

TURKEY - Earthquake

Date: October 30, 1983

Location: Provinces of Erzurum and Kars in Eastern Turkey

No Dead: 1,346

No. Affected: 33,000

No. Homeless: 33,000

Damage: Many villages were completely destroyed, with thousands of houses in ruins, roads blocked by rubble and landslides, and 30,000 livestock killed.

The Disaster

Early on Sunday morning, October 30, 1983, a major earthquake rocked the provinces of Erzurum and Kars in eastern Turkey. The quake, which registered 7.1 on the Richter scale at its epicenter in Horasan, was felt as far as 400 km away.

In the province of Erzurum, the districts of Horasan, Narman, and Pasinler were the most affected. Ninety percent destroyed, Horasan district suffered the greatest damage and loss of life with 1,070 bodies recovered from the rubble. Eight villages were badly damaged and 133 people died in Narman district. In Pasinler, six villages suffered extensive damage and 23 people were killed. In the adjoining province of Kars, 56 people were killed and six villages were heavily damaged by the quake.

Snow, rain, and mud hampered relief efforts while landslides blocked roads and trails. For several days relief workers were unable to reach the more isolated villages, but by November 3 most villages had been contacted. The death toll rose to 1,346, with 1,137 injured; most victims died of suffocation as their homes collapsed around them. Built

of mud and stone, the traditional housing of the region could not withstand the seismic shock. As a result, houses crumbled and buried their inhabitants. Of the region's 800,000 residents, approximately 33,000 were left homeless.

Action Taken by the Government of Turkey (GOT)

On the day of the quake, the Minister of Reconstruction and Resettlement and the Minister of Health visited the stricken area. The following day, Turkish President Erzen and Prime Minister Bulen Vulusu traveled to Erzurum. Nationwide clothing and blood drives were organized to benefit the injured and homeless.

The GOT military and the Turkish Red Crescent Society (TRC) mobilized immediately in response to news of the earthquake. The military's Ninth Corps provided overall direction, establishing an Emergency Command Center at its headquarters in Erzurum. The disaster zone was divided into three sub-regions in which relief operations were administered by major generals. Helicopters and other military aircraft were enlisted to transport relief supplies and transfer the injured out of the area.

Search and rescue teams were organized to identify victims and free them from the rubble of their destroyed homes. Aftershocks and snow hampered efforts to reach remote villages, and landslides rendered some of the more isolated villages inaccessible for several days. TRC sent 45 relief workers to the disaster scene, where they organized four field kitchens and distributed 6,000 winter tents and 30,000 blankets. Medical supplies and blood donations were also made available.

On November 2, the GOT formally asked UNDRO to launch and coordinate an international appeal for assistance.

By November 9, the Ninth Corps turned over responsibility for the relief effort to the Governor of Erzurum and by November 11, the regional disaster management was also under civilian direction. Three refugee centers were established to feed and house those unable to return to their homes. Residents of severely damaged villages in isolated areas were urged to remain in the refugee centers for the winter as snow and rain made it impossible for the GOT to commence repairs and reconstruction in those areas.

Assistance Provided by the United States Government

When reports of the earthquake and its effects reached Ankara, U.S. Ambassador Robert Strausz-Hupe declared that the earthquake constituted a disaster of a magnitude warranting U.S. Government assistance. On October 31, a check for \$25,000 was sent to the Turkish Red Crescent Society for use in

meeting victims' immediate relief needs. Two days later, Ambassador Strausz-Hupe visited the disaster site with other USG personnel and received a briefing on the Turkish relief operation.

As assessment reports were received and the GOT began to indicate the types and quantities of various relief commodities required, the USG offered further assistance. Through OFDA, four U.S. Department of Defense C-141s were mobilized to transport relief supplies from the OFDA disaster stockpile in Leghorn, Italy to Incirlik, Turkey. There the commodities were transferred to C-130s and flown directly to Erzurum. By November 4, twelve C-130s had delivered the following:

1,043 tents	2,000 5-gallon water containers
15,677 wool blankets	8 collapsible water tanks
250 110 x 25 ft. rolls of plastic sheeting	(3,000 gal. capacity)
50 fifty-person cooking stoves	2 drums of chlorine
50 gas cans	2 water purification units with 2,000 gal./hr. capacity and support equipment

On November 5, 240 additional rolls of plastic sheeting arrived in Erzurum from Leghorn to be used for temporary repair of damaged homes and insulation for tents. Six U.S. military personnel from Leghorn, Italy worked with the Turkish military to oversee distribution of supplies donated by the U.S. They also helped erect tents and train people to operate the field stoves. A 10-passenger snow vehicle loaned by the U.S. military proved valuable in the rough and snow-covered terrain.

Potable water became a critical need as the displaced population arrived in the GOT shelter areas. On November 4, OFDA dispatched a sanitary engineer, logistician, and two maintenance and training technicians to assist GOT and U.S. Embassy personnel in assessing water needs and resources. The team confirmed the need for water purification units and selected an appropriate site for the units. Within a short time the units were in operation.

The U.S. technical team trained GOT personnel to install and maintain the equipment. The OFDA team received excellent support from the GOT Ninth Corps, from the local GOT military facility at Erzurum, and from the six person U.S. military team.

Power lines in many areas of the affected provinces were knocked down, thus disrupting electricity for regular and relief operations. In response to a GOT request, the USG procured four 36 kva diesel generator sets which were subsequently installed.

Summary of USG Assistance

Ambassador's Authority	\$25,000
Tents	\$268,166
Blankets (to be replaced in FY 1985)	\$73,195
In-kind contribution of water containers, valued at \$2,950; field stoves valued at \$6,250; gas cans valued at \$250; and water tanks and chlorine valued at \$15,858	
Plastic sheeting	\$137,322
Replacement freight	\$37,000
DOD airlift of OFDA equipment and supplies	\$426,028
Services and travel of two contract engineers	\$26,062
Local procurement of extra piping	\$10,000
Shipping of 120 filter candles (valued at \$2,880) for water purification units	\$587
Local procuremnt of generators	\$40,000
TDY of A.I.D. Sanitary Engineer	\$2,261
Total OFDA FY 84	\$972,426
Total OFDA FY 85	\$73,195
TOTAL	\$1,045,621

Assistance Provided by U.S. Voluntary Agencies

CWS - contributed \$5,000 in cash to the World Council of Churches and issued an appeal for \$75,000 for reconstruction assistance. In response to this appeal, \$73,342 was collected.

TOTAL \$78,342

Assistance Provided by the International Community

International Organizations

EEC - contributed an unspecified quantity of winter tents valued at \$84,507

UNDRO - dispatched a relief coordination officer to Erzurum to assess relief needs and issued an international appeal for assistance.

UNDP - Resident Representative in Ankara hosted a meeting of international donor representatives on November 4 at which the GOT priority needs were presented; made cash grant of \$30,000.

UNICEF - 1,300 anoraks and 1,300 boots (for children).

World Health Organization - sent a sanitary engineer to affected areas on November 9 to update previous field assessments.

Governments

Australia - contributed \$370,370 in cash in response to the UNDRO appeal.

Austria - contributed \$109,300 in cash through UNDRO.

Belgium - 200 family-size winter tents with an estimated value of \$28,169.

France - one ton of protein tablets and \$12,578 in cash.

Germany, Fed. Rep. - 4,600 quilts, 7,000 blankets, and 2,100 parkas flown in, with an estimated value of \$114,800; 1,000 bottles each of sodium chloride, darrow, and dextrose, valued at \$3,800; and \$334,248 in cash to the German Red Cross to support LORCS program.

Greece - 500 tents, 1,500 blankets, 13 bundles of clothing, 45,000 vaccines and 8,000 serums.

Iran - \$4,082 in cash; 10 tons of rice, 400 tents, 10 large tents, 8,000 blankets, and 30 cases of clothing.

Italy - 120 eight-person tents, 960 beds, and 2,000 blankets, transported during three flights with total estimated value of \$472,000. Subsequently, an unspecified quantity of stoves, valued at \$233,000, were also provided.

Japan - cash grant of \$400,000 to the Turkish government.

Jordan - two planeloads of miscellaneous relief supplies.

Kuwait - 22.5 tons of family boxes, 200 tents (12'x12'x10'), 6,000 blankets, and 10 tons of medical supplies and equipment, all transported in two C-130s and one DC-9.

Libya - two planeloads totaling 80 tons of relief material.

Luxembourg - 350 sleeping bags, 300 wool blankets, and 500 wool overcoats.

Netherlands - 36 large tents, 100 tarpaulins (12x6 m), 30 tarpaulins (5x3.5 m), 2,100 blankets, 1,500 kerosene tent heaters, and 2,300 jerry-cans with a total value of \$441,000.

Norway - contributed \$408,163 in cash, 150 tents and 150 stoves valued at \$204,082.

Pakistan - 600 tents, 5,000 blankets, 340 cartons of medicines, and 8 cartons of surgical instruments with an estimated total value of \$310,000.

Saudi Arabia - contributed \$10,000,000 in cash.

Sweden - contributed \$384,600 in cash to the Swedish Red Cross in support of LORCS program.

Switzerland - two disaster rescue and health service teams (52 people and 18 dogs), 5 tons of tents, blankets, and medical supplies, and 30 Iso-Shelters, with total estimated value of \$492,112.

United Kingdom - 490 tents valued at \$134,000, and \$29,850 in cash.

Vatican - made a cash grant of \$25,000 for prefabricated housing.

Voluntary Agencies and Non-Governmental Organizations

Aviation Sans Frontieres - provided transportation valued at \$10,000 for relief goods from Secours Catholique and Secours Populaire Francais.

Caritas Germany, Fed. Rep. - \$38,400 in cash.

Caritas Italy - \$50,000 in cash.

Caritas Switzerland/Entre aide Protestante Suisse - contributed tents, boots, sleeping bags, and water clothing.

Catholic Fund for Overseas Development (UK) - \$2,900 in cash.

German, Fed. Rep. Relief Society - contributed 4 tons of children's clothing.

Hungarian UNICEF National Committee - contributed 800 children's blanket through Turkish Red Crescent.

Islamic Solidarity Fund - \$500,000 in cash.

Japanese Shipbuilding Industries Foundation - \$20,833 in cash.

LORCS - issued an international appeal for \$7.7 million to help the Turkish Red Crescent to purchase 5,000 polar tents, 30,000 heavy blankets, 5,000 winter sleeping bags, 150,000 sq. m. of tent canvas, and other relief supplies. LORCS dispatched a 4-member Disaster Relief Standby Team to survey the disaster area and identify emergency needs. The following societies responded to the appeal:

Australia - \$92,592 in cash.

Belgium - winter tents valued at \$9,390.

Bulgaria - 50 tents, 3,750 blankets, 50 stoves, and 1 ton of medical supplies.

Cyprus - 2,000 blankets, a health team, and first aid material.

Denmark - \$105,000 in cash to purchase blankets and tents.

Germany, Fed. Rep. - 15 large tents, 7,000 blankets, 1,775 sleeping bags, and 3.8 tons of medical supplies and emergency surgery items with a total estimated value of \$119,230. Subsequently, the German Red Cross contributed 3 trucks, 7 field kitchens, 5 generators, and 200 Swedish huts, all valued at \$488,460.

Greece - 1,500 blankets, 380 sleeping bags.

Italy - 1,300 blankets.

Libya - \$515,000 in cash.

Netherlands - 5,000 blankets valued at \$15,254.

Nordic Countries - 150 tents, 50 prefabricated housing units, 1,700 blankets, and 500 sleeping bags, all transported by a Swedish C-130.

Norway - \$67,567 in cash.

United Kingdom - 100 tents and 100 blankets, with a total estimated value of \$119,400.

Norse Folkeiijelp - \$13,514 in cash.

Paritaet International - 50 tents and tent heaters, 5,000 blankets, 15 tons of clothing, and 5 tons of medical supplies, all valued at \$633,000.

Secours Catholique and Secours Populaire Francais - sent 5,250 blankets valued at \$31,250 and 2.5 tons of clothing valued at \$7,500.

World Council of Churches - contributed \$10,000 in cash.

TOTAL \$17,474,951