



India's Nuclear Programme

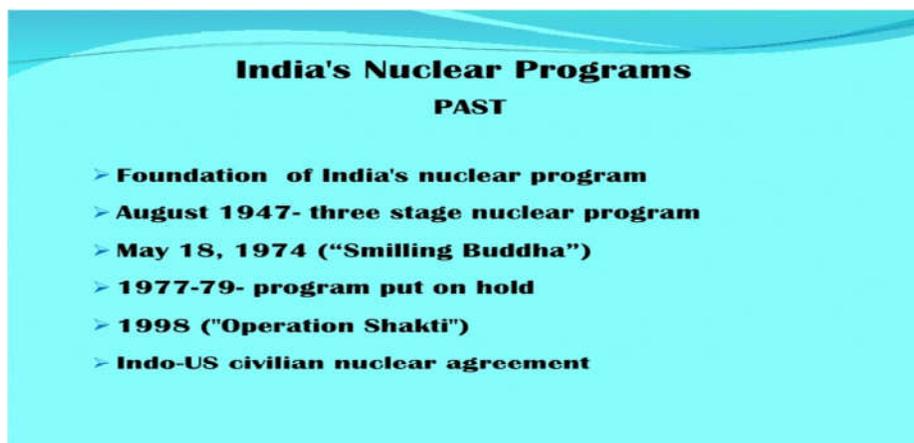
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1 Background

- For India, nuclear deterrence is defensive and a means to secure its sovereignty and security. Its strategy of assured retaliation, combined with “no first use,” provides adequate guarantee for this purpose.
- The strategy was unveiled concurrently with its **1998 nuclear tests**, which ended the determined U.S. bid to prevent India from acquiring nuclear deterrent.
- Ironically, India’s nuclear weapons tests, together with the rapid expansion of its economy, transformed its global outlook and relations with the U.S. and the world.
- The P-5 states treated non-proliferation as their default foreign and security policy objective, but this was invariably trumped by national interest.

India’s restraint and decision not to weaponise its nuclear capacities after the 1974 test were well known. Yet, when Pakistan accelerated its nuclear proliferation, it was not stopped in the wake of the Soviet occupation of Afghanistan, when U.S. President Jimmy Carter designated Pakistan a “frontline” state.



- The Chinese transferred nuclear materials and technology to Pakistan, including the weapons design and the means to deliver them-the solid fuel 300-kilometre range M-11 ballistic missiles. In a paper published in 1972, Professor Wayne Wilcox of Colombia University, then working as cultural attaché in the U.S. Embassy in London, perceptively recognised that India’s policy concerning China and Pakistan “is to hedge all bets and cover all contingencies.” India was compelled to acquire nuclear weapons to deter nuclear blackmail in its contiguity.
- Unlike Pakistan or Israel, India could not have a “recessed” deterrent or bomb in the basement, given India’s governance practices.
- **Contingent factors delayed India’s nuclear weapons tests**, such as the persistent external pressure on India, and arguments by internal agnostics who claimed that such testing would betray India’s long-held principles, diminish its international standing, and reduce future GDP growth rates by up to two per cent annually.
- In 1995 came the perpetual extension of the **Non-Proliferation Treaty**, without linking it to the complete elimination of nuclear weapons. The conditions attached to the **1996 Comprehensive Test-Ban Treaty**, which could foreclose India’s nuclear weapons option, became the final point of conviction. From then on, the question was not whether to test but when.
- For India today, the choice is clear, as it was in 1998: so long as nuclear weapons exist, India’s nuclear deterrence will have to be maintained. Until there is a global compact for creating a nuclear weapon-free world, India will have to persevere with this policy.

2 What is credible deterrence?

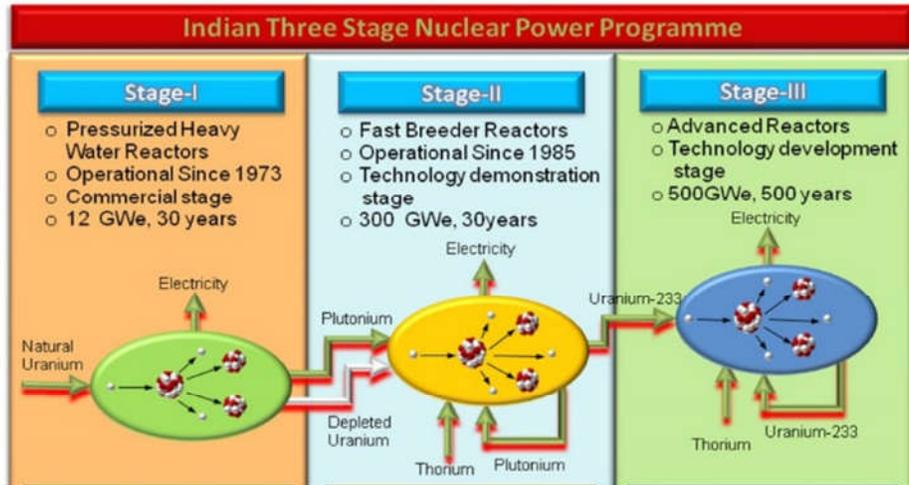
- In delivering the message of credible deterrence, all nuclear weapons states, including those that have embraced no first use, face a conundrum.
- Nuclear weapons are weapons of the last resort, fundamentally different from conventional weapons. War is a traditional tool of statecraft, but the weapon to end all wars cannot be a standard instrument of an ordinary war-it can only be the final recourse for dissuasion.

- It cannot be chance, for then it will fail to deter. While embracing a declaratory policy to avoid nuclear war, the state concerned must simultaneously demonstrate that it has nuclear war fighting capacity—the resilience to take the pain of a first strike, and both the ability and resolve to inflict massive and intolerable destruction on the attacker.
- For improving its punitive capacity, China is seeking a sea-based nuclear deterrent, deploying mobile solid-fuel missiles, and moving missiles below the surface in elaborate tunnels in mountainous terrain, undetectable from space, called the “**Underground Great Wall.**” The same motivation has led India to similar pursuits.
- India’s missile force, the weak link in its deterrence, is under rapid repair. Its transformation is enabling the shift toward strategic deterrence. In the past half-dozen years, India has invested in improving the command, control, communications, and intelligence systems and its second strike capacity, including the survival of the decision-making structure.
- The National Command Authority deserves credit for this. Simultaneously, the sea-based leg of the triad of delivery systems is taking shape—even if at a slower pace than the situation warrants. India might also have to do more to communicate effectively that its deterrent carries credibility.
- In popular domestic imagination, India’s assurance of “**credible minimum deterrence**” is confused with **minimum credible deterrence**, as if it connotes an arbitrary limitation.
- The essential prerequisite for **nuclear deterrence** is as much the sufficiency of the retaliatory capacity as the surety of response. This hinges on the size and nature of the arsenal and delivery systems, their survivability in the event of a pre-emptive attack, and the realisation by a potential adversary that the costs of attack outweigh the gains.

India’s nuclear programme:

- While India remains watchful, most P-5 states appear to be settling into a more stable deterrence, discounting first strike weapons, despite holding a range of nuclear weaponry and delivery mechanisms.
- At a time when the Chinese had already possessed a nuclear weapon for over ten years and less than three years after its decisive victory over Pakistan in 1971, India conducted its first nuclear test in May 1974. The second and more decisive set of nuclear tests in May 1998 saw India declare it a nuclear weapons state.
- It seems that through the years of ‘principled opposition’ to international non-proliferation regimes like the NPT and the CTBT, the Indian government deliberately ensured that the road to a nuclear weapon would never be constrained by any legally binding commitments.
- As India acquired nuclear weapons in 1998 this course of action became amply clear and the debate now turned to what kind of nuclear posture would be adopted. Of course a unilateral moratorium on testing as well as assurances of a ‘credible minimum deterrent’ posture did not stop sanctions from being imposed upon India. But the signing of the Indo-US nuclear deal changed all of that and with it sparked of a new set of domestic debates in India related to nuclear energy. Some of these current debates regarding nuclear energy and weapons that have gained prominence in India shall be duly discussed.
- Of course, over the years India has carved out for itself an image, which is that of a peace-loving nation and a reluctant nuclear power thrust by circumstances into the realm of nuclear high politics.
- Yet, India is now on the verge of operationalizing its ‘nuclear triad’ in 2013 with the nuclear submarine INS Arihant, it has successfully tested its first ICBM, the Agni V, with a range of 5,000 kilometres, signed a deal to acquire 126 Rafale fighter bombers from France and there is talk of a Ballistic Missile Defence Shield ready for deployment.
- Not a signatory to the Nuclear Non Proliferation Treaty (NPT) or to the Comprehensive Test Ban Treaty (CTBT) owing to their discriminatory nature and yet a nuclear weapons state despite its commitment to the worldwide elimination of nuclear weapons, the Indian nuclear posture has a strong component of ambiguity.
- What have also marked the narrative of Indian nuclear policy are its claims to ‘**exceptionalism.**’ It is this ‘exceptionalism’ that has seen a nuclear weapons state (albeit not recognised as such due to the inflexible and obdurate nature of the NPT) in spite of its non-conformist nature gain a waiver from the **NSG (Nuclear Suppliers Group)** and a clean chit from the IAEA for a civilian nuclear pact with the United States.
- There is now a strong bid from the Indian side to gain membership into the NSG as well as a host of other export control regimes. This article seeks to understand how the Indian nuclear policy reconciles these contradictory characteristics.

- The **US-India Civil Nuclear Agreement of 2008** provided the answers to a number of Indian problems at the same time. In spite of its status as a non-signatory to the NPT and the CTBT, the NSG waiver and the IAEA go ahead ensured that India would not only retain its nuclear weapons programme, but also preserve its access to international nuclear cooperation. The deal has larger implications in terms of Indian access to the international nuclear fuel market for its civilian nuclear programme, which in turn frees up its indigenous nuclear fuel supply to be used for its military nuclear programme.



3 Indo-US Nuclear Deal

The U.S. Congress on October 1, 2008, gave final approval to an agreement facilitating nuclear cooperation between the United States and India. The deal is seen as a watershed in U.S.-India relations and introduces a new aspect to international nonproliferation efforts.

Highlights of this deal:

- India agrees to allow inspectors from the **International Atomic Energy Association (IAEA)**, the United Nations' nuclear watchdog group, access to its civilian nuclear program.
- By March 2006, India promised to place **fourteen of its twenty-two power reactors under IAEA safeguards** permanently.
- India commits to signing an **Additional Protocol (PDF)**-which allows more intrusive IAEA inspections-of its civilian facilities. India agrees to continue its moratorium on nuclear weapons testing.
- India commits to strengthening the security of its nuclear arsenals.
- India works toward negotiating a **Fissile Material Cutoff Treaty (FMCT)** with the United States banning the production of fissile material for weapons purposes.
- India has promised that **all future civilian thermal and breeder reactors** shall be placed under IAEA safeguards permanently.
- U.S. Companies will be allowed to build nuclear reactors in India and provide nuclear fuel for its civilian energy program. (An approval by the Nuclear Suppliers Group lifting the ban on India has also cleared the way for other countries to make nuclear fuel and technology sales to India.)



NSG:

- NSG is a body of 48 nations that regulates global trade in civil nuclear materials and technologies.
- It ensures the materials and technologies transferred to any nation aren't diverted to developing nuclear weapons.
- It is said to have been created about 40 years ago as a sequel to India's first nuclear test conducted in 1974.
- It isolated India from nuclear trade with the rest of the world.
- However, in 2008 when the Indo-US Bilateral Civil Nuclear Agreement was signed, the US facilitated lifting of the NSG trade restrictions against India.
- The NSG waiver to India was granted in September 2008 after an intense debate. The participating countries took note of India's nuclear-related activities and appreciated its commitments to non-proliferation over all these years including the 20 years between India's first nuclear test in 1974 and the latter in 1998 while it had definitely possessed the nuclear arsenal.
- The NSG was satisfied and convinced that India would finalise the separation plan for its civilian nuclear facilities that shall be open to the IAEA safeguards and would accept the Additional Protocol.

India's membership in NSG:

- India's membership is one of the important issues facing NSG in the immediate future.
- There is, of course, also the issue of further expansion of the NSG in the coming years, which needs to be looked into by the NSG members.
- Factors that need to be considered by the NSG Participating Governments (PGs) while considering admission of new States were last finalized by the NSG members during their 2001 Aspen Plenary. These were: A new Participating Government should:
 1. be able to supply items covered by the Annexes to Parts 1 and 2 of the Guidelines;
 2. adhere to and act in accordance with the Guidelines;
 3. have in force a legally-based domestic export control system which gives effect to the commitment to act in accordance with the Guidelines;
 4. Be a party to the NPT, the Treaties of Pelindaba, Rarotonga, Tlatelolco or Bangkok or an equivalent international nuclear non-proliferation agreement, and in full compliance with the obligations of such agreement(s), and, as appropriate, have in force a full-scope safeguards agreement with the IAEA.
 5. Be supportive of international efforts towards non-proliferation of weapons of mass destruction and of their delivery vehicles.

The foremost threat to Indian security today comes not from its nuclear posture or externally, but from social deprivation and anaemic economic growth. Unshackling its entrepreneurship, accelerating infrastructure development and regenerating growth will make India safer. There is a clear vision in India on what has to be done. The new government should focus on how best and quickly to do it.

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