

Stirring up the nuclear pot

What is the issue?

\n\n

The looming uncertainty about the nuclear power due to recent mishaps and changing global perception has caused much debate among world nations.

\n\n

What are the issues with nuclear power?

\n\n

\n

- With increased change in global threat perception about nuclear power and other uncertainties have decreased the phase of expansion of nuclear power.
 - \n
- Nuclear weapons have ceased to be viable as instruments of war because of the unpredictability of the consequences of a nuclear war. \n
- The theories of deterrence of nuclear stockpiles have also been discredited after 9/11 brought the most formidable nuclear power to its knees.
 - \n
- Non-proliferation today, if any, is not on account of the Non-Proliferation Treaty (NPT), but on account of the futility of building nuclear arsenals. \n
- After Fukushima, nuclear power too is receding as a sensible component of the energy mix. \n
- One clean-up operation after an accident can demolish many years of technological advancement and hopes of having cheap power. \n

Why nuclear power still a flourishing?

\n\n

∖n

- Former U.S. President Barack Obama's Prague speech had ignited cautious optimism that nuclear weapons would cease to be the anchor of security.
 - ∖n
- But still the nuclear and disarmament industry still flourish.
 - \n
- Rajiv Gandhi's United Nations Plan of Action for total elimination of nuclear weapons still remains a distant dream. \n
- The 'Global Zero' movement gained momentum, even as nuclear weapon powers continued investment in developing delivery systems and weapons.

∖n

\n\n

Why needed non-proliferation?

\n\n

\n

- NPT enthusiasts have been disappointed because out of the three pillars of the treaty only one got emphasized. \n
- That is among non-proliferation, disarmament and nuclear energy for peaceful purposes non-proliferation, has got watered down and disarmament has become the priority.
- They also worry that dangerous technologies like enrichment are within the reach of the non-weapon states. γ_n
- In the context of Japan and South Korea debating acquisition of nuclear weapons, they feel that non-proliferation should be brought back to be the first priority of the NPT. $$\n$
- The promotional function of the International Atomic Energy Agency (IAEA) is also a concern for them. \n
- The IAEA has already shifted its focus from nuclear power to nuclear security.

• In 1995, the NPT was made a perpetual treaty with no possibility of amendment.

∖n

- Now advocates of NPT emphasise non-proliferation to the exclusion of disarmament and nuclear energy promotion. \n
- The UN General Assembly held the first UN conference in more than 20 years on a global nuclear weapons ban, though the nuclear weapon powers did not join.

\n

- More than 120 nations in October 2016 voted on a UN General Assembly resolution to convene the conference to negotiate a legally binding treaty. \n
- The treaty is to prohibit nuclear weapons, leading to their total elimination.

\n

- Britain, France, Russia and the U.S. voted no, while China, India and Pakistan abstained.
 \n
- Though India had recommended the convening of such a conference, it abstained on the resolution. $\space{1.5mm}\space{1$
- India said that it supported the commencement of negotiations in the Conference on Disarmament on a comprehensive Nuclear Weapons Convention, which in addition to prohibition and elimination also includes verification.

\n

- The conference has failed even before it commenced. $\space{\space{1.5}\sp$

\n\n

What is the issue with nuclear power production?

\n\n

\n

- Due to Fukushima disaster many countries that had lined up before the IAEA for nuclear technology for peaceful purposes quietly switched to other sources of energy.
- Except for China, India and Russia, most nations have shied away from building nuclear reactors or importing them. \n
- India's liability law deterred U.S. companies from exporting reactors to

India.

\n

- The financial problems of Westinghouse, which had agreed to build six reactors in Andhra Pradesh, postponed, if not cancelled, the venture. \n
- But India has not fundamentally changed its three-stage nuclear power development, though the thorium stage eludes it. \n
- The need for reduction of greenhouse gases was an incentive to increase nuclear power production. $\gamma{\label{eq:constraint}}$
- With India set to attain increased renewable energy to 40 percent of the total energy production by 2030, nuclear power is a key to attain this large quantum. n
- President Trump's challenge to concept of climate change as a hoax and the consequent reduction of allocation of funds to protect the environment will further reduce the accent on nuclear power. n
- As a result the Kudankulam project is set to move along with Russian collaboration, but its progress has been slow. \n
- The nuclear liability law, the Westinghouse bankruptcy and the protests by local people have combined to delay the expansion of nuclear power in India.

\n

\n\n

Source: The Hindu

∖n

