

## ■ EGYPT

### Cairo in mourning after strong earthquake

On Monday 12 October at 3 pm local time, an earthquake measuring 5.9 on the Richter scale struck Egypt with its epicentre located 30 kms southwest of Cairo. In the Egyptian capital, a busy city with 12 million inhabitants, and another 4 millions transit population commuting everyday to their jobs, the quake shook buildings in the residential quarter of Heliopolis and the more popular districts of Zaher, Sharabeya, Bulaq and Gamaliya. Residents in old buildings were buried in the rubble before they had time to flee. The population was seized with panic and school children (some 40 died), were particularly frightened. Cairo's underground railway and the Aswan dam were fortunately unscathed. The ancient sites, which include of course the Pyramids and the Sphinx - that were thought to be immune from destruction, were unfortunately not spared. Repairs to the Sphinx

will take more than a year. Other monuments, such as the Saqqarah Pyramid and the temple of Qom Ombo, as well as the roof of Cairo's Egyptian Museum, were damaged. Despite significant loss of life (561 dead), the earthquake did not create a major disaster like, for example, the 1988 Armenia earthquake. The immediate damage in Cairo, although serious and of incalculable value in the case of cultural monuments, was limited to punctual collapses of buildings, mostly two or three storey houses in the older parts of the city. One tall 14 storey building collapsed in Heliopolis, close to central Cairo, killing several people. In the rural areas, on the outskirts of Cairo, the damage was more severe and many families were made homeless due to the collapse of their homes. People did not dare to go back to their houses in fear of after-shocks. 10,000 people were injured and 3,000 families lost their homes. Although strongly shaken and having to deplore several hundreds of fatal casualties, the citizens of Cairo and of Egypt as a whole, could have faced a much worse



*Although not considered as an earthquake prone area, Cairo is exposed to this risk.*

situation if the intensity of the earthquake had been more than 5.9. This disaster might serve as a reminder that although not considered as an earthquake prone area, Cairo is exposed to this risk.

**Previous disasters:**

Back in 1262 the famous Lighthouse of Alexandria was destroyed by a violent earthquake. The last major earthquake to occur in Egypt was the 1847 one which caused some 100 deaths.

**■ EL SALVADOR  
Floods**

Since 28 September continuous heavy rain caused floods in wide areas of the South East region of the country, affecting the already precarious economic situation of the inhabitants. More than 8,000 people were evacuated and crops and housing were seriously damaged.

**Previous disasters:**

On 10 October 1986 a violent earthquake killed 1,000 persons. 10,000 were injured and up to 30,000 families rendered homeless.

**■ FRANCE  
Torrential rain in the south-eastern region. Departments of Vaucluse, Ardèche and Drôme declared disaster areas and ORSEC Emergency Plan set in motion**

The "black Tuesday" of 22 September, when continuous thunder storms struck South Eastern France, flooding the ancient town of Vaison-la Romaine, transformed the region into a scene of desolation. The Ardèche, a rushing tributary of the Rhône, frequently rises to high levels: 11.20 metres in 1982, 12 metres in 1977, 12.20 metres in 1958 and 15.80 metres in 1900. The Ouvèze, coming down as a 15-metre wall of water, crashed into Vaison-

la-Romaine, destroying everything in its path. Some of the victims experienced the tragedy of being unable to rescue their relatives or neighbours while they were carried away by the waters. Thirty-two people died and several were missing, including tourists trapped in their caravans or camping tents. As Commandant Yves Cavalier, who was in charge of the rescue operations explained, there was no "technical possibility of finding people alive", despite the use of 16 helicopters and 1,500 rescuers.

*Both in the United States and in France such tragedies have re-opened the debate on the prevention of natural disasters.*

**■ INDIA  
Suffers from  
floods and cyclonic storms**

Floods in the states of Uttar Pradesh and Jammu and Kashmir killed almost 500 people and damaged 14,000 homes. Torrential rains gave rise to severe flooding in Kerala, in Southern India, causing at least 50 deaths.

On 12-14 November, the Southern tip of India was struck by a cyclonic storm which devastated Northern Sri Lanka. In Tamil Nadu alone, 170 people were killed and 600 reported missing. In Kerala State 41 people died and 70 were missing. The State of Karnataka was also seriously affected by this disaster.

**Previous disasters:**

A major earthquake occurred in India, in the north-east Bihar region, on 15 January 1934, and was claimed at that time to be "one of the biggest seismic disturbances in the history of the world". It was severe enough to be felt 1,000 miles away from the epicentre and to cause massive destruction over an area of 15,000 square miles, with the loss of at least 7,000 lives.

# Floods

(A glance at the year 1991)

In 1991, there have been 7,485 deaths and missing persons in the world due to this phenomenon occurring in 32 events with 10 or more deaths, according to our estimates. If it had not been for the cyclone "Gorky" that ravaged Bangladesh, floods would have been the worst disaster of the year 1991.



Asia, with 6,524 people killed mostly due to the monsoon rains has been the continent most affected; Africa follows with 530, America with 298 and Europe with 133. The countries that have been most affected are China and India. In China, floods from the middle of June to the end of July have killed 2,295 people, affected 200 million people (10 million have been left homeless) and resulted in damage estimated at US \$12,900 million.

In India, the most severe floods took place on 20 October. They affected the State of Uttar Pradesh and others with 1,600 victims and US \$60 million worth of losses. The floods in Andra Pradesh on 30 July were also very destructive with 524 deaths, followed by those on: 16-28 August with 57, in Karnataka on 30 October with 30, in Kerala on 1 June and 9 July with 99 and in Bombay on 8-13 June with 44.

Afghanistan's worst floods were those in Jowzjan on 2-3 June with 728 deaths, in Takhar on 13 April with 50 and from 1 February to 24 March with 100.

Other major floods in Asia were those in: Viet Nam with 174 death, South Korea with

70, Cambodia with 100, Bangladesh with 130, Sri Lanka and Maldivas with 27, Pakistan with 200, Iran with 128 and Turkey with 45. In Indonesia, Kalimantan, floods caused 97 deaths from 6 to 9 June.

In Africa, the most serious floods were those in Malawi with at least 472 deaths and 150,000 people left homeless from 10 to 14 March. Camerun and Tchad were also hit by this disaster with 41 deaths, and Algeria with 17.

In America, the greatest floods were those of Chile in Antofagasta, with 141 people killed, 2,558 wounded and 30,000 injured by a flood of 5 million tons of mud due to rains on 18 June. In Mexico, there were 70 deaths in Veracruz and other states and 15 in the U.S.A., in Texas.

In Europe, there were 107 deaths in NE Romania, especially in the watershed of the Tazlu river where a dam broke on 29 July; the losses were estimated at US \$50 million. In Italy, especially in Sicily, there were 26 deaths on 12-13 October.

*Source: Natural Disasters in the World - Geo-Mining Technological - Institute of Spain, 1991.*