

# experts confident about nuclear energy

IANS

Bangalore/Chennai, April 26 (IANS) Leading atomic scientists in India Tuesday asserted that nuclear power plants in the country were safe as the world observed the 25th anniversary of the Chernobyl disaster and assessed the impact of Japan's Fukushima failure.

Japanese Ambassador to India Akitaka Saiki too pleaded that science, and not emotion, should decide on going for nuclear power in the light of the ravage caused to the Fukushima nuclear power plant in his country by the March 11 tsunami.

The Indian scientists' confidence that the nuclear power plants in the country would not suffer a Chernobyl type accident comes in the backdrop of intensifying agitation against setting up of a nuclear power plant at Jaitapur in Maharashtra.

'We have crossed a lot of distance after Chernobyl. Most of the lessons learnt from Chernobyl have been incorporated in reactor design,' Ratan Kumar Sinha, director of the Bhabha Atomic Research Centre in Mumbai, told IANS.

The Chernobyl incident is considered the world's worst nuclear power plant disaster.

In the early hours of April 26, 1986 a reactor in the nuclear plant at Pripyat, near Chernobyl in the then Soviet Republic of Ukraine exploded sending out massive dose of radioactive material into the atmosphere.

The exact number of deaths due to explosion and immediately thereafter vary with some placing it around 30.

The leak of the nuclear material led evacuation of over 150,000 people in a 30 km radius over a period of time.

Till now there is no clear estimate of the people who have died because of contamination from the radio active material.

'A total of up to 4,000 people could eventually die of radiation exposure from the Chernobyl nuclear power plant (NPP) accident nearly 20 years ago,' an international team of more than 100 scientists said in its report in 2005.

The team, called the Chernobyl Forum, was made up of eight UN agencies, including the International Atomic Energy Agency (IAEA), the World Health Organisation (WHO), United Nations Development Programme (UNDP), Food and Agriculture Organisation (FAO), UN Environment Programme (UNEP), UN Office for the Coordination of Humanitarian Affairs (UN-OCHA), UN Scientific Committee on the Effects of Atomic Radiation (UNSCEAR), and the World Bank, as well as the governments of Belarus, the Russian Federation and Ukraine.

'As of mid-2005, however, fewer than 50 deaths had been directly attributed to radiation from the disaster, almost all being highly exposed rescue workers, many who died within months of the accident but others who died as late as 2004,' the team said.

Just over a month ahead of the Chernobyl disaster anniversary, the Fukushima nuclear power plant was ravaged by a tsunami, raising further concerns across the world, especially in India, over the safety of nuclear power plants.

Sinha, however, was sure that Indian nuclear power reactors were better designed than the ones at Fukushima and had adequate safety measures.

'Current reactor designs are much more advanced than the Fukushima reactors in Japan,' he said.

'There are enough safety features in Indian reactors. We have already seen one tsunami (December 2004) and are taking more safety measures post-Fukushima,' Sinha added.

He said: 'Barring extreme natural causes, I don't see any major issue in the reactors now.'

The Japanese ambassador, who was speaking at a function in Mumbai, said the Fukushima failure should be looked at 'scientifically and not emotionally'.

Baldev Raj, director of Indira Gandhi Centre for Atomic Research (IGCAR) in Kalpakkam, said: 'Earlier in sodium-cooled reactors, there used to be some sodium leakage. But in the last eight to 10 years the industry has learnt to handle sodium.'

'India is building the most modern reactor (500 MW fast breeder reactor designed and being built by IGCAR). Unlike Fukushima, even in extreme cases we can shut down our reactors. There won't be a repeat of Fukushima,' he told IANS.

Another nuclear scientist, however, said the issue of locating a cluster of nuclear reactors at one place 'needs to be analysed in detail taking into various possibilities.'