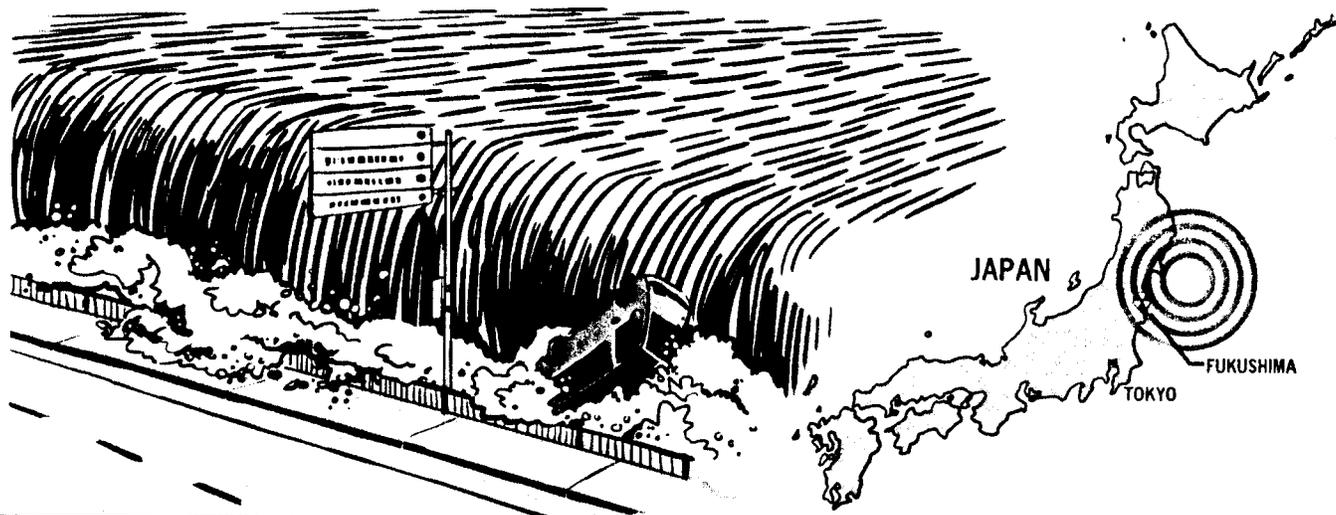


INTERNATIONAL DOUBLE DISASTER STRIKES JAPAN



"An earthquake powerful enough to make the world wobble on its axis, a massive tsunami, an emergency in nuclear power stations. Any one of these would be a tragedy. Thousands of people have died and this has turned this tragedy into a catastrophe."

- Herman van Rompuy, President of the European Council.

March 11 was a normal working day in the Far East island nation of Japan. That wintry Friday afternoon, schoolchildren were concentrating in classrooms, office workers were filing reports and subways were delivering shoppers to local malls.

THE EARTH COMES ALIVE

Suddenly, at 2:46 p.m. on the northeast coast of Honshu island, a great roaring and rumbling was heard. Then the ground began shaking violently. The strongest earthquake ever recorded in Japan, measuring nine on the **Moment magnitude scale**, was underway.

The terror lasted five long minutes. During this time, buildings on parts of Japan's main island collapsed in heaps. Telephone poles swayed. Trees fell like pick-up sticks. The impact was so powerful, violent tremors shook office towers in the Japanese capital of Tokyo, about 370 kilometres from the quake's **epicenter**. The event was "like a scene from a disaster movie," said one 34-year-old. "The road was moving up and down like a wave. Things were on fire and it was snowing."

A RAGING TSUNAMI

It didn't seem like the situation could be any worse – yet there was more terror to come. The **megathrust earthquake** that had occurred 24 kilometres underground and 125 kilometres off Japan's east coast had triggered a massive **tsunami**.

Within minutes of the tremor, a wall of water four metres high began pounding hundreds of kilometres of

ABOUT JAPAN

Japan, an island chain located between the North Pacific Ocean and the Sea of Japan, has a population of 126 million and covers an area just over half the size of Manitoba.

The nation is a **constitutional monarchy** with an elected parliament. Emperor Akihito serves as the ceremonial head of state. An industrialized country, it has the third-largest economy in the world. Its main exports are cars, computer parts, chemicals, scientific instruments and watches.

coastline, flowing over or crashing through anti-tsunami seawalls and surging up to 10 kilometres inland.

Near the worst-hit city of Sendai, home to one million people, a muddy torrent of water carried cars and homes at high speed across farmland. Ships were flung onto a harbour wharf, where they lay helplessly on their side.

DEFINITIONS

CONSTITUTIONAL MONARCHY: a democratic government with a figurehead monarch

EPICENTER: the point directly above an earthquake

MEGATHRUST EARTHQUAKE: a very large tremor caused by one tectonic plate suddenly sliding underneath another

MOMENT MAGNITUDE SCALE: scale for measuring the energy released by earthquakes

TSUNAMI: a very large ocean wave that can occur when a large body of water is suddenly displaced



INTERNATIONAL

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Everywhere, large objects were tossed around like toys in the water.

"I saw the bottom of the sea when the tidal wave withdrew and houses and people were being washed out," one survivor recalled. "I couldn't watch any more."

UTTER DEVASTATION

In the port town of Minamisanriku, half the population of 17,000 simply disappeared. The villages of Kuji and Ofunato were swept away entirely. Rikuzentakata, where the tsunami was reportedly three stories high, was almost completely submerged, while the city of Kesenuma, with a population of 74,000, was hit by widespread fires and flooding.

Across the region, several airports were closed, rail services were halted and all ports were shut. As well, more than 800 roads, dozens of bridges and seven railways were badly damaged, leaving many hard-hit towns and villages cut off. More than a million households were without water, while 5.6 million homes had no power.

"This is Japan's most severe crisis since the war ended 65 years ago," said Naoto Kan, Japan's Prime Minister.

DID YOU KNOW...?

The March quake moved the island of Honshu 2.5 metres to the east. It also shifted Earth on its axis by about 25 centimetres, shortening the length of the day by about 1.8 millionths of a second.

THE RELIEF EFFORT

The government immediately threw every wing of Japan's Self Defence Forces into frantic service. Hundreds

of ships, aircraft and vehicles were deployed to the disaster scene together with 100,000 soldiers, firefighters and police officers.

Some 50,000 U.S. troops already stationed in Japan joined the relief effort, and the Japanese Red Cross sent 95 medical teams to the region. Meanwhile, 14 international organizations and 102 nations offered to help. Prime Minister Stephen Harper said Canada was on standby, willing to do whatever was necessary.

Rescue efforts, however, were hampered by more than 500 aftershocks of magnitude 4.5 or greater that plagued the region for weeks after the initial quake. Fuel shortages and a cold snap that brought snow made the work even more difficult.

Emergency crews also struggled to cool the six reactors at the Fukushima nuclear plant. After the quake and tsunami knocked out power to the complex, the reactors began leaking radiation, sparking a third disaster.

A LONG ROAD AHEAD

Two weeks after the quake, the country was still in a crisis. More than 10,000 people were confirmed dead, with thousands more still missing. Another 450,000 remained homeless, many packed into schools, gymnasiums and other community buildings often without heat, medicine and hot meals.

Officials estimated that it would take five years, and up to \$309 billion (U.S.), to get the country back on its feet. The road ahead was daunting: Debris would have to be cleared, the transportation network needed to be

NEW ZEALAND'S EARTHQUAKE

On February 22, 2011, a magnitude 6.3 earthquake shattered the city of Christchurch on New Zealand's east coast. This shallow-focus quake, which occurred at a depth of 5.1 kilometres, struck just 10 kilometres southeast of the city. It killed at least 160 of the town's 350,000 people and damaged 100,000 homes.

The tremor was caused by the Pacific Plate sliding past the Australian Plate, like two trains going in opposite directions.

repaired, and thousands of homes, businesses and factories would have to be rebuilt.

But the government, and survivors, say the jobs will get done, and life will go on. The resilient country has overcome many obstacles in its history, and the Japanese will get through this disaster, too, by sticking together and taking each day as it comes.

"We could be living like this for a long time, so all we can do is stay in good spirits," said one man. "I try to concentrate on what I need to do this morning [and] this day." ★

DEFINITIONS

AFTERSHOCKS: a series of tremors after an earthquake

DEPLOYED: brought into action