### **TURKEY**

## Earthquake May 22, 1971 5:30 PM

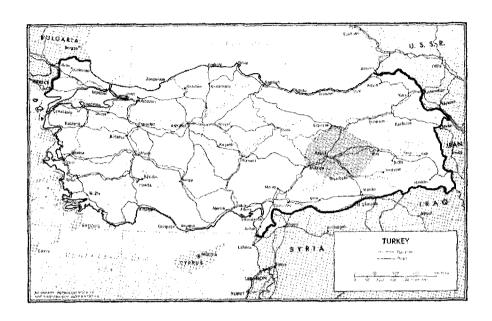
... measuring 6.8 on the Richter scale kills 878, injures 1,200, leaves 27,465 homeless in Eastern Turkey. Nearly 60,000 people directly affected. 5,493 homes destroyed, 3,408 sustained substantial damage, 3,318 suffered slight damage. 334 public buildings ruined or in need of extensive repair. Estimate 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 1-1/2 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 revised 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.

Kizilav 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 USG should contribute tents, blankets and medicines. Accordingly, he authorized the U.S. Military to deliver a planeload 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 am 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	
	\$165,084	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	\$1	84,887

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.	873
	\$ 15,473

#### **Church World Service**

CWS made a cash donation to the World Council of	
Churches for the earthquake victims of	\$ 1,000

#### American National Red Cross

ANRC airlifted 10,000 22-cc yials of gamma globu	
and 3,000 blankets which arrived in Ankara	via
PanAm on or about June 2 Estimated value	ın-
cluding airlift	

\$ 24,000

\$40,473

### 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 

\$ 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 Belgium Bulgaria Ceylon Finland France Greece Hungary Iran Israel Italy lapan Kuwait Netherlands Norway Spain

Sweden Switzerland Tunisia United Kingdom USSR West Germany Yugoslavia

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, Kızılay, the Governor of Bingol, and Turkish Military