Japanese earthquake causes catastrophic damage

Mike Head 12 March 2011

Many hundreds of people are feared dead and thousands made homeless after the strongest earthquake ever to hit Japan. Yesterday's magnitude-8.9 quake—the seventh largest recorded in world history—has caused catastrophic damage, especially across northern Japan.

Coastal cities and towns were engulfed by tsunamis as high as 10 metres caused by the main quake. This has been followed by almost constant major aftershocks, as strong as 7.4 on the Richter scale. Within two hours of the initial shock, which occurred at 2.46 p.m. local time, giant waves and sea surges swept up to 10 kilometres inland, demolishing houses, farms and factories, giving residents little time to seek shelter.

As dawn broke this morning, the extent of the disaster began to emerge. In some cities, virtually all the wooden homes—numbering in the thousands—have been washed away completely. Taller concrete buildings remain flooded to their second storeys, and shopping complexes, hospitals and schools have been swamped. Fires continued to blaze, consuming houses and apartment blocks.

Police have so far reported finding between 200 and 300 bodies in the north-eastern city of Sendai, population one million. Sendai was the closest urban concentration to the quake's epicentre, which occurred 10 kilometres under the sea and about 400 kilometres northeast of Tokyo.

The official toll reached 427 this morning in nine prefectures, including Tokyo, with the number likely to rise to well over 1,000, according to the National Police Agency and the Defence Ministry.

The final toll could be even higher. Television footage showed terrifying images of walls of debris-filled water tearing away homes, large buildings, cars and buses, with motorists desperately trying, unsuccessfully, to escape the fast-flowing surges. A dam in Fukushima prefecture broke and homes were washed away, Kyodo news reported early this morning.

Widespread aftershocks—more than 50 in 24 hours—are continuing to affect much of Japan. Large fires, most likely caused by gas and oil leaks, were burning in an oil refinery near Tokyo and in several apartment buildings in the capital and other cities. There were reports that a ship and a passenger train had been lost.

Prime Minister Naoto Kan declared a nuclear emergency last

night after at least two power stations malfunctioned, causing fears of radioactive leaks. A cooling system failed at Tohoku Electric Power's Onagawa facility and the Kyodo newsagency reported that a fire had broken out at the plant. Three other nuclear power plants were reported to have shut down safely, but 80,000 residents are now being evacuated from a 10-kilometre radius around a facility in Fukushima prefecture.

Japan's nuclear regulating agency reported this morning that radioactive levels inside one Fukushima reactor had risen to 1,000 times above normal. The government issued what Kyodo news called "an unprecedented order" directing the Tokyo Electric Power Co. to open valves at two plants to release pressure that was threatening to cause overheating in several reactors.

The nuclear emergency contradicted Kan's initial claim, at a media conference after the quake struck, that there were no signs of radioactive dangers. Kan warned of "major damage in broad areas in northern Japan" and asked people "to act calmly while listening carefully to information from radio and TV".

The earthquake was 160 times more powerful than the one that devastated the New Zealand city of Christchurch nearly three weeks ago. Thirty minutes after the main quake, tall buildings were still swaying in Tokyo and mobile phone networks were not working. Major buildings, built to high earthquake engineering standards, managed to withstand the immense earth movements.

Nevertheless, as big aftershocks rocked the city, hundreds of people were trapped inside tall office and apartment buildings. Multiple injuries were reported when the roof of a hall collapsed during a graduation ceremony. Plumes of smoke rose from at least 10 locations in Tokyo, where 4 million homes suffered power outages. The city's metro system shut down for several hours, along with the main international airport at Narita. Metropolitan expressways were also closed.

Further north, the damage was far greater. Helicopter footage showed massive flooding in coastal towns. Japan's meteorological agency said that within two hours, tsunamis had washed ashore into cities along a 2,100-kilometre stretch of the country's eastern shore, from the northern island of Hokkaido to central Wakayama prefecture.

Several multinational companies, including Honda, Nissan,

Toyota, Sony and Volvo, reported that damage had forced them to close plants, at least temporarily. Honda said a 43-year-old male employee had died at its research-and-development centre in Tochigi Prefecture, north of Tokyo, as the wall of a cafeteria crumbled. More than 30 employees at several Honda facilities in the same prefecture were injured.

Seismologists have expected an earthquake of this magnitude for some time. The epicentre lies along the boundary between two of the earth's tectonic plates, with the Pacific plate grinding westward, pushing under the edge of the Eurasian plate. The previous week had seen several substantial quakes, one at 7.1 on the Richter scale.

Seven earthquakes over magnitude 8 have rocked Japan since 1891. In 1923, a 7.9-magnitude earthquake killed 147,000 people in and around Tokyo, mainly due to fires that raged through wooden and paper houses. In 1995, despite strict building codes in modern city areas, more than 6,000 people died in the Kobe earthquake, predominantly in poorer, working class districts where the government had failed to implement the higher standards.

The entire Pacific Rim was put on high alert last night after a tsunami warning was issued throughout the region. Tsunamis were feared across the Pacific, because the earthquake was almost as powerful as the 9.1-sized quake off Indonesia that set off the Indian Ocean tsunami in December 2004, killing more than 200,000 people.

The waves that sped across the Pacific at speeds of up to 800 kilometres per hour were so powerful that they reached California early yesterday morning local time, where they pummelled the harbour at Crescent City in the state's north. Residents had heeded the blaring evacuation sirens, and this saved lives, but the tsunamis ripped chunks off wooden docks and destroyed or damaged two dozen or so boats. One man who tried taking photographs of the tsunami on a beach about 20 kilometres south of town was swept out to sea. Federal seismologists said the 3-metre swells that roared into Crescent City were the largest to hit the United States on Friday-higher than the 2-metre surges that hit Hawaii. The rest of the California shoreline quickly began seeing surges after that. By then, all residents in low-lying areas had been urged to evacuate, and officials closed some schools and coastal roads as a precaution.

Official reports today indicated that little damage had been caused in the southern Pacific, but waves as high as two metres hit Hawaii in the early morning hours today. Because the Hawaiian authorities had some time to prepare, sirens sounded throughout the night, and residents in coastal areas were sent to refuge areas at community centres and schools, while tourists were moved to higher hotel floors.

At a White House media conference, US President Barack Obama expressed concern at the seriousness of the disaster and said the US would "stand with" Japan, a close ally, where American troops were based, as it "recovers and rebuilds from this tragedy". His initial offer of assistance was military. Obama said the US currently had an aircraft carrier in Japan, and another was on its way. A third naval ship was en route to the Marianas Islands to assist as needed.

In financial and ruling circles, considerable nervousness has been voiced about the economic impact of the disaster. CNN reported: "Investors around the world were rattled Friday after a massive earthquake and tsunami struck Japan, adding another layer of uncertainty to markets that were already jittery about oil prices and the volatile political situation in the Middle East." Japan's Nikkei share index immediately fell 1.7 percent.

"There is no way to assess even the direct damage to Japan's economy, or to the global economy, that this will cause," Carl Weinberg, chief economist at High Frequency Economics, told CNN. However, "experience tells us that the economic shock can be, and likely will be, much bigger than anyone can imagine."

Japan's economy has stagnated since 1989 and there were already signs of renewed slump, with gross domestic product shrinking by 1.3 percent in the final quarter of 2010. Market representatives warned that the government would be forced deeper into debt in order to pay for reconstruction. The question was whether the disaster could "push Japan over the edge" financially, Brendan Brown of Mitsubishi UFJ Securities told *Bloomberg*.

Japan's public debt is 228 percent of GDP, compared with 144 percent for Greece and 77 percent for the United Kingdom. In January, Standard and Poor's cut the country's long-term sovereign debt rating, saying politicians had no real plan to reduce the worrying debt levels.

There were also more immediate profit-based concerns. James Shuck, an insurance industry analyst for the investment bank Jefferies, estimated the insurance industry's losses at \$10 billion. That would make it the costliest Japanese earthquake for insurers ever, but Shuck said the liability would be limited, since only about 10 percent of Japanese households had earthquake insurance.



To contact the WSWS and the Socialist Equality Party visit:

wsws.org/contact