

Text 10

Amid the apocalyptic scenes reaching our television screens from northern Japan, it seems scandalous to address just one aspect of this catastrophe or to draw any conclusions -- so recently did disaster strike and so comprehensive is the destruction. Already, however, the disaster has urgently posed a question that seemed to have been retreating from global concerns in recent years: how safe is nuclear power really?

Given its history, Japan had every reason to be most prudent in developing and using nuclear power. Its geography argued for doubling the precautions that might be taken anywhere else. And until last week, the safety measures appeared more than adequate. Japan had a safety record, and a reputation for integrating safety into design, that was the best in the world. The famous national discipline and resilience of the Japanese was seen as an added advantage, in the event of any problem.

Until now, it had also been possible to talk about Japan's experience to silence fears about the safety of nuclear reactors. It was always assumed that there was something particular about previous nuclear accidents that would not be replicated in Japan. America's worst nuclear accident, at Three Mile Island, was the consequence of a mechanical failure that caused the reactor core to overheat. New regulations and design changes followed. The most destructive of all nuclear accidents, at Chernobyl, reflected design problems, but also the neglect of infrastructure and general indiscipline during the last years of the Soviet Union. Nuclear power in Japan, it was generally believed, was much more reliable.

All assumptions about the safety of nuclear power must now be open to challenge. Maybe Japan's regulators could have done more to ensure the safety of the reactors at Fukushima. It is also possible that the extensive safety measures that were in place minimised the escape of radiation.

Although this was a natural disaster far worse than anything ever envisaged, even for Japan's fragile geology, the implications are still grave. If the Japanese, with all their inhibitions about anything nuclear and all their world-leading technology, cannot build reactors that are invulnerable to disaster, who can?

The pictures from Japan, the reports of radiation leaks, the evacuation ordered for 200,000 people within a 20km radius of Fukushima and the memories refreshed by the Chernobyl anniversary will all affect opinion around the world.