



## After the Quake: Journey to Fukushima

Mar. 13, 2011

**By David McNeill** -- Tokyo is crawling unsteadily back on its feet. Its buildings are intact, its vast transport network is creaking back to life, cellphones work again, patchily. Planes land in the main international airports but traffic crawls through the streets.

But the world outside, along Japan's Pacific coast to the northeast has been knocked flat on its back. Battered by tsunamis, rocked by a steady, terrifying string of aftershocks, thousands of people bed down for the second night in makeshift refugee centers in schools, sports centers and gymnasiums.

The world's media has begun descending on the capital, looking to tell this story. And three hundred kilometers north of Tokyo comes the biggest story of all: a fire at a nuclear plant that could potentially rival the twin nuclear disasters of Three Mile Island (1979) and Chernobyl (1986).

Getting there, over roads buckled and warped by Friday's huge quake, is an ordeal. With two of my colleagues we rent a car and begin the long journey through Tokyo's clogged traffic then onto almost empty highways toward Iwaki city in Fukushima Prefecture, as close to the plant as we can get. As we drive, we listen to live reports on state broadcaster NHK, which says the Fukushima No.1 plant has started to go into meltdown.

It is terrifying news, filtered through the oddly emotionless tones of a professional translator. It's the first time the reactor core of a nuclear plant has melted in Japan, informs the announcer. An explosion has torn the roof from the complex. Radiation has leaked into the atmosphere. Twenty thousand people within ten kilometers of the plant have been told to evacuate. At teatime, Prime Minister Naoto Kan announces to millions of Japanese that the perimeter has been expanded to 20 km.

Japan's technological confidence has been shattered by quakes before. In 1995, the Great Hanshin Earthquake, with its famous images of toppled highways and collapsed buildings, killed 5,000 people, injured over 400,000 and brought global humiliation to a country proud of its construction prowess.

Four years ago, another huge quake struck almost underneath the world's largest nuclear power plant in Niigata, sparking fires, leaks and a crippling shutdown. Officials were forced to admit that they had not known about the fault underneath the 8200-megawatt Kashiwazaki-Kariwa plant.

Most people want to believe Mr. Kan when he says that the government is working hard this time to make sure "not a single resident will suffer any effects" from the radiation. But not Watanabe Yoshi, who lives with his wife and two young children about 135 km from the Fukushima plant. "They don't know what they're doing," he says. They should extend the perimeter further but they can't because they can't handle that scale of evacuation."

The sun sinks behind the highway. We pass a convoy of fire engines and truckloads of self-defence force troops, on their way to the coast to help rebuild devastated villages. At an almost deserted service station, Matsumoto Chieko stands waiting for customers as NHK flickers live in the corner. The power plant is an hour away. "Not far enough," she says. "We've been told not to go outside and breath the air, to stay here and watch the TV. It's just so scary."

In pitch darkness we enter Iwaki City. Apart from a handful of cars, the streets are deserted. Restaurants and bars have been closed. The blinds have been pulled down in the local Denny's. Even the 7-Eleven convenience store has shut its doors. We spot a schoolgirl walking quickly in the dark. "I'm on my way to pick up my mother," she tells us. "We're going to the refugee center. We've been told to stay indoors and not breath in the radioactivity." Then she hurries off.

The local municipal gymnasium has been converted into a makeshift shelter. Dozens of people are lying on futons and blankets, some clearly exhausted. A truck arrives bringing pot noodles, water and toilet rolls. "It's our second night here," says Yoshida Tsukase (33). He fled with his family after the first tremours on Friday, which were so strong they knocked him off his feet. "Now this," he says. "We heard rumours about the radiation before it was announced on the radio. My family are so tired."

In a corner, Moue Shun (22) and her boyfriend Sakuma Sugunori (24) cuddle to keep warm. "We saw the news of the plant leak on TV," says Moue. "The quake was terrible, but I worry more about the plant. We get only limited information. Are they really going to be able to make it safe?" Sakuma shrugs his shoulders. "They're doing their best," he says.

On the radio, experts are speculating on the worst-case scenario at the plant 30 km up the coast. "If there's no time to escape, I'll just go home and lock myself in," says Moue. "There probably wouldn't be time to run away." Someday they plan to marry, perhaps have children. Will they feel safe raising them here? Sakuma frowns. "This is where my family is from," he says. "Where else would I go?"

People inside the center begin drifting off to sleep. News arrives that the container insider the reactor was undamaged in the explosion and that radiation levels are falling. Tiny and frail, Fukaya Yoshiko (79) is wrapped in blankets that rise and fall with her breathing. She shrugs as she is told the news. "There'll be something else," she says. "There always is."

*David McNeill is Japan/Korea correspondent for The Chronicle of Higher Education, a regular contributor to The Irish Times and The Independent, and an Asia-Pacific Journal coordinator.*

**Note:** Below is an excerpt from a Channel News Asia article that discusses some of the broader implications of Japan's nuclear disaster:

[US experts fear 'Chernobyl-like' crisis for Japan](#)

13 March 2011

WASHINGTON - US nuclear experts warned Saturday that pumping sea water to cool a quake-hit Japanese nuclear reactor was an "act of desperation" that may foreshadow a Chernobyl-like disaster.

Several experts, in a conference call with reporters, also predicted that regardless of the outcome at the Fukushima No. 1 atomic plant crisis, the accident will seriously damage the nuclear power renaissance.

"The situation has become desperate enough that they apparently don't have the capability to deliver fresh water or plain water to cool the reactor and stabilize it, and now, in an act of desperation, are having to resort to diverting and using sea water," said Robert Alvarez, who works on nuclear disarmament at the Institute for Policy Studies.

"I would describe this measure as a 'Hail Mary' pass," added Alvarez, using American football slang for a final effort to win the game as time expires.

...

"It is considered to be extremely unlikely but the station blackout has been one of the great concerns for decades," said Ken Bergeron, a physicist who has worked on nuclear reactor accident simulation.

"We're in uncharted territory," he said.