

Stirring up the nuclear pot

What is the issue?

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

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What are the issues with nuclear power?

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- With increased change in global threat perception about nuclear power and other uncertainties have decreased the phase of expansion of nuclear power.
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- 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.
- 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.
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- One clean-up operation after an accident can demolish many years of technological advancement and hopes of having cheap power. \n

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Why nuclear power still a flourishing?

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• Former U.S. President Barack Obama's Prague speech had ignited cautious optimism that nuclear weapons would cease to be the anchor of security.

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- But still the nuclear and disarmament industry still flourish. $\ensuremath{\sc vn}$
- Rajiv Gandhi's United Nations Plan of Action for total elimination of nuclear weapons still remains a distant dream.
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- The 'Global Zero' movement gained momentum, even as nuclear weapon powers continued investment in developing delivery systems and weapons.

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Why needed non-proliferation?

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- 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. $$\n$
- The promotional function of the International Atomic Energy Agency (IAEA) is also a concern for them. \n
- The IAEA has already shifted its focus from nuclear power to nuclear security. $$\n$
- In 1995, the NPT was made a perpetual treaty with no possibility of amendment.

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- 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.
- More than 120 nations in October 2016 voted on a UN General Assembly resolution to convene the conference to negotiate a legally binding treaty. $\nline{\nline{1.5}}$
- The treaty is to prohibit nuclear weapons, leading to their total elimination.
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- Britain, France, Russia and the U.S. voted no, while China, India and Pakistan abstained.
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- 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.
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- The conference has failed even before it commenced. n

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What is the issue with nuclear power production?

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- 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.
- India's liability law deterred U.S. companies from exporting reactors to India.
- The financial problems of Westinghouse, which had agreed to build six

reactors in Andhra Pradesh, postponed, if not cancelled, the venture.

- 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. γn
- 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.
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- 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.
- 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.

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Source: The Hindu

