

DEPARTMENT OF HUMANITARIAN AFFAIRS
DHA-GENEVA

The Great Hanshin-Awaji (Kobe) Earthquake in Japan

17 January 1995

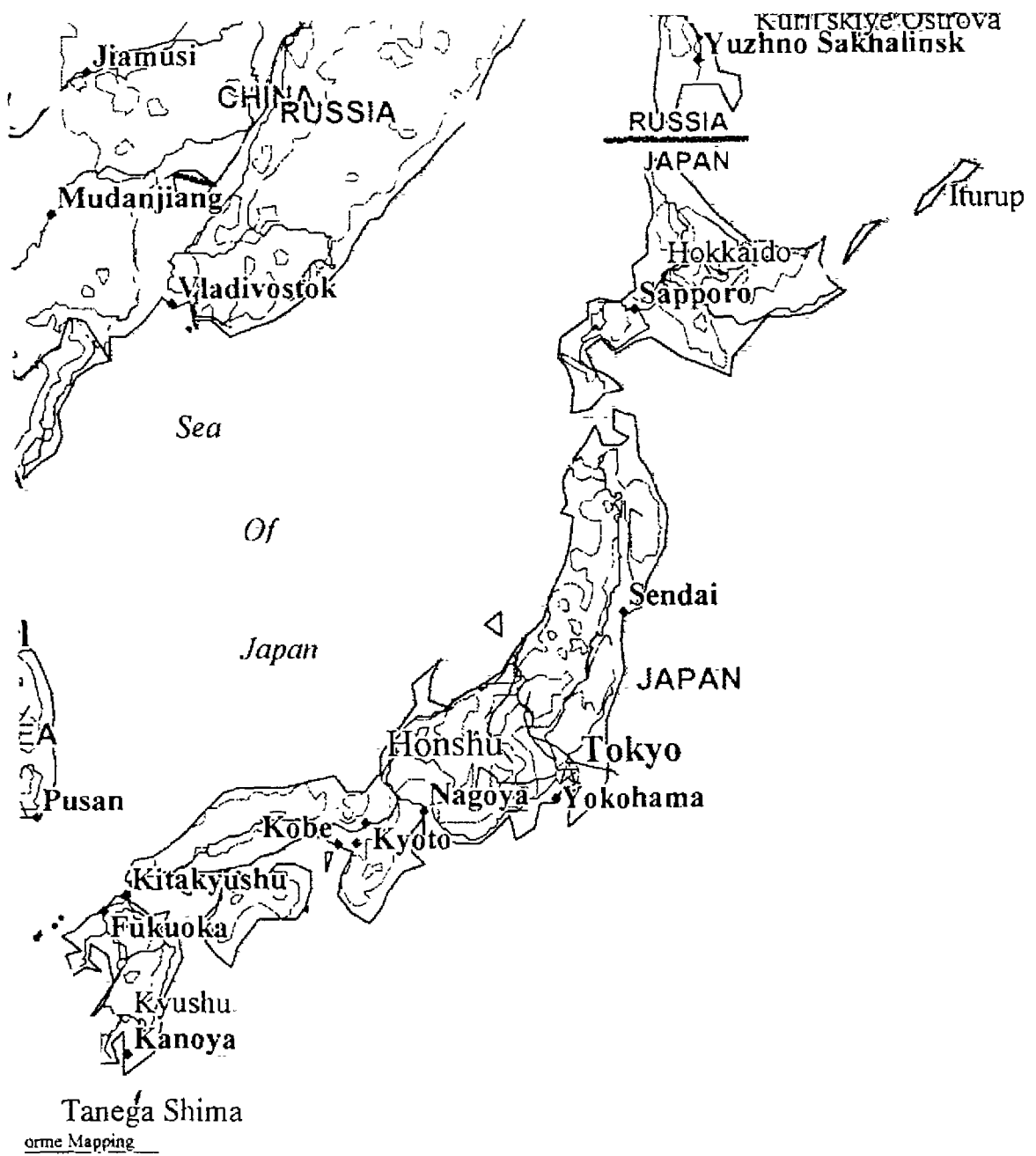
**The Earthquake, On-Site Relief
and International Response**



**UNITED NATIONS
New York and Geneva, 1995**

Published by the Department of Humanitarian
Affairs. Not an official document. Opinions
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Figure 1 Location of Kobe



Executive Summary and Introduction

On 17 January 1995 at 5:46 a.m., an earthquake measuring 7.2 on the Richter scale hit the City of Kobe and its vicinity. Since the epicenter was close to Kobe and the depth was only 14 km, this caused unprecedented ground motion in Kobe. The seismic intensity was estimated to be 12 on the Modified Mercalli Scale (MMS) in the center of Kobe, which caused extensive damage to old houses and buildings and structural damage to elevated railroads and highways. Casualties totaled 5,502 dead, 2 missing and 41,648 injured. Direct economic damage has been estimated at approximately US \$100 billion.

Kobe is a city of 1.5 million inhabitants which has developed on a narrow plain belt, sandwiched in between the mountains in the north and the sea in the south. Population density is very high, and there is no empty space in the built-up area. Kobe is supported by a massive public transportation system and highway networks. Although Japan is known to be an earthquake-prone country, Kobe residents regarded themselves to be in a low seismic-risk area, and local preparedness plans foresaw earthquakes only up to 9 on the MMS.

Relief workers themselves were severely affected. Police and fire stations were also damaged. Local governments, which were to coordinate the first response, were initially paralyzed. This delayed initial nationwide mobilization of rescue and medical resources. However, within 24 hours, the nationwide emergency response mechanism was fully mobilized. Traffic jams, a lack of open space and a lack of water hindered rescue and relief efforts.

Several hours after the earthquake, with a sharp rise in official casualty figures, news of the Kobe earthquake filled the headlines of the international media. Live coverage with impressive images of physical destruction and tragic stories shocked viewers around the world for days.

Since Japan has sufficient rescue and medical personnel to respond to emergencies as well as an abundant supply of consumer goods in the country, it did not request international assistance. What relief workers in the affected area wanted was full mobilization of the country's human resources to work under their command structure. However, offers of international SAR teams were repeated and accepted. Three international SAR teams came to Kobe from Europe. They recovered 13 bodies in all, but no survivors. Due to the time difference and geographical distance, it was impossible for these SAR teams to reach Kobe within 36 hours. There were also offers of medical teams. The medical needs of the affected area changed drastically in the first three days. The main medical requirement at the end of this time was to take care of the daily medical needs of the mass of evacuees deprived of their family doctors and to cope with cases of colds, digestion problems and fatigue. A fluent command of Japanese and an acquaintance with the customary Japanese treatments for these symptoms were basic qualifications for any medical volunteers to be of help to the affected population.

There were numerous offers of in-kind assistance with relief materials. The Japanese Government and local authorities saw these as symbols of international solidarity and expressed gratitude for all this good will. Japanese authorities accepted as much as possible as long as it was useful for the affected population. Blankets and plastic sheeting were useful as at any disaster site. Bottled mineral water and instant cup noodles were greatly welcomed. Large group-tents could not be utilized due to space constraints. Medicines with instructions in English could not be used for practical reasons.

Many governments, scientific institutions and NGOs expressed a wish to visit Kobe on fact-finding missions. Local Kobe authorities asked that these missions be postponed for one month, since they were devoting all their manpower to relief and immediate rehabilitation measures. They realized that the arrival of these teams would add another burden to the constraints in accommodation and transportation. Seeing the great demand for fact-finding missions, some academic institutions opened information centres to researchers coming from abroad. This eased some of the burden on local authorities.

Since Kobe is an international port city, news of the earthquake led to great congestion in the telephone lines to Japan. People with family members and friends in the affected area had difficulty reaching them. To solve this problem, a disaster welfare inquiry system was set up by the Red Cross and the Public Broadcasting Corporation.

Many lessons can be learned from this earthquake event. Such a quake in a densely populated, modern metropolitan area has its own characteristics. Immediate relief needs and required items are somewhat different from those for disasters in medium-sized cities. Also, local and national relief authorities must bear in mind that the news of any major disaster in an easily accessible area is being given live coverage by all the international media and that, even if the affected areas do not require international assistance, this coverage will evoke various international reactions.

Immediately after the earthquake, the Relief Coordination Branch of the United Nations Department of Humanitarian Affairs (DHA) started real-time monitoring of the situation. It issued a series of reports to provide accurate information to the international community. DHA sent a fact-finding mission to Japan to assess the international response to this earthquake from 28 February through 10 March 1995, when the immediate relief phase was over and reconstruction had started. The following is the case report based on this first mission. Some of the figures quoted in this report have been taken from preliminary reports available at the time of the mission and may be revised in the future. Many facts regarding this even still need to be verified, and this case report should be updated accordingly.

26 May 1995

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Figure 2 Kobe and Its Vicinity Scale 1:1,000,000

