 cash
French Red Cross - \$9,717 in kind
German Churches - \$106,585 cash
German Democratic Republic Red Cross - \$333,379 in kind
Hungarian Red Cross - \$25,092 in kind
Irish Red Cross - \$30,439 cash
Japanese Red Cross - \$8,717 cash
Korean Red Cross - \$1,975 cash
Kuwait Red Cross - \$3,589 cash
Lutheran World Federation - \$650,995
Luxembourg Red Cross - \$4,362 cash
Monaco Red Cross - \$1,474 cash
Netherlands Red Cross - \$250,207 cash
New Zealand Red Cross - \$6,660 cash
Norwegian Red Cross - \$852,601 cash ,
OXFAM - water purification tablets, sanitation unit, and other
goods valued at \$44,755
Redd Barna - \$96,025 cash
Romanian Red Cross - \$16,773 in kind
Save the Children - \$25,099 in kind
Spanish Red Cross - \$4,244 cash
Swedish Red Cross - \$221,100 cash
Syrian Red Cross - \$2,547 cash
Thai Red Cross - \$891 cash
United States Red Cross - \$19,430

TOTAL \$14,830,919

* Please note: the figures for total U.S. voluntary agency and international assistance are an approximation. In many cases the cash value of in kind aid is unavailable.

** Contributions for most organizations as of 3rd quarter 1979.